



Haaga-Helia

University of Applied Sciences Ltd.

Empowering Citizen Development

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Master's thesis

Digital Business Opportunities

2021



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Specialisation Digital Business Opportunities	
Thesis title Empowering Citizen Development	Number of pages + number of appendices 102 + 8
<p>This thesis aimed to make citizen development more familiar and help organizations see its potential. The topic is handled from the perspective of citizen developers and potential citizen developers. The article looks for ways to ensure their members become citizen developers by providing the right employee experience.</p> <p>Citizen development is a part of the ongoing digital transformation and is expected to spread in the future. Citizen developers can form a business-led IT, which by creating technical solutions to their specific needs, will take on the part of tasks currently in IT's backlog.</p> <p>To ensure citizen development will spread in a company, its leaders will need to invest in creating a psychologically safe, motivating, and resilient culture. They will also need to build structures that support the citizen development movement. IT will need to have a role in the endeavor as an enabler. They will need to provide citizen developers with a safe environment for development. Only then the development made by those working outside IT will become sustainable.</p> <p>The interviews section includes narrative stories of eight people with diverse backgrounds. Some of them work currently as citizen developers, some have in the past, and some are potential developers whose employee experience has negatively impacted their willingness to develop.</p> <p>The action research was the chosen method for this research, and based on findings on the literature review and interviews, a web page was created. The page includes three sections. 1. General information about citizen development. 2. Introductions to potential citizen developers. 3. Introductions to company leaders and HR. The website address is https://sites.google.com/view/kansalaiskehittaminen. This page was created for Finnish organizations, and therefore the language is Finnish. Also, a network for citizen developers was created for LinkedIn https://www.linkedin.com/groups/9104446/. Citizen development was discussed and marketed via LinkedIn posts.</p> <p>The website and the group were shared via LinkedIn posts, and they will be communicated directly to selected IT consultancies and different publications.</p>	
Keywords Citizen development, employee experience, intrinsic motivation, democratizing development, Digital transformation, Organizational culture.	

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Abbreviations

AI	Artificial Intelligence
EX	Employee Experience
PMI	Project Management Institute
RPA	Robotic Process Automation

1 Introduction

This master's thesis is action research on how companies can make sure they succeed in citizen development. The result of the research will be shared with company leaders, HR, and potential citizen developers and those who already identify themselves as citizen developers via a website (Appendix 6.).

Digitalization and the 4th industrial revolution are disrupting the companies' needs for IT development, and the customers are expecting increasingly fast service and better products from companies. However, there is a shortage of IT professionals and fierce competition in the labor market for hiring them. Therefore, companies will need to make changes to their development processes. Citizen development can help them meet the customer's needs and make sure they provide their customers more value than the competition. It can also help them manage better to meet the needs of their business professionals.

Citizen developers are those employees, or consultants, working for the company outside the IT department, who experience work inefficiencies first-hand. In citizen development, they are given the authority to create value-adding solutions with different software applications. Most citizen developers nowadays use no-code or low-code platforms selected by the company, but in the past, they were the Excel wizards of the team.

Citizen development is a foreign word for many people, and the value and opportunities citizen development brings to companies are not yet appropriately recognized. Many companies do not even realize that they have had citizen developers working in their teams for a long time, and neither often do the citizen developers themselves. Chapter three aims to help companies create an employee experience and organization culture, in which the citizen development movement will accelerate, and chapter two demonstrates the benefits the companies will get for doing so.

The citizen development movement is ongoing. However, without companies understanding the needs of this movement and the kind of environment knowledge workers can become citizen developers, they will not succeed in it. The author has a long experience of citizen development and brings to the notion that there is a gap in many companies' employee experience. Those gaps will need to be filled before a company can fully utilize citizen development.

For understanding the needs of citizen developers, I have conducted interviews with them. In chapter four, I have added their experiences in narratives and let them talk about their

experiences creating technical solutions while working in a business role. Some of my interviewees have not yet reached their full potential as citizen developers. I am discussing the reasons for it with them. I have also looked for solutions for making the organization's culture more innovative and supportive to citizen developers by interviewing an employee experience expert. Finally, to understand IT's point of view, I have interviewed a technical architect whose work is influenced by citizen development.

Based on the research, I have created a website for potential citizen developers and company leaders who act as the enablers of the citizen development movement. On the page, the leaders can find information on how they can succeed in implementing citizen development at the organization level, and the potential citizen developers get tips on how they can become developers.

Citizen development will require continuous improvement, learning, and mastering changes. This research takes the perspective of citizen developers and potential citizen developers to present what kind of environment and tools empower them to make a difference. Creating applications requires an innovative mindset, courage to take an interpersonal risk, and a strong intrinsic motivation. In addition, it will require the right kind of employee experience and company culture, and bottom-up leadership.

1.1 The Target Organization

The commissioning party is Haaga-Helia's collaboration project TT TOY. "Artificial Intelligence is coming" about how artificial intelligence will change work in the transformation of work. Finnish Work Environment Fund funds the project, and the other parties in the project are the Finnish Institute of Occupational Health, the City of Helsinki, and various trade unions. (Kärnä & Nikina-Ruohonen 2021)

The project is linked to artificial intelligence and is done together with, for example, the Ulyseus European University in Spain. Another aim of the project is to boost productivity and wellbeing at work. That is done by increasing the understanding of modern technologies, such as AI (Artificial Intelligence) and RPA, but also the importance of learning in organizations. (Kärnä & Nikina-Ruohonen 2021)

The project aims to understand the role of knowledge workers working in support functions and their potential to develop and create value with the new tools. Also, supporting knowledge workers in developing their roles to better meet the needs of digitalization is researched in this project. Increasing cross-function collaboration and

learning new ways of working will be required in the future, as will self-governing organizations. (Kärnä & Nikina-Ruohonen 2021)

There is also an aim to research the upskilling and involve the experts in ways that will decrease their work strain and improve their work capability. The project is designed to build a pathway from traditional work roles towards community development, value creation, and meaningful work. (Kärnä & Nikina-Ruohonen 2021)

I see that citizen development is intricately linked to the project's objectives since it is all about helping people reach their full potential. Moreover, the tools suited for citizen developers often have inbuilt AI capabilities such as text and image recognition, and by creating solutions with them, they can make a significant positive change for their own work or help others.

1.2 Objectives

My thesis will help companies and individual employees understand the opportunities citizen development brings and the prerequisites for successful implementation of citizen development. Citizen development allows companies' application development to become more agile and tailored and less costly. It, however, is not risk-free, and the selection of offered tools will have to be done together with the IT department. Furthermore, I will be looking for sustainable methods to ensure application continuity in case citizen developers exit the company.

I will create an info website with sections for company leaders and HR, and potential citizen developers, and those who already act as citizen developers (Appendix 6). The site will be created from the point of view of potential citizen developers and those already developing. I aim to make their voices heard and identify their needs and find tools for employees to motivate them to become citizen developers.

For company leaders, I will demonstrate points of view and tools for developing their employees' experience and company culture to meet the needs of citizen developers. In addition, I will be researching different subtopics of employee experience and company culture and how they affect employees' willingness and skills for becoming citizen developers. Finally, I will instruct how citizen development can be done sustainably and ensure the continuity of applications if citizen developers exit the company.

I aim to find role models and success stories for future citizen developers on why to start developing. I will also help find training and other support online and examples of what kind of solutions they could create with their new skills.

The objective of the research is to get answers to the below questions:

RQ1. What kind of employee experience supports citizen development?

RQ2. How to achieve such an employee experience?

RQ3. How to become a citizen developer?

RQ4. How to make sure the development made by citizen developers is sustainable?

RQ5. What tools are available

The chosen research methods are action research and theme interviews with citizen developers, IT professionals, and employee experience professionals.

My assumptions before the research are:

1. Some individuals will be developing their work because they enjoy it, and they would do it in any kind of environment.
2. If the employee experience is not positive, they might not be sharing their solutions
3. There is a tremendous unrecognized potential in knowledge workers.
4. Citizen development is risky.
5. Citizen developers within the company will be the best people to inspire other people to become citizen developers.
6. Citizen development can be prevented by not giving the employees time to learn or develop.

1.3 Action Research

This thesis was created as qualitative research. The action research methods were followed but had to be modified due to the nature of this research. The citizen developers or the experts interviewed were not active participants in the development process, but their stories strongly influenced the outcome

This thesis aims to bring forward the phenomena of citizen development and the change in software development in the future. Action research is used to gather information for the product, the website (Appendix 6) and tell citizen developers stories.

The creation process of the website (Appendix 6) and this thesis were cyclical and included the steps in action research. In action research, the researcher belongs to the system in action research and is not an outsider (Anttila 1998). That is also a case for this

thesis. Even though it does not research people in any specific organization, it does research a group of people with similar backgrounds to the researcher. The inspiration for the research came from my own experiences as a citizen developer and observations I had made about employee experience and willingness to innovate and develop work. I realized that my background made me biased, and evaluating and reflecting everything through neutral lenses was essential during this project.

I did profound research from literature and web sources to create a theory base to help me form a fact-based view on the topic instead of reflecting on my own experiences. I started planning the project based on my own experiences but modified the plan constantly while creating the theory.

The first goal was to get sufficient information on the different topics linked to this thesis to conduct high-quality interviews with the citizen developers and the experts in employee experience and IT.

In implementing the interviews, I worked at the agile method. My goal was to find as authentic stories of the interviewees as possible; therefore, the interview questions were often adjusted to fit the specific individual. The interviews are a way of participating citizen developers in building the website. The interviews' conclusions are used to decide the topics prioritized on the website.

In action research, the data gathering is a collection of different methods (Anttila 1998). Information was needed for different stages of the project. In addition, the planning and building of the product often require other methods for data gathering. In this thesis, the primary sources for data have been literature, web articles, and theme interviews. Reflection was used for bringing forward the interviewees' experiences, views, observations, and assumptions on the topic.

2 Citizen Development

Citizen development by Gartner is “A citizen developer is an employee who creates application capabilities for consumption by themselves or others, using tools not actively forbidden by IT or business units. A citizen developer is a persona, not a title or targeted role. They report to a business unit or function other than IT.”

2.1 Why Citizen development?

For organizations, the citizen developers can give a cost-effective approach to innovation and be a part of organic change across the business. Citizen developers are usually people who have a hands-on attitude, who are closest to the problem, and rather than accepting inefficiencies at their work, they try to find solutions to fix the issues if they have a mandate to do that. As an example, they can make changes that automate the mundane, time-consuming tasks from work, and people will be able to do more meaningful work, like the innovation of new products or adding real value to the customers. (PMI 2021, 23)

In their article “Gartner Identifies the Top 10 Strategic Technology Trends for 2020,” Gartner writes about the Democratization of Expertise. They forecasted that there would be four critical aspects on the future trend for democratization acceleration. They are data and analytics, the democratization of development, design, and knowledge. The democratization of design and knowledge are intricately linked to citizen development as by those Gartner means the no-code /low-code usage, and by the knowledge, they point to people working outside IT departments getting access to tools and expert systems not linked to their expertise and previous training. (Gartner 2019)

The applications citizen developers can create for business are varied. They can be made for any region, industry, or organizational function. The apps are often designed for supporting tasks, which fall in a gap between used software applications. PMI (2021,11-25) lists the benefits of citizen development across the organization.

Table 1. Citizen development will benefit the whole organization, IT function, and individual citizen developers. (PMI 2021,11-25)

Organization	IT function	Individuals
Accelerates new product and service creation	Frees up capacity in IT	Fosters a culture of employment through autonomy and ownership

Drives more efficient processes and automated workflows.	Mitigates the shadow IT risk and improves code quality	Allows developers to make changes to applications in real-time
Stimulates widespread innovation across the organization	Elevates the role of IT as a safeguard for the organization	Speeds up and simplifies turning ideas into apps
Help cut costs and build resilience in volatile times	Enhances reusability and reduces maintenance efforts	Provides recognition and enhanced career prospects
Expedites digital transformation and accelerates project-based working	Increases transparency of application inventory	Democratizes development for nonprofessional coders

The organization will benefit from citizen development by decreasing the time between the idea and product or service creation. Citizen development will also ensure the work will become more efficient and streamlined, project-based, and successes will increase the willingness to innovate across the organization. By streamlining work and creating solutions, citizen developers will help companies save money and be readier in volatile times. (PMI 2021,11-25)

IT will benefit from citizen development because their service will no longer be required to simple solutions. If they become a part of citizen development and enable it by providing citizen developers safe environments to develop, it will decrease the risk of shadow IT and make IT a safeguard for the organization. In addition, if the solutions developed by citizen developers become visible to IT, they will be able to reuse them. (PMI 2021,11-25)

When citizen development is adequately led, the individual citizen developer enjoys autonomy and ownership for their work. The needed solutions can be built quickly after the need has been spotted without time-consuming requirements documenting. Citizen developers do not need to become professional coders, but their skills might open doors to new careers and recognition. (PMI 2021,11-25)

Citizen development has not yet been researched widely, but the aspect of automating tasks and processes with robotic process automation has many similar outcomes as the automation created by citizen developers. Nenad Veselinovic's Master's thesis "Co-Creating Knowledge Work Automation" (2017) researched how automation of knowledge work can be turned to a knowledge worker's own advantage. Findings from the research were that the knowledge workers found having a virtual personal assistant positive and desirable. They saw that automation saved them time to innovate, improve their ability to work more, and have fun at work. They felt that in some cases, they could build simple

solutions themselves in the future, but it would require that the development would have been made easy. Reusable automation content, a building block of automation shared for everyone, would help them develop.

2.1.1 Business-Led IT to Help with Growing IT-Backlog

Business-led IT practices have frequently been growing within past years. In 2019 Gartner identified increasing spending of 36% in companies IT budget as the business units have taken over some of the application development from IT. However, the IT department must be involved in citizen development to prevent the birth of unwanted shadow IT (Wong 2017). According to Wong (2019), it is up to application leaders to help companies maximize the benefits for business and IT functions by assisting them to define, guide, and optimize citizen development.

Customers and different stakeholders are increasingly expecting The IT departments to provide value to users faster (Gartner, Newsroom 2021). Citizen development will be able to prevent bottlenecks in software development caused by the growing backlog of the IT department (Waxer 2020). The business already requires custom software solutions to support them in digital transformation (Gartner, Newsroom 2021), and this has augmented the increase in citizen developers using low-code/no-code platforms to build applications using drag-and-drop (Waxer 2020).

The development cycle of new IT solutions is speeding up constantly (Gartner, Newsroom 2021). According to Waxer (2020), the “new normal,” meaning the COVID-19 pandemic and an increasing amount of remote work, has raised the need to scale the cloud infrastructure and design more customized solutions for specific pain points and tasks automation. To better meet the needs of remote work, there has been an increase in the creation of digital forms and task automation, otherwise difficult to handle from the remote workplace (Gartner, Newsroom 2021). Citizen development, which is often done with software available at the market, can create such solutions. Gartner expects that half of them will come from outside IT from all low-code software buyers by year-end 2025.

The above table states that citizen development will “mitigate the shadow IT risk and improve code quality” (PMI 2021, 22-29). In Gartner’s expert on no-code and low-code and citizen development, James Wong (2019) introduces “Business-led IT.” Compared to shadow IT, business-led IT, which includes citizen development, if appropriately organized, is open and transparent from start to finish. Business-led IT also usually is much more of a collaborative effort between business and IT where appropriate standards and policies are applied (Wong 2019)

For the company to succeed in citizen development, it will need to be aware of its risks. Only when the IT department is active and aligned with the citizen development strategy, offers citizen developers approved tools and necessary connectors to business software can the application development by citizen developers be done safely. Companies will have to provide citizen developers with a centralized development environment, which the IT department controls. This safe development environment will create transparency and visibility to the existing applications and ensure the citizen developers are not using unauthorized applications for their development purposes. (PMI 2021, 22-29)

Citizen development, however, will bring benefits to IT departments as well. Because people working at business functions can create solutions for their specific problems, the number of requests coming from business functions will decrease, as will the IT backlog. Not having an overload of work will allow IT to focus on more demanding, strategic endeavors. Duplicating the created solutions is relatively easy if modern no-code/low-code platforms are used. Having the ability to share the solutions will benefit many people than just the person creating the solution. By tracking the applications across the company, IT can identify a duplicate solution and minimize the development efforts. Sharing solutions will drive community collaboration and help companies to spread the benefits of citizen development. (PMI 2021, 22-29)

Citizen developers will deliver value to the company's digital transformation journey, as these two movements are very intricately linked. Gartner (Gartner, Newsroom 2021) expects that digital transformation will increase the quantity of citizen development and its applications. The applications created by citizen developers will act as good examples of use cases of no-code/low-code software applications for the rest of the organization. Though that to happen, it will require the right organizational culture, in which successes are made visible, recognized, and celebrated

2.1.2 Who are Citizen Developers?

"Citizen developers are people who are willing to make a change." They can work for any company or any team. They are solution-driven people who can create ways to make work easier and more effective. Those solutions can be beneficial to themselves, their teams, departments, or customers. (Wong 2019)

Citizen developers on their initiate craft their jobs to meet their hopes better. Job crafting will enable them to work with development tasks, find positive challenges or learn new skills and make them feel more engaged in their work (Lyytinen, Hakanen 2021). In

addition, they break the routines and challenge the old ways of working by creating solutions to reach the same goal, often more quickly and with less effort.

Citizen developers should possess specific skills to succeed in the role.

1. They should have a good understanding of and be good at recognizing the business needs.
2. They will need to have a natural curiosity and problem-solving mentality and think outside of the box.
3. Citizen development requires continuous learning, and a citizen developer will need to be willing to learn; even if the company cannot provide training, they are expected to teach themselves.
4. They will need to be able to work independently and provide high-quality and creative solutions. In addition, they will need to in a way to sell themselves as a developer, due to a lack of former training.
5. Citizen developers will need to be able to take constructive criticism. They will need to be able to take the feedback and develop their skills based on it.
6. Citizen developers can be supported by providing them a role adjacency.
7. The citizen developers will need to be passionate about their cause because there is a possibility that they will need to sell it to the organization or customers. (Watts 2020)

They are the people who demonstrate altruistic Organizational citizenship behavior (OCB) at work and are willing to go the extra mile and work more than their co-workers to learn and find solutions to problems. Citizen development is rarely a part of employees' formal job description but is something people do out of their own interest and free will (Verlinden).

Citizen development, or citizen IT, will need to be cultivated in the modern digital workplace, according to Wong (2019). In theory, any end-user can become a citizen developer if given an opportunity and if they are fit for the task, and that is why the number of potential citizen developers within the company is much greater than the number of professional developers.

Citizen development is continuous improvement on an individual or team level. In the book *Citizen Development, the Handbook for Creators and Change Project Management Institute (PMI) (2021, 15-17)*, they describe that "Citizen developers tend to be domain experts, who have a deep understanding of a business process of a series of tasks performed in the organization." They also highlight how those people have a box seat for identifying new opportunities and improving operational efficiency. Therefore, the citizen developers often are knowledge workers of some other field first and developers second. They usually do the actual work themselves and are the best people to see the inefficiencies and pain points. Citizen developers could also be consultants working for the company to support their journey on digital transformation.

In a webinar held by Sofor (Eerola & Luuppala 2021), Sami Eerola brought up how most teams have people they would call “Excel Gurus.” Those are the people who have learned how to record a macro and create functions to create tools that make the work more efficient. They were the citizen developers before the term was invented. PMI also mentions how citizen developers have been around for a while and used Visual Basic for Applications to build macros on spreadsheets to make their own or others work more effectively (PMI 2021, 15-17). Those very same people will be excellent candidates for becoming low-code/no-code developers in the future if given a chance.

Citizen development is a “hyper-agile” way of working. According to Wong (2019), anyone can become a citizen developer. The below image divides people into four groups; Citizen developer (End-Users), Citizen developer (Power users), Business-led pro developer, and Enterprise IT pro developer. The latter two will be running the more comprehensive development projects, but the first two groups together will have abilities to create business solutions with no-code or low code platforms.

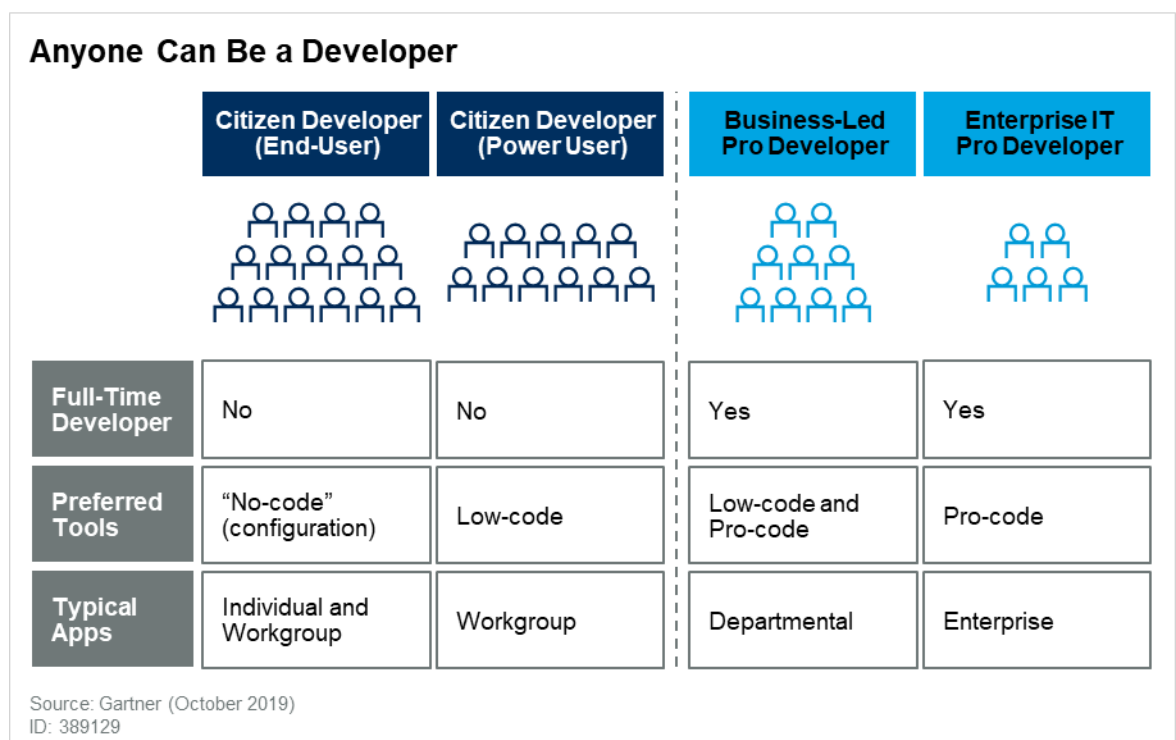


Figure 1. Anyone can be a developer (Wong 2019)

According to Wong (2019), anyone can be a developer, and 46% of the companies responding to Gartner’s survey on this topic had already started to increase the investments for business-led IT. They also found that 41% of respondents already had citizen development, and another 20%, in 2019, evaluated or planned to start citizen development within their organization.

2.2 Technological Environment

When the company starts its citizen development journey, it will have to make sure it has experimented and innovating culture in place to succeed in it. Having the right kind of culture will require authorizing the business professionals from all levels of hierarchy to manage changes within their area of expertise. The company will also need to ensure collaboration between citizen developers and the IT department. The citizen development framework should be created before starting the citizen development journey. Without the right technological base and motivating company culture, citizen development does not exist as extensively as it could. I will be deciphering the employee experience's impact on citizen development (PMI 2021 63-96). In this thesis, I will be concentrating on technological and cultural environments, as they have more direct implications for citizen development.

Tools that help people get their jobs done are essential for any employee in the company, and if the employees get frustrated with the tools available, the employees are less satisfied, not only with the tools but also with one another. Technology is a part of communication, collaboration, and doing the work. Any technology used in the company creates a technological environment, which affects the person's employee experience (Morgan 2019). Also, citizen developers will need sufficient tools for their development work, and in turn, their solutions can positively influence their colleague's employee experience.

Technology will empower people to do their work, and the point of view of citizen developers will have to give opportunities to create solutions for developing selected business problems. In his book *Employee experience*, Jacob Morgan (2019) introduces the model ACE, which can be used in creating a great technological environment.

A stand for availability to everyone and means that there should be equal rights for all employees who use technological tools. Unequal availability of tools and opportunities to use available tools can cause problems and resentment. For example, if one team can work more flexibly or have tools available for citizen developers to make the work more efficient than others can negatively affect the employee experience. Jacob Morgan (2019) also raises the issue that many business technologies are not as user-friendly as are the applications people use in their free time. The technological environment in the company communicates its level of commitment to drive innovation, collaboration, and

communication between functions and teams. It also shows if the company is focused on enabling the organization as a whole and how it can technically adapt.

C stands for consumer Grade technology, and it is creating a modern-looking work experience. It can be started by moving from clunky enterprise-grade technologies to more robust and flexible ones, which are more secure and more manageable for IT professionals to manage and deploy. Morgan suggests that companies provide their employees' tools they would use voluntarily in their free time. He argues that if the tools look familiar to the employees, less training will be required, they get more effective and engaged in their jobs. (Morgan 2019)

E stands for employee needs versus business requirements, and it means that it is crucial to understand how and why the employees work. Their needs should be the key in any IT project instead of the business requirements. The development decisions should not be made only by IT. He suggests a collaboration between IT and HR find solutions best suited for employee needs. That would require the IT to be more flexible and the HR to understand the risks of modern technology deployment. This third letter means that the company is committed to helping their employees to do their best work, and their voices are heard. (Morgan 2019)



Figure 2. How can technology empower them to do their work? ACE model by Jacob Morgan (2019)

2.2.1 Citizen Development and Available Technologies

In the past, the tools available for citizen development were most often limited. MS Office Excel was often the chosen tool for the citizen developers of that time. Those days they might be called Excel Gurus or something similar. They often used Excel and pivot tables for reporting purposes and may be created the simplest form of automation by recording tasks with Excel Macros. However, the opportunities for development after that required understanding of Visual Basic for Applications code, and even then, the automation opportunities for citizen developers were limited to only a few applications. Now, citizen development does not require any understanding of coding as the number of available no-code applications is increasing rapidly. (Eerola & Luuppala 2021)

Even though citizen developers are working on business roles, IT also has a role in citizen development. Their role will be to enable citizen development and to offer tools suitable for development. Technologies needed by citizen developers can vary case by case, but to succeed in citizen development, companies should make sure that their employees have access to tools for the below purposes:

- Tools for core operational processes
- Automation tools
- Project management software
- Collaboration tools. (PMI 2021 102-109)

There are two levels of citizen developers, those with no programming skills using no-code -solutions and those with the skills to use more demanding low-code -solutions.

No-code applications are application software, which a person can work with a graphical, drag and drop interface and configurations without a need of coding. The availability of code applications is expected to increase the application development done within business functions significantly. Traditionally, the no-code application platforms have been used to create process automation, reporting, forms, and mobile desktop applications. (Johannessen & Davenport 2021)

The low-code development platforms, which can also be used for creating application software, are also used through a graphical interface. Low-code development, however, requires more understanding of coding languages and allows the creation of more complex applications. When using low-code applications, most of the code is generated automatically when the building blocks of the automation or the other output are added, but

by using custom code, the outcomes can be tailored to a specific business need than those made with no-code applications. (Johannessen & Davenport 2021)

Below low-code applications will be more closely handled in chapter 5 of this thesis.

- UiPath Studio and Studio X
- MS Power Platform
- Zapier
- Betty Blocks
- Appsheets

2.3 How The Development Is Done

Agile ideation is one of the cornerstones of citizen development. There is a need for many ideas to find opportunities for citizen developers to deliver real value and decrease inefficiencies in operational processes. PMI (2021, 42-55) introduces an approach called Ideation 2.0 for citizen development, where the business is the function where ideas are matured, and the project is kicked off for creating the eventual solution.

In large-scale IT projects, there is often excessive documentation required before the IT development, which often results in scope creep, and the final product will not meet the real needs of the business. In Ideation 2.0 (PMI 2021, 42-55), they suggest that combining brainstorming and the actual development will bring companies value quickly. In this approach, the ideation and design of the result are continuous and ongoing during all development project phases.

The inspiration for development comes from understanding business needs, processes, inefficiencies, and the wider business environment. When following the ideation process, one should include stakeholders from across the organization, people with different viewpoints and specialisms. With this diverse group, real-time development of the mock-ups or working solutions is done. This kind of development eliminates the need for complex documentation before development (PMI 2021, 42-55).

2.3.1 Company's Role at Citizen Development

In his book "Human + Machine: Reimagining Work in the Age of AI," James Wilson mentions five principles that have been recognized by companies leading development.

Those companies have gone beyond task and process automation and have reinvented their processes with the help of different automation solutions. Those companies are action-oriented, understand the potential of their employees, help them reach their potential to the fullest and help them get more free time to learn by automating their routine tasks (Wilson 2018). Citizen development will become a part of the work in the age of AI as many tools available to citizen developers use AI-enabled functionalities. Therefore, the five principles Wilson introduces support citizen development. (Figure 3.)



Figure 3. MELDS – Five Crucial Principles for leading development (Wilson, H. James 2018)

1. The mindset in the companies will have to change their focus from using machines to automate steps on the workflow to re-inventing their traditional processes and continuous adaptation of teams. Disrupting and re-inventing processes is also what a citizen developer does when looking for solutions to streamline the work (PMI 2021,11-25).
2. Experimentation should play a significant role in any company, which wishes to succeed in development. It is no longer possible to copy processes from a successful company, but they will need to be uniquely set to the company's specific needs and will require significant amounts of trial and error before the balance between work done by humans and machines can be determined.
3. Leadership means that investments will need to be done to their employees. The employees will need to be empowered to make decisions but also well trained to the task. The executives will also need to ensure that the moral, ethical, and legal implications are met.
4. Data is said to be the “Fuel to intelligent systems,” and it should flow freely and not be affected by departmental silos.
5. As per Wilson, humans will be needed more than ever, and they will need the right skills. When collaborating with machines, they will need to learn how to use the machines as support to their work and work seamlessly with them. (Wilson 2016)

3 Employee Experience Empowering Citizen Development

Employee experience is the experience of individual employees working for a company. It is the expectations and promises colliding with reality (Luukka 2019, 12-33). Employee experience is formed from all small experiences, things happening and impacting the individuals. Employee experience comes into being by the feelings the workplace causes. Therefore, enabling the employees to have more good days than bad will positively affect their employee experience. (Bridger & Gannaway 2021, 10-13).

Three environments will impact persons' employee experience, says Jacob Morgan, the author of *The Employee Experience Advantage* (2017). These are cultural, physical, and technological environments. For companies to have a winning employee experience to cultivate all opportunities, they must succeed in all three domains. On top of that, they will need to have an apparent reason for being the mission, and it will have to link to those working in the company directly.

Many companies are known for having a great employee experience and are profitable. However, an employee experience can never be copied from another company but must be designed for the company in question. To create the right kind of employee experience, they will need to know their employees. Therefore, the experience should be intentionally designed for that company and the people there. It will need to be based on the company culture, purpose, values, and people.

Bridger and Gannaway (2021, 52-86) link two factors to employee experience. Hygiene factors are those taken for granted, such as pay, benefits, and job security. They do not increase the employee experience if they do not meet the employee's expectations but do lower it if they do not. The other factors are the motivator factors intricately linked to the individuals themselves, and meeting them will probably significantly impact the individual's performance. They can increase the employee experience significantly but are more challenging to provide. Motivator factors can be autonomy, challenging and stimulating work, giving them responsibility, growth and development, mastery, and purpose.

Citizen development will empower individuals to solve problems independently, innovate and create solutions (PMI 2021, 128-136), and it can have a significant impact on their experience at the company. The experience improves because the individual is provided with a certain level of autonomy and challenging tasks, which are learning opportunities and will increase their motivation to create needed change. However, citizen development requires that the management grants the employees a prominent level of autonomy and trust.

The organizations and their approaches to work are evolving. In the past, the companies were focused on utility, then came the time when most of the companies were concentrating on productivity and making sure they got the most out of their people. Engagement and experience are more human-centric values and impact employees' willingness to develop and learn. (Morgan 2017)



Figure 4. Work has changed significantly in the past. Jacob Morgan (2017) visualizes the evolution of work-life from Utility to employee experience in the above image.

Morgan uses a three-point engagement model framework to demonstrate different engagement levels within a company.

1. Actively disengaged. These are the people who are not happy about the company and undermine their colleagues.
2. Not engaged are the people who do not care. They do nothing extra but the bare minimum.
3. Engaged employees take up extra assignments and develop their work just because they feel connected to the company and its values and have passion for their work. (Morgan 2017)

In the following chapters, I will research the topic of cultural environment more closely. This chapter aims to find ways how organizations can increase engagement, innovation, and creativity and empower their employees to become citizen developers. Linked to that, I will investigate the topics of psychological safety and different motivation factors and how they might affect people’s willingness to become citizen developers and succeed in it.

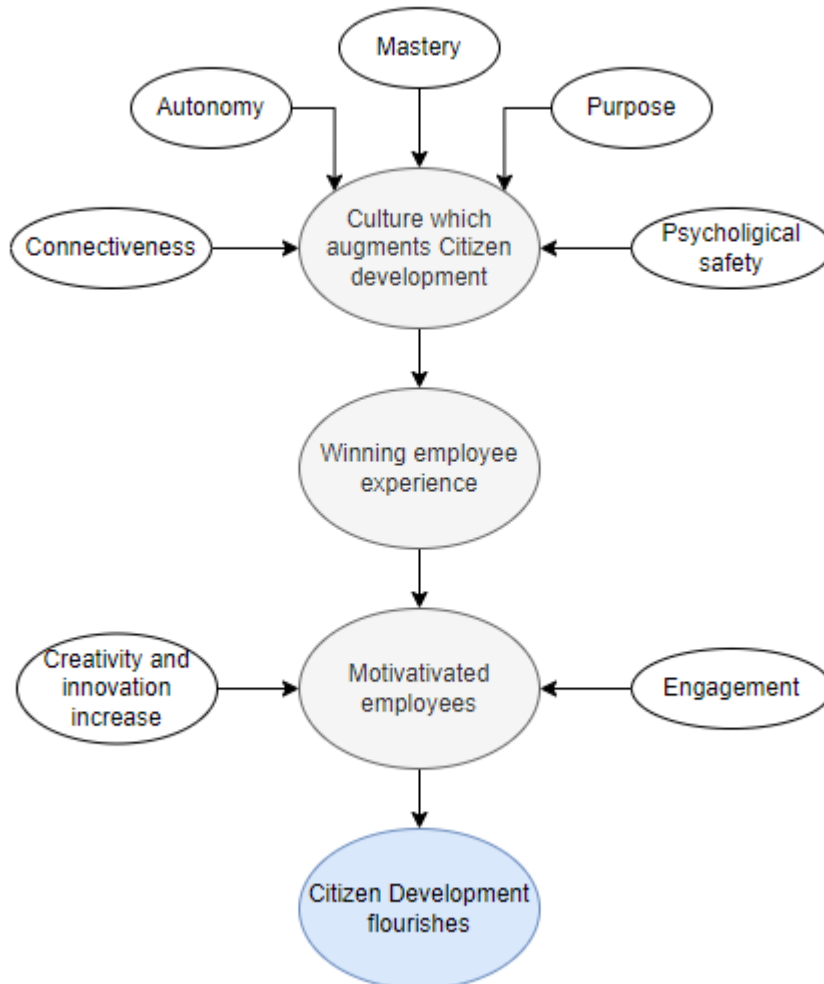


Figure 5. Factors for empowering citizen development.

3.1 Cultural Environment

Bridger and Gannaway, in their book “Employee experience by design. How to create an effective EX for competitive advantage” (2021, 1-28), borrow a definition connecting company culture and employee experience by Wright Wasson from 2019; “Culture is a soup, in which employee experience swims.” They also demonstrate a link between

company culture and employee experience. Even though a good company culture does not ensure a good employee experience, it usually makes it more likely.

In his book “Organizational Culture and Leadership” (Schein, Schein 2016, Chapter 1), Edgar Schein states that culture has been widely studied from different points of view for a long time, and therefore there are many definitions for it. They see that culture exists on many levels. Some of them can be visible to outsiders, but many things affecting the culture are hidden under the surface. In his book “Yrityskulttuuri on Kuningas,” Panu Luukka writes how company culture is hard to define but is something you recognize when you feel it (Luukka 2019, 24-26). He does, however, quote a definition from Herb Keheller from Southwest Airlines, saying; “Culture is what people do when no one is looking,” and describes company culture as “Invisible glue, which with the help of norms, values and meaning leads the actions of company’s members.”

Company culture is often visualized as an iceberg. Above the surface, some things determine how it is communicated within the company about how the things get done, such as company vision, strategy, shared values, goals, structure, policies, and procedures, and below the surface, and can be unconscious. The beliefs shared assumptions, perceptions, traditions, values, norms, unwritten rules, feelings, and stories are the ones that define the way things get done in the company. (Wahl 2017)

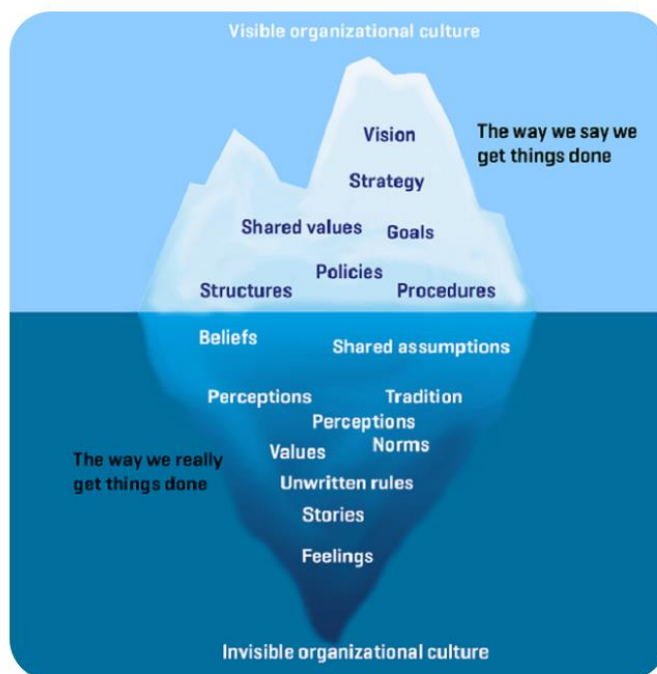


Figure 6. Wahl (2017) describes the company culture, beliefs, and system as a combination of visual things and those hidden under the surface.

To understand the company's culture, Schein and Schein suggest to:

1. Observe the behavior of organizations' members. How they interact and try to find patterns, such as what kind of language they use.
2. Find hints of the organization's climate. For example, what kind of feeling conveys from the groups' interactions and physical layout.
3. Recognize how formal rituals and celebrations demonstrate organizations' values and what they see as important passages.
4. Recognize espoused values. The organization's values are articulated publicly and what the company claims to work towards.
5. Recognize formal philosophy. What are the principles guiding organization members' actions towards the internal and external stakeholders?
6. Try to identify group norms. For example, what are the group's norms, standards, and values?
7. Recognize the "rules of the game." What are the unwritten rules that help organization members get along, and how do the newcomers become accepted members?
8. Try to understand the organization's identity and how the organization sees itself. What determines who they are, their purpose, and how they do things.
9. Try to understand what the embedded skills in the organization are. For example, the particular competencies helping the group accomplish tasks and which are passed on to newcomers.
10. What are the habits of thinking, mental models, or linguistic paradigms? What are the things thought to newcomers in an onboarding process about the framework for perceptions, thoughts, and what kind of language is preferred in communications?
11. Recognize the shared meanings: The same words in diverse cultures can mean other things. The group members create the emergent understanding.
12. Recognize the "Root metaphors" or integrate symbols. These are the ways how the groups characterize themselves. These symbols might not be appreciated consciously but are often embodied, for example, in buildings, office layouts, and other material artifacts. (Schein, Schein 2016, Chapter 1)

The culture is a collection of small deeds and things left undone. The company's visions, strategies, and missions can only build a winning culture if the employees' everyday experiences support them. The company management and owners have a significant impact on the company culture, and the management must have a clear role in how they can positively affect it. In culture creation, they act as role models for the rest of the company. How they act, what they talk about, to whom they speak to and especially whom they select as fellow managers are critical determinants to the company's culture. The employees see their actions as unspoken messages about how employees should act, which values are valued and how they might progress in their careers. (Luukka 2019, 97-109)

Luukka divides the company's culture into four stages (Luukka 2019, 58-71). The company culture, where creativity and citizen development can flourish, will need to trust the employees, even those working on the lower level. Those companies, who have a

winning or luck culture in which the management relies upon employees often have bottom-up leadership (Schein, Schein 2018 chapter 1). The fact that a company has a winning culture does not guarantee that it will always be that way. It is possible that any company if their culture is not adequately led, will regress to destructive culture, and therefore the company culture will need to be constantly on the agenda of executive meetings, and actions will need to be taken to make sure the culture will, for example, meet the company's vision and objectives (Luukka 2019, 58-71).

The winning culture is what the companies should consciously aim for and take actions towards. It will require that the culture be managed, and the basis of management will be in enabling the company to become a place to work in which the objectives can be met and in which the people want to use their full potential to help the company succeed. In a winning culture, the management trusts the employee and provide them autonomy (Luukka 2019, 58-71; Schein, Schein 2018 chapter 1). The employees will become more involved in the company, and the company will benefit from their full potential(Luukka 2019, 58-71).

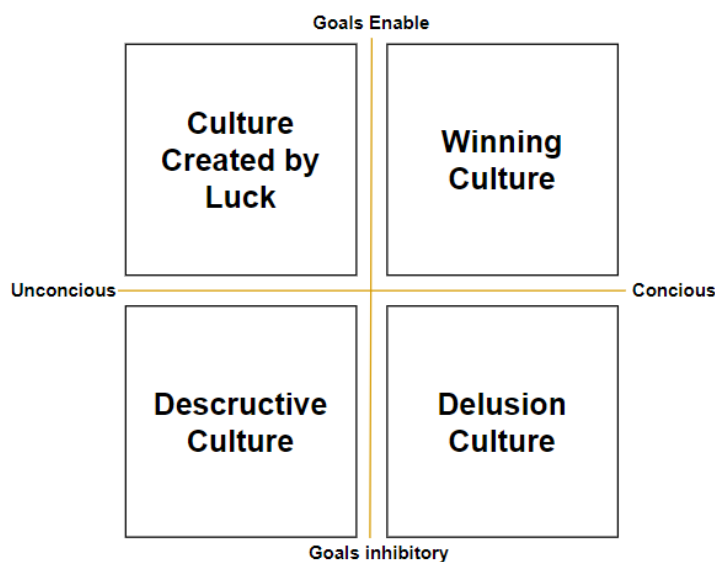


Figure 7. Winning culture by Panu Luukka: (2019, 59)

The state of culture, which will inhibit the company from meeting its objectives and goals, is called destructive culture—the destructive culture results from the unconscious forming of culture and luck. When the company management's intuitive is to make wrong choices for meeting the company objectives, it leads to destructive culture. It is possible that

management may think they are working towards building a desired kind of company culture but do not realize that they have been unsuccessful. The basis for building the culture can be delusional and wrong from the objective point of view. This state of culture is called the delusion culture. (Luukka 2019, 58-71)

There is a link between company culture and employee experience. When adequately led and designed, the company culture can increase the employee experience and create satisfaction. However, if the culture is not the priority and its forming is let to a chance, there is an elevated risk of developing dissatisfaction or noncommitment within the employees (Luukka 2019, 216).

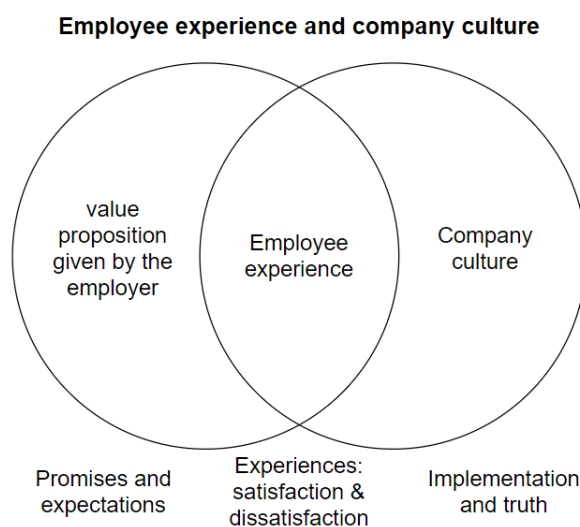


Figure 8. Luukka's visualization of the employee experience and company (Luukka 2019, 216).

The competition between companies in the business world has changed and is constantly evolving. In their book about Strategy at the digital age, Hämäläinen, Maula, and Suominen (2016) accent the importance of insights and epiphanies. The Finnish word "oivallus," which they use in the book, can also be translated to the idea. They wish to demonstrate the importance of being critical and even challenge the old familiar practices and beliefs. In past years, many companies, which are famous for their past successes, were beaten by more agile companies because they were not able to renew themselves. Change is necessary even in a prosperous company, and solid roots and previous success do not guaranty future success. They suggest that realizations and producing innovative ideas will need to become part of any company strategy.

Insights and epiphanies usually come from an individual, or in some cases, a group, and they can produce significant findings. Bringing the findings to the surface will require the

courage to question standard practices and consider things from a new perspective. If an employee can ask what-if questions, unique and sometimes even impossible solutions are found to the situation. The development will require an opportunity to ponder the issue, test their hypothesis, and require sufficient resources. This kind of activity can lead to the “Fail fast, fail often” way of working, which is recognized as an exemplary method for innovation. (Hämäläinen, Maula and Suominen 2016)

When the managers give autonomy to find solutions to problems to employees working on the lower level of the company hierarchy, it will require that the managers have an elevated level of trust in them. The management’s job is to ensure the employees’ full potential can be realized. The biggest mistake the manager can make is to overestimate the meaning of their status, experience and underestimate that of others, even their challengers, with less experience. To succeed in the digital era, the managers will have to have an ability to listen with an open mind, even those who might have opinions that deviate from the prevailing truth. The management will need to be mature enough and patient to understand that there might be value in those insights, even if they do not follow the company’s official line and what is seen as the truth. (Hämäläinen, Maula and Suominen 2016)

3.1.1 Augmenting Creativity and Citizen Development

Citizen development is a cognitive role, which requires a significant amount of creativity as the citizen developers are constantly looking for new ways to work. Therefore, the stakeholders in citizen development will need to have a high level of engagement in their development work (PMI 2021, 119-136). Motivator factors can increase employee engagement. But, on the other hand, employee engagement increases the person’s motivation to meet their goals. Martela and Jarenko (2014, 15) write about a person’s intrinsic and outer motivation, which is a crucial separation when becoming a citizen developer. The intrinsic motivation allows the employees to become more creative and innovative and makes them more engaged in their work and the organization. Gichohi found out in his research “The Role of Employee Engagement in Revitalizing Creativity and Innovation at the Workplace: A Survey of Selected Libraries in Meru County – Kenya” (2014, 6). He found that the workplace climate and empowering leaderships affect the birth of intrinsic and autonomous motivation (Gichohi 2014, 7).

For citizen development to root into the company and thrive, it will require a culture in which the individuals are empowered to innovate and solve the problems they see around them. Increasing employees' motivation to develop their work and skills will make them

more efficient in the future. Engaging company culture will help companies to become continuously improving and innovating machines. (PMI 2021, 128-137)

Higher creativity and innovation can lead to higher productivity and improve performance excellence and employee experience. In his study, Paul Maku Gichohi (2014) from the University of Nebraska – Lincoln was able to confirm that the level of employee engagement will be positively related to the level of staff creativity and innovation. The study has conducted a survey to find out the role of employee engagement in revitalizing creativity and innovation in the workplace. This survey was created to answer the question “Are the constructs of employee engagement positively related to the constructs of staff creativity and innovation in the library?” and was sent to selected librarians in Kenya. They held semi-structured interviews with the managers of each library. They recognized that when the people had meaning for work, it made them more emotionally attached to their job and they wanted to go the extra mile to accomplish more than they were expected. They were also able to show how people with higher levels of employee experience were more likely to take extra roles and how it increased their innovation and creativity. Higher employee engagement, by their research, could be achieved by making them feel trusted, and the management made them involved in decision making. Encouraging the employees to openly speak about their ideas, no matter how wild they were, also had a high impact on their employee engagement and experience (Gichohi 2014, 20-23)

3.1.2 Understanding Your Employees

Knowing your employees and learning to understand them is crucial in a good employee experience (Luukka 2019, 218). Employees are individuals, and each of them values different things and feels differently in each situation, understanding and acting upon that can make the employees passionate and ready to work harder to reach their goals or even go beyond (Schein, Schein 2018 chapter 9). To create a winning employee experience, the employer must understand their employees’ values, beliefs, aspirations, and expectations. The best way to understand that is to ask them and get to know them as individuals (Morgan, Jacob 2019, chapter 7). Especially if the company is big, the management cannot know all the employees personally, but they will need to increase their understanding with research (Bridger Emma, Gannaway Belinda 2021, 47-49).

In her master’s thesis, “Enhancing engagement through employee experience design,” Hanna Heikkonen (2019, 61-66) found that the needs of employees are different for everyone. Therefore, designing experiences will have to be done so that they can be

easily tailored to everyone. As a part of her research process, she established a mentoring program and innovation day and found that they were the most significant drivers for engagement. Employees participating in her research valued the mentoring program and innovation day as they considered their needs as individuals. Their engagement with the employee increased because they could invest their cognitive, physical, and even emotional energies in work.

Knowing the employees is also essential for identifying the potential citizen developers working within the company and those enthusiastic enough to become effective role models for the rest (Robiquity Limited 2020). If you learn to know your employees as people, not just as positions in the company, they feel that they are treated fairly, which will affect their motivation level. You are more likely to identify the individuals who have skills needed for citizen development.

An employee value proposition (EVP) is a tool built to understand what different employees value. It is a good base for building a company's value proposition (Luukka 2019, 218). To reach the intended goal with the EVP, it will have to be realistic and mirror the company values and purpose. If the employee sees the EVP as untrue, they will no longer see the company as trustworthy, which will negatively affect their employee experience. By keeping promises and living by their values every day and in every situation, the company can create positive employee experiences and increase employee satisfaction and engagement.

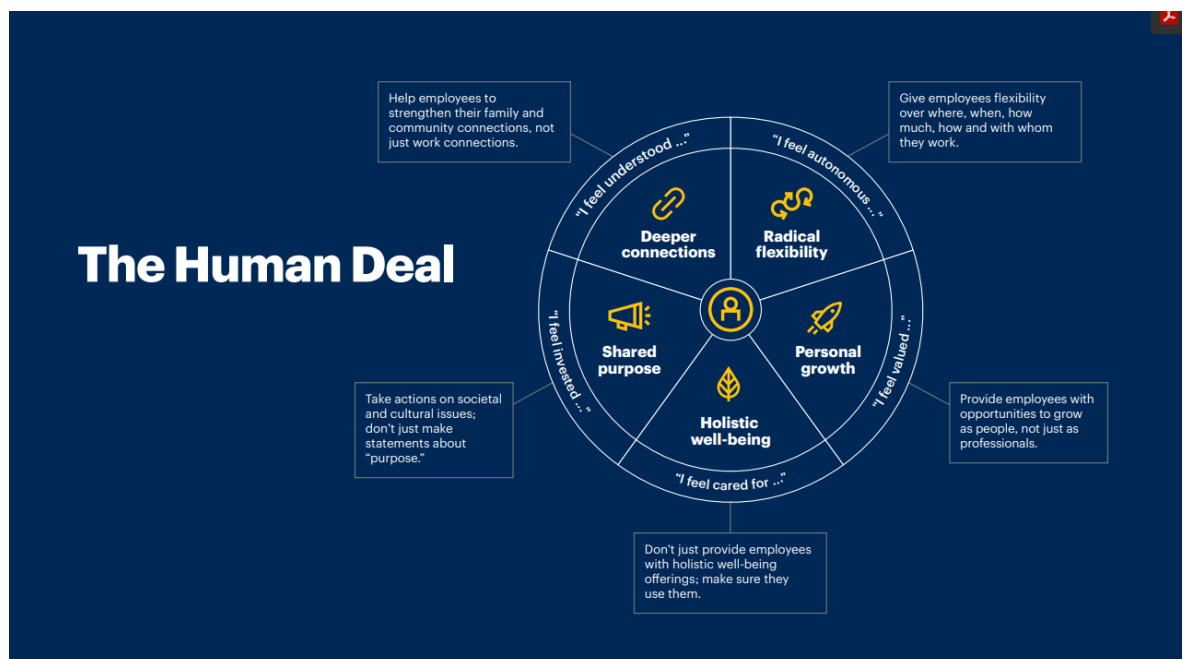


Figure 9. Garner (2021) has created a reinvented EVP for the post-pandemic workforce. It has augmented a more human-centric approach to creating an EVP.

A part of understanding the employee and what sparks them is identifying what kind of experiences they value. Bridger and Gannaway share the “Best Experiences” activity. This activity demonstrates how management can find out the most valuable motivator factors for employees. In this activity, the employees discuss the best experiences they have had within their careers. They are looking for occasions when they felt engaged at work and loved what they were doing. They also think about how they felt about the experience and the conditions that made the experience possible. They found out that many of the best experiences were not totally positive, but often they were taking part in a challenging project and seeing it through. They also introduced the peak-end rule, which shows how people usually remember experiences when asked about them later. They tend to reflect the most intense moments of the experience, the peaks, and the end. For example, people probably remember inspirational management and success from the challenging project previously mentioned. (Bridger, Gannaway 2021).

3.1.3 Create An Experiment-Friendly Work Environment

Companies should find ways to increase the ideation of their employees. Often, people do not speak about their ideas for fear of failure or being ridiculed. The company's psychological safety climate will increase the organization's ability to innovate and for its employees to bring forward their ideas. Ideation for a citizen development project will require many ideas, and the ideation will need to be constant (PMI 2021, 42-55). For companies to succeed in citizen development, they will need to start by identifying the environment of psychological safety within their teams and across organizations.

Amy Edmondson (2016, introduction) defines psychological safety as “a climate in which people are comfortable expressing and being themselves.”. Psychological safety is essential for citizen developers because in creating solutions, they will need to take interpersonal risks. Depending on the citizen developers' skills, development might require continuous learning of the technical tools and the connected target processes. Creating a functional solution with software applications is not straightforward but often requires a large quantity of trial and error. Within a company, where failure is not accepted, this kind of development work cannot happen (Edmondson. 2004).

In a companywide implementation of citizen development, it will not be enough for the citizen developers to feel psychologically safe, but the experience of psychological safety will need to be companywide. The approach of Ideation 2.0 will require the cooperation of

citizen developers and other company employees (PMI 2021, 42-55). No matter what role the person works at, their elevated level of participation will be required. They also need to ask questions and honest feedback without risk of penalization and harming their image. By Edmondson (2004), the experience of psychological safety will allow the group members to engage more openly to learn something new and innovate.

In her research of teams, Amy C. Edmondson (1999) recognized that psychological safety was the reason for success in the most successful teams in hospital environments. She came to that conclusion because, after research conducted on teams, she noticed that the most successful teams also made the most considerable number of mistakes. After further investigation, Edmondson realized that more errors were reported and not concealed within those teams, as in the units reporting fewer mistakes. She noted that taking an interpersonal risk on the most successful teams was easy and led to collective, group-level learning.

Psychological safety is a crucial factor in the effectiveness of teams and the ability to learn. According to Amy C. Edmondson's article "Managing the risk of learning: Psychological safety in work teams" (2002), it is easier for team members to admit their mistakes if they do not feel the risk of rejection if they believe their findings will benefit the other member in future. In these teams, members can discuss mistakes, ask for help and dare to try a new way of working. As citizen developers aim to change the ways of working, they will need to feel that it is not a considerable interpersonal risk if they challenge the status quo and have a critical view of the current way of working. Individuals constantly make unconscious decisions and calculations about how safe it is to admit mistakes and take risks only when the risk is small.

Edmondson has also studied with Josephine P. Mogelof the psychological safety in innovation teams. Even though there rarely are teams of citizen developers, there can often be only one citizen developer in a team. I suggest the innovative individuals will need the same experience as a team of innovators. I see similarities in the case of citizen developers to what Andersson, Moen, and Brett (2020) researched. Their research "The organizational climate for psychological safety: Associations with SMEs' innovation capabilities and innovation performance" done on Norwegian companies was able to demonstrate that psychologically safe environments do not only have a positive effect on innovativeness on team level as Edmondson (2002) suggested but it also has an impact on SMEs collaborating across the organization. Their results showed that reducing the risk felt by people at the organizational level enables collective learning and increases creative innovation.

In Edmondson's study (2004), the experience of psychological safety is influenced not only by the actions of top management but also by the relationships of colleagues. In the roles of SMEs and citizen developers, the people will need to feel safe, not only in the team their position is based on but also with diverse teams formed by people working in different corporate fields (Andersson, Moen, and Brett 2020). I see the results of the previous paragraph are linked to Edmondson's view of how dismantling silos and better enabling collaboration between other functions ensures collaboration between people working in innovation work together. Cooperation between teams provides the diversity needed for the innovation process and understanding the needs outside one's team. Collaboration and sharing are the best way to enable the spread of innovation activities throughout the organization (Edmondson. 2004).

According to Edmondson (2004), good leadership and support structures, well-defined tasks, and team goals, and sufficient knowledge and resources for doing the job help create psychologically safe teams. In addition, it will significantly increase camaraderie and the desire to work together in a team. On the other hand, if the above is not met, things working in the team have a greater likelihood of negative and distressing experiences, decreasing the feeling of psychological safety.

In his book "The 4 Stages of Psychological Safety", Timothy R. Clark (2020) talks about different levels of psychological safety. These levels define what a person feels safe to do or say in that group. I will be noting the first three levels but immerse at the fourth and most relevant level for citizen development.

Level 1, Inclusion safety, sounds simple, but it can be surprisingly difficult to reach when people get to adulthood. As children, the people are inclusive by nature, and a new member is accepted as a full member of the group, for example, in kindergarten very quickly. In adulthood, the reaction towards newcomers to the group is not as straightforward anymore. Only when actions have shown the acceptance of a new person, the person will become a fully integrated person of that specific group. (Clark 2020, chapter Stage 1. Inclusion safety)

The second level is Learner safety (Clark 2020, chapter Stage 2. Learner safety). Individuals who know the learner's safety have a higher level of psychological safety within the team. They dare to ask questions, ask for feedback, share their ideas, make mistakes, or even fail. They are no longer passive members of the group but can try new things, take risks, and become influential members. Learning possesses more interpersonal risk than inclusion safety, and at this level, a person might be worried about

how they are seen, are being tested or ignored, can they be themselves, and will their image be damaged by something they should do?

A person having a Contributor safety (Clark 2020, chapter Stage 3. Contributor safety) feels that they are not apprentices but are truly becoming a part of the team, and their actions add value. To reach the level of contributors' safety, the person must develop in their job and acquire the skills required for the job and are not between preparation and performance as they are on learner safety but have received guided autonomy based on their performance. When people reach this level, they feel a valued part of the team. This level is also affected by, for example, a person's position, title, or the authority they have received. The contributor safety level can be lost, and the person can be retrenched to learner safety if the person is not performing as expected.

The highest level of psychological security and the most meaningful from the point of view of citizen development is the level of the Challengers' safety (Clark 2020, chapter Stage 4. Challengers' safety). Clark finds that one of the key concepts of challengers' safety is the democratization of innovation. Citizen development can also be interpreted as a democratization of development. I see these two things are linked closely together. A person who has reached this highest level of Psychological safe dares candidly challenge the existing status quo and take risks. Leaders modeling behavior has a significant effect on a group becoming innovative. The leader can unlock the groups' creativity by welcoming dissent and showing by their actions the members that there is no need to fear. In a group where the leader accommodates and helps the members to tolerate dissent emotionally and encourages dialogue, it is possible to reach a level of connections, association, unexpected leap and what is the most important from the point of view of citizen development, the flow of insights aha moments and ideation. As a result, the innovation capacity is higher, and people can challenge and cocreate better. It is important to remember that in the innovation process, learning is always more fruitful than knowing, and it should be noted that any ridicule or rivalry for prominence can kill the curiosity and opportunities for co-creation.

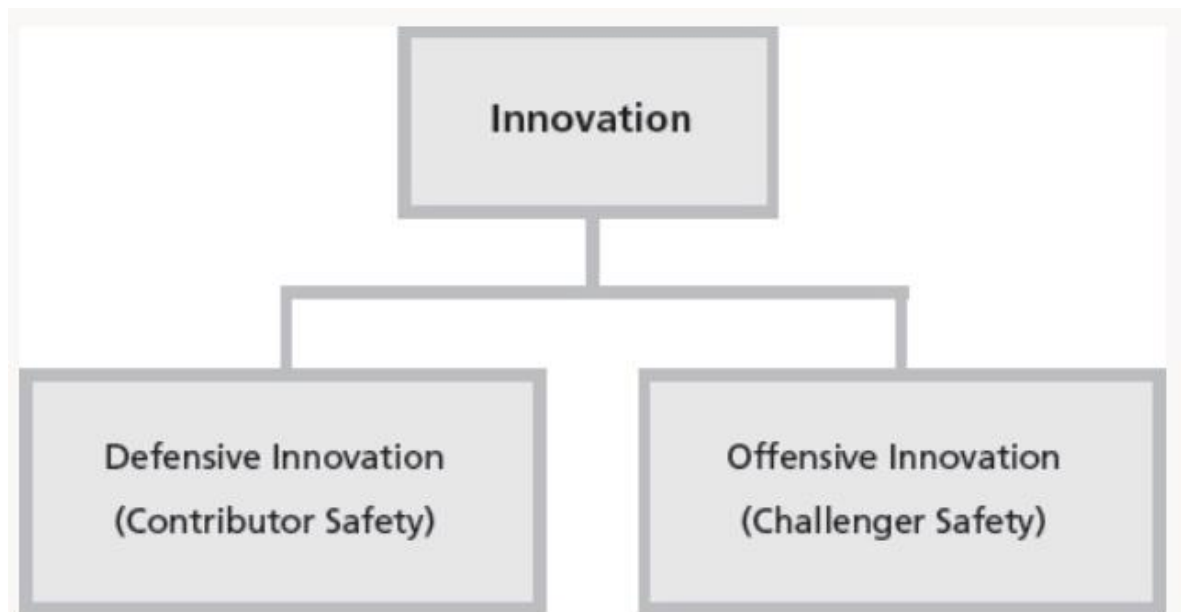


Figure 10. The levels of innovation people feel psychologically safe to do at the two highest levels. (Clark 2020, chapter Stage 4. Challengers' safety).

3.1.4 What Motivates People to Walk the Extra Mile?

To succeed in citizen development, the management should spend some time trying to understand why their employees would be willing to use their valuable time in challenging the past ways of working and developing novel solutions to things they find inefficient or some other way faulty. However, Panu Luukka (2019) augments this task by noting that the managers should understand the employees take an active role in the company and what is the insensitivity level of them of doing so. Companies have also discussed motivation in the past, but they have tried to understand how motivated the employees are. The reasons for motivation might not have been understood. What might not have been understood in those conversations is that motivation and its causes can be divided into two. The extrinsic and intrinsic motivations differ from where they arise.

Extrinsic motivation is the reason for doing something that is detached from the person. The actions taken are driven, for example, by benefits, rewards, and avoidance of punishments. When a person is extrinsically motivated, they are not excited about performing the task itself, but about the prize, they get from doing it or the punishment they might get from not doing it. In his book "Drive" (2009), Daniel Pink extensively discourses how using extrinsic motivators to get the job done has been widely used since

Taylorism, created by Frederick Winslow Taylor's rise at the end of the 1900s. And how extrinsic motivators can help people work with tasks that do not require cognitive thinking but only mechanical skills, such as those done in factory-like environments, where the jobs are non-interesting and straightforward. For some people, this is still true.

When working in a creative role, such as a citizen developer, it is essential to notice that the external motivation will not bring out the best results, but often it will even kill the creativity when the person is concentrating on achieving the reward. Pink (2009, 62) and Martela and Jarenko (2015, 71-76) highlight the risks of using external motivators for tasks requiring cognitive skills, as even though they might help achieve short-term goals, they can lead to poorer performance in the long term. External motivators can give a short time benefit, which will quickly wear off, and in the long term, it might even reduce the motivation of that person. Even though using, for example, money as a motivator can cause the employees to narrow the focus needed for cognitive tasks, it does not mean that the employees should not get compensation for their work. Instead, the employees should get a fair baseline compensation for their work, such as salary and benefits, ensuring they can maintain their standard of living.

As the subject of this research is citizen development, more specifically knowledge workers acting as citizen developers, I will be looking more closely into intrinsic motivation. It has been identified as the most valuable motivation for cognitive tasks. Intrinsic motivation is enjoyment-based motivation and is the most forceful driver to the task at hand, especially if the task requires creativity. It is determined by how the person doing a creative job feels when working. When people are intrinsically motivated, they want to engage. The concept of intrinsic motivation was first discovered by Harry F. Harlow in the 1940s when he researched primates solving puzzles and found that no external rewards were needed since the enjoyment of conducting the task was a reward itself. Further research has been done by Deci and Ryan from the 1960s on, and they have introduced their self-determination theory. When replicating Harlow's research on humans, they identified that people are driven to be autonomous, competent, and connected (Bridger Emma, Gannaway Belinda 2021, 64-69).

Intrinsic motivation is the most important type of motivation in today's working life, which for most of us requires cognitive skills (Pink 2009, 21-25). That is also true when trying to understand what could motivate citizen developers. Their work involves ideation and turning ideas into reality (PMI 2021, 11-14). If the goal is to increase employees' intrinsic motivation, the organization can succeed by offering them intrinsically inspiring moments (Martela & Jarenko 2015, 71-86). Sometimes, the organization can define the goal, and

the person can still be intrinsically motivated. That can happen if the goal feels valuable to them and if they feel reaching it is worth their effort.

Martela and Jarenko (2015, 71-86) also state that we all have moments in our work when we are intrinsically motivated and those when the motivators come from outside. They stress that it is essential for the company leaders to recognize that the employees have intrinsic motivation and do not benefit from the carrot or stick -approach many company managers to rely on. When a person is intrinsically motivated, they can feel enthusiastic and energetic, and identifying opportunities feels easy. On the other hand, external motivation might feel stressful, distressing, or wearing, and it is easy to see threats instead of opportunities when intrinsically motivated.

Daniel Pink (2009) bases his own research on Self-determination theory, as does Martela and Jarenko (2015). Pinks theory on motivation 3.0. replaces the connectedness to purpose and competence with mastery, but Martela and Jarenko (2015) talk about all four aspects. In the following chapters, I will dive more deeply into the different motivation builders identified in the above studies. I will be using the term “mastery” for mastery and competence.

Table 2. the self-determination theory by Deci and Ryan and the Motivation 3.0. by Pink are linked to Abraham Maslow’s theory of needs. Martela and Jarenko talk about four aspects of intrinsic motivation.

Maslow	Deci & Ryan	Pink
Self-actualization	Autonomy	Autonomy
Esteem	Competence	Mastery
Love and Belongingness	Connectedness	Purpose

Autonomy is a basic psychological need. Having autonomy at the workplace means that the person can express themselves by working. They affect the ways of working and can decide and prioritize tasks worth working on. In an autonomic workplace, the employees should have the freedom to select which of the organization’s rules they choose to follow. In addition, they should be guided by and support the company values and goals. (Martela & Jarenko 2015, 71-75).

In his book "Drive," Daniel Pink (2009, 23) cited MIT management professor Karim Lakhani and Boston Consulting Group consultant Bob Wolf how "enjoyment-based intrinsic motivation, namely how creative a person feels when working on a project, is the strongest and most pervasive driver." They are realized when the company culture and task generate intrinsic motivation.

Pink (2009, 85-108) says that management of people is outdated and that it is something humans have invented and is out of sync with human nature. It is built on beliefs that those being managed will need a reward or punishment to act and that they need guidance or otherwise they will wander. He reminds us how by nature, young children are self-directed and curious and when growing up, that basic set of a human being is changed to more passive and inert by perhaps the school system, management, or broader ethos. Autonomy at the workplace means less managerial control of people and reawaken their deep-seated sense of autonomy. He calls for a renaissance of self-direction.

The feeling of autonomy strongly affects individuals' performance and attitude. In the year 2004, Deci, Ryan, and Baard researched workers of an American investment bank and found that those employees, who were given more autonomy, were more satisfied on the job. The bosses who looked at things from the employee's point of view managed to improve job satisfaction, which led to higher performance. The employees received support and meaningful feedback, and opportunities to choose their tasks and thrived at work (Pink 2009, 85-108). Working on tasks meaningful to them, the people will work with more flexibility and have a better focus on outputs (Luukka 2019, 368). Gichohi's study also shows that autonomy does not only enhance the employee experience but helps them to think in a more creative and innovative manner. (Gichohi 2014, 22).

In his book, Daniel Pink (2009, 85-108) tells stories of two well-known companies with an autonomous culture. In both companies, the employees can use a certain percentage of their working time on projects of their own choice. The two quite different companies: M3 with an exceptionally long history, which was already led autonomously in the 1930s and let their employees' use 15% of their time working on a project of their own choice, the other one is Atlassian, which was only established in 2002 and in which people can use 20% of their working time on personal projects. Both companies have experienced some of their most successful products springing from those projects. The invention of Post It notes is worth mentioning here. They are now a significant part of M3's product offering but were originally a personal project of a man called Art Fry, who developed them on his 15% doodling time.

Mastery is another one of people's psychological basic needs, and it means that a person feels that they are good at what they are doing, and they can successfully finish the tasks given to them (Martela & Jarenko 2015 71-76).” As a motivation builder, mastery is a driving force for creating employee engagement and making people want to learn new skills and get better on those skills they already possess (Pink. 108-130). We also enjoy doing tasks we excel and reaching goals makes us feel happy, say Martela and Jarenko 2015, 71-76).

People can be motivated by the experience of being involved with an activity. The activities can be risky, difficult, or painful but offer novelty and the opportunity to discover something new. This experience Mihaly Csikszentmihalyi calls flow and describes it as an “almost automatic, effortless, yet highly focused state of consciousness.” (Csikszentmihalyi 2009, Chapter 5).

Csikszentmihalyi (2009, Chapter 5) lists nine elements about the state of flow, and they are:

1. Having clear goals for how the task should be done
2. Getting immediate feedback. (This can also be received from doing the task and will not need to be verbal)
3. Having a balance between challenges and skills
 - a. tasks that take people to a limit of boredom and anxiety.
4. Action and awareness are merged
 - a. Being concentrated on the task at hand
5. Being intensely focused on the present and excluding disruptions from consciousness.
6. Not being worried about failure
7. People stop being self-conscious
8. Losing the sense of time
9. The activity becomes autotelic. (Csikszentmihalyi 2009, Chapter 5).

The feeling of mastery and willingness to return to the task is strongly influenced by the progress made and learning new things. The mastery is also enhanced when the person can move forward and get better at doing the task. People want to be their personal best, and, in many hobbies, people learn new things and work hard to achieve something voluntarily, and this also applies to citizen development, which is an intrinsically born, voluntary task in most cases. (Pink 2009, 108-130)

Companies can increase the feeling of mastery within their workforce. However, to do so, they will need to understand what affects the person’s ability to be resilient, develop themselves, and learn new things (Pink. 209. 108-130). In previous chapters, I have written about psychological safety, and in the creation of a learning environment, people

must be able to admit their shortcomings and trust that they can safely try new things without fear of punishment.

Another thing affecting people's resilience and willingness to try challenging things is called self-efficacy. Self-efficacy is determined by a person's belief in their abilities to succeed in a specific task and circumstances. People with low self-efficacy are unwilling to take on challenging tasks or give up at an early stage because they take the failure personally. Self-efficacy is affected by past experiences of people linked to a similar task or experiences of other people they see as like themselves. People's self-efficacy can be increased by providing them role models like themselves, collective learning, or splitting the tasks into smaller bites, which can be more easily achieved. When the person's self-efficacy increases, they will be more willing to take on new, similar challenges in the future (Greene 2018, Chapter three).

The person's mindset also influences their willingness to try something new. Carol Dweck (2019) has recognized how people have two kinds of mindsets. A person with a fixed mindset sees their intelligence and ability to achieve as unchangeable. They might not think they can learn certain things and see failure as personal. A person with a growth mindset sees that by trying, they can reach a higher level of intelligence by taking on challenges and hard work and being open to criticism.

A fixed mindset is born out of past experiences but is not permanent. Company leaders can increase the employees' mastery by designing a company culture with a growth mindset. That can be done by recognizing people's efforts to learn and develop instead of their talent (Dweck 2019).

The following two basic needs are closely linked to feeling connected to something. People around us have a significant effect on us and our motivation. For example, a conflict at the workplace can have a significant negative impact on everybody's motivation, and on the contrary, if people around us are happy or if we know that our work can make them feel better, we are more likely to be more motivated. (Martela & Jarenko 2015, 71-91)

Purpose or doing a good thing, as Martela and Jarenko (2015, 71-91) express it, means that *"a person can positively affect the lives of themselves or others."* They also state how working with tasks that harm other people can be experienced distressing and crippling. Doing good is a solution where everyone benefits, which has a positive effect on the person at the receiving end but also the one executing the task. The purpose is to work for a cause larger than oneself and provide context to work.

Pink (Pink 2009, 131-146). portrays humans as purpose seekers, and he states that purpose has previously been overlooked and how he sees it as a powerful source of energy to people. Therefore, his Motivation 3.0 emphasizes purpose maximization. Pink (2019, 131-146) sees that the purpose has become increasingly important in business because of two generations. The so-called boomers are currently reaching their 60th birthday and looking back to their past lives, understanding their mortality, and beginning to seek meaning, significance, and what they want to do with the rest of their lives. On the other hand, their children, the millennials' upbringing, gradually changes the requirements for good working culture. These generations put more weight on nonmonetary factors, such as meaningful work, than they do on monetary compensations.

Viktor Frankl (2010), the concentration camp survivor and inventor of logotherapy, saw death in all its ugliest form during his time in the camp. He realized that if the people had a meaning and purpose for their lives, they could endure and stay alive. A key motivational factor is a sense of doing meaningful work and understanding its purpose.

Bridger and Gannaway (2021, 65-72) mention how work can become more meaningful if its meaning for someone else and the task's purpose in the bigger picture is clear. Panu Luukka (2019) shares a story of radiologists whose correctness of diagnoses was increased by 46% when they were shown the x-rays and pictures of the patients' faces. The person's image gave them a greater understanding of the meaning of their work and woke up their intrinsic motivation to do the task better.

The above three motivator factors are a part of Daniel Pinks' Motivation 3.0. theory (Pink. 85-108), but the Connectedness is the third factor in the self-determinator theory by Deci and Ryan (Bridger and Gannaway 2021, 65-72) and the fourth factor in Martela's and Jarenko's theory (2015, 71-91). It means that a person feels cared for and connected to others. A sense of belonging and working towards the same goals is a vital motivation builder. Bridger and Gannaway's (2021, 65-72) research has shown that connection to other people is strongly linked to people's best experiences. Positive social relations, for example, with management, peers, or people from outside the company, affect individuals' well-being as it increases the level of serotonin in their brain, which activates the reward circuitry and makes us feel happy.

Center for Talent Innovation found that sense of belonging increases the individual's productivity, motivation, engagement and makes it more likely to contribute to their fullest potential. A Belonging Barometer study by Ernst & Young Global Limited was launched to understand "the emotional impact of belonging." They found that people want to connect with their co-workers, and checking in on one another now and then increases their sense

of belonging, especially if it is done with positive intent. Reaching out to a person on a personal or professional level makes them feel valued and connected and enhances their employee experience, especially if the reaching out is done by the company leaders. (Twaronite 2019)

Being a part of a team has been researched extensively. Psychological safety, which significantly affects connectedness, has already been handled in chapter 3.2.2. Timothy R. Clark (2020-chapter Conclusion) has introduced the four stages of psychological safety: inclusion safety. That is closely linked to connectedness and becoming a part of a group. The individual will need to experience being respected and having permission to participate to stay motivated. If they do not, it will negatively affect the individuals' confidence and cohesion.

3.1.5 Managing Change

The human brain is hardwired to have a built-in survival instinct, and change is seen as a threat. In his book, "Change," Kotter (2021, Chapter 2) says that this survival channel has played a vital role in the survival of the human race but does not serve us well in today's world. Often change might make people feel afraid and anxious and activate their "fight or flight" -mode, starting the survival channel. There, however, is a companion to the survival channel, the thrive channel. It means that the human brain is looking for opportunities instead of threats. Spotting possibility activates the internal mechanism and makes energy go up and feel passionate and excited. If a person's thrive channel is activated in a change situation, it will result in more positive emotions and help people be more creative, innovative and collaborate better with others. Conversely, if the survival channel activates, a person's energy spikes, and focus will shrink to ensure personal survival.

In today's fast-moving world, organizations often fail to activate their members thrive and fail in change. Many companies struggle in arising the thrive as the historical experiences of their members and the threats affecting them by the news and social media have overstimulated people's Survive. Even though change must be led without overheating the Survive of people, it does have positive effects and makes people faster problem-solvers. Kotter says that great leaders keep survival alert but make sure it is not overheated but rather aid them to thrive. He also stresses that change must be led and not managed. (Kotter 2021, Chapter 2)



Figure 11. How Survive and Thrive can best work together and lead to good solutions. (Kotter 2021, Chapter 2)

The citizen development movement is a part of the digital revolution that constantly changes the world and organizations (Gartner, Newsroom 2021). Today the speed of change is much faster than it has been in the past, and we live in a world of great uncertainty. The work of many will change significantly, and the digital transformation will and has already created many threats and opportunities. Big, transformational change happens more often, and the COVID-19 pandemic has accelerated the change in the last two years as it has forced companies to adapt to the new situation in a short time. Some companies have succeeded better than others, and it is essential to try and understand what those organizations that succeed in transformation do differently from those that do not. (Kotter 2021, Chapter 4)

Citizen development ensures continuous change in the company. To effectively launch novel solutions, change management skills are needed to fully realize the full potential of the applications created by citizen developers. It requires introducing modern technologies and changing business processes and the methods the old systems are used. Unsuccessful change management can derail a successful adoption of citizen development in the organization. It is important to have advocates and natural ambassadors for citizen development who believe in it and want the organization to succeed in it. Those could be people who have experienced the value of citizen development in their own work or just people who like to try new things. By leveraging

their enthusiasm, these change ambassadors can make the implementation of citizen development easier. (PMI 122-128)

Words must match the deeds to succeed in change. If there is a gap between what is said and done, the change will not be successful as people grow cynical and stop believing in the change. Therefore, it is essential to show by deeds that the organization is serious about the matter, and it is not just another of those change initiatives which do not lead to anything new overall. It is essential to understand that honest communication about change is not merely data transfer, but people's faith must be evoked for the change vision. Their anxieties will have to be accessed, and their anger must be accepted. The leaders of change will have to find ways to deal with them and generate the buy-in of the whole organization. (Kotter. 2008 step 4).

The pace of change can often feel too slow for change-driven people and make them frustrated and stressed (Kotter 2021, Chapter 2). However, it is essential that when starting citizen development in the company, it is well planned, and the structures it requires are all in place. The management will need to strategically choose to begin implementing citizen development, act as sponsors for the change and ensure they are all aligned. In addition, employees may need to get a higher level of autonomy to do their development work to what they have previously had and more training opportunities to learn skills required in citizen development (PMI 122-128).

Being transparent about the future is vital. If people know what to expect and understand the greater meaning behind the change, they will accept the change more quickly. Demonstrate how they can make their work easier by showing them solutions already done, visualizing the benefits of citizen development to an individual, and telling how the company is planning to upskill them. It is also crucial that the citizen developers have enough support and documentation they can turn to when they need help. Recognizing and mobilizing change ambassadors can significantly help activate peoples thrive to citizen development and increase enthusiasm for the opportunities it can bring and generate buy-in. Finally, in the words of Kotter (2021 chapter 2), "Unleash the power of masses." A sense of shared ownership of the endeavor will help generate the buy-in, get the masses to contribute, and make sure the change is done together with the future citizen developers. (PMI 122-128)

3.2 Findings from Literature Review

With the digital revolution, businesses are expected to respond much faster to customer needs than before. Today, customers and company employees are accustomed to quick

response times and having information easily accessible when and where it is needed (Gartner, Newsroom 2021). The need for custom-made apps and task automation has been recognized in most companies, but external consultants often implement such solutions (Wong 2019). Some of those solutions could be created by citizen developers. Often solutions needed are relatively simple to develop, have low value from the whole company's perspective, but would significantly streamline an individual's or group's work.

People who become citizen developers enjoy developing. They have an intrinsic motivation to develop, and if they are allowed to do so, their employee experience will increase (Martela & Jarenko 2015 71-76). In addition, the work done by citizen developers can affect the employee experience of others working in the company. For example, if a citizen developer uses a low-code tool, such as MS Power Automate, to automate a repetitive task, it will help the person previously doing it and let them concentrate on more valuable work.

When other people become a part of citizen development, as PMI (2021, 11-14) suggests in Ideation 2.0, they will become a part of the change process, and the outcome will probably fit their needs better. Likewise, when people have systems that serve their needs well, it will affect their employee experience (Morgan, Jacob 2019).

On the other hand, the organization will need to be ready for citizen development. They will need to work decidedly towards the kind of culture where citizen development can flourish. It is a self-feeding loop; citizen development increases the employee experience and vice versa.

Citizen development will need to be invested in, and in many cases, it will require significant organizational culture changes. The employees will need to be empowered to make decisions, but they will need sufficient skills to do that. The culture that can increase company innovation is psychologically safe as it will ensure the people can be open about their ideas and be critical (Edmondson. 2002). In addition, seeing people as individuals and meeting their unique needs will increase their employee experience (Heikkonen 2019, 61-66). To motivate people to become citizen developers, the company should offer them autonomy, mastery, purpose, and connectedness (Martela & Jarenko 2015, 71-75).

4 Research Methods

Action research is a method of research that is done with soft techniques. The methods address real-life events and examine the implications of this intervention. Action research focuses not on obtaining generalizable information but finding precise information for a specific situation and purpose. Action research is not a research method but a research setting. In action research, the work is done in close collaboration with the setting for action. (Anttila 1998)

Action research is related to the work, and the subjects of the study are all those with whom the researcher has a functional connection in that situation. The research subjects are those who work together with the researcher on the problem. Action research provides a systematic framework for the problem-solving situation. It will also influence future development projects. (Anttila 1998)

It is an empirical method because it involves observation and uses behavioral data. It relates to "here and now" experiences and not the subject's past experiences. On the other hand, it can also be counted as a hermeneutic method because the researcher must interpret the situation and its factors. Action research is flexible and adaptable, and it can change during research phases. It also allows interaction, experimenting, and innovating, but it might happen at the expense of control. (Anttila 1998)

According to Ojasalo, Moilanen, and Ritalahti (2020, 58-64) action research process work in cycles. The spiral moves from observation to evaluating and reflecting, planning, and implementing if the plan is changed—its trickers to another spiral, including the same steps.

Action development is an integral part of organizational development. It is a collaborative and interventionist way to research how behavioral science knowledge and existing organizational knowledge are integrated. Action research is done to address existing issues, and it aims to bring change and develop a self-help-competencies that add to the scientific knowledge. It is an evolving and collaborative process. It is essential to understand the past and build on it to change the present and shape the future in action research. Action research is conducted with people rather than to them. (Coghlan, Abraham 2016, Chapter 1.)

The context of action research can be divided into environmental and local (Coghlan, Abraham 2016, Chapter 1.). The environmental context is the global and local economies

in which the action research occurs. The environmental context of this thesis is the ongoing digital transformation and its effects on the knowledge workers and development done in companies in the future. The local context in this thesis is the functions in the organizations where citizen developers work and the citizen developers as individuals.

Quality of relationships between members of the system and the researcher is essential in action research (Coghlan, Abraham 2016, Chapter 1.). Having a trusting relationship helps to succeed in research and reach high-quality outcomes. The people participating in action research should share goals, reflect together. Collaborative actions will have to be taken. Building trust and developing a common language is essential. Even though this thesis did not have the collaboration aspect of action research, the previous had to be established with the interviewees. Before the interviews, discussions were held with them on LinkedIn to ensure trust in the interview situation. Their stories were also shared with them, and they were able to give feedback and ensure their correctness.

The quality of the action research process itself will need to be ensured. The quality is built on the inquiry process and implementation (Coghlan, Abraham 2016, Chapter 1.). The meaning of the dual intent is to constantly through continuous collaborative cycles to generate insights, trigger action and pay attention to the project's processing. The quality of action in this project was done continuously. The development was agile, and it started by creating the skeleton of the website (Appendix 6). The literature review and the discussions with the interviewees were the biggest influencers on the website's content and the decision to start a LinkedIn group for citizen developers (Appendix 7).

Outcomes in action research usually improve organizational practice and the participants developing their competencies (Coghlan, Abraham 2016, Chapter 1.). Another outcome is the actionable theory which adds value to an organization. This thesis does not look for outcomes to a single organization but a solution that will help many organizations to take the correct action to reach an employee experience that supports development. During the discussions, the interviewees discussed their competencies as citizen developers, and some of them understood their benefits and opportunities to learn new skills.

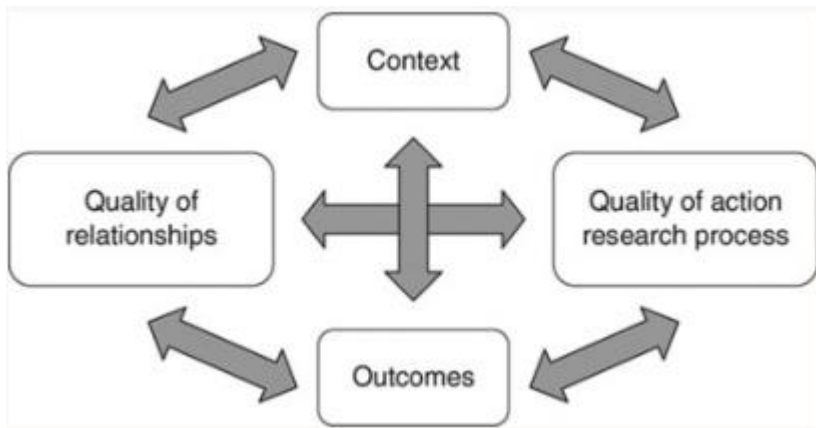


Figure 12. A complete theory of action research by Shani & Pasmore (2016). (Coghlan, Shani 2016, Chapter 1.)

I was researching a phenomenon, citizen development, and my research had an ontological aspect. Popper's three worlds (1972) combine three elements of my thesis (Anttila 1998). This model incorporates all three parts of my thesis into one research entity as it combines the physical, human, and psychological aspects. In the perspective of this thesis, the three worlds by Popper, world 1. is the software used by citizen developers, world 2. the organizational culture and employee experience, and world 3. is the website created.

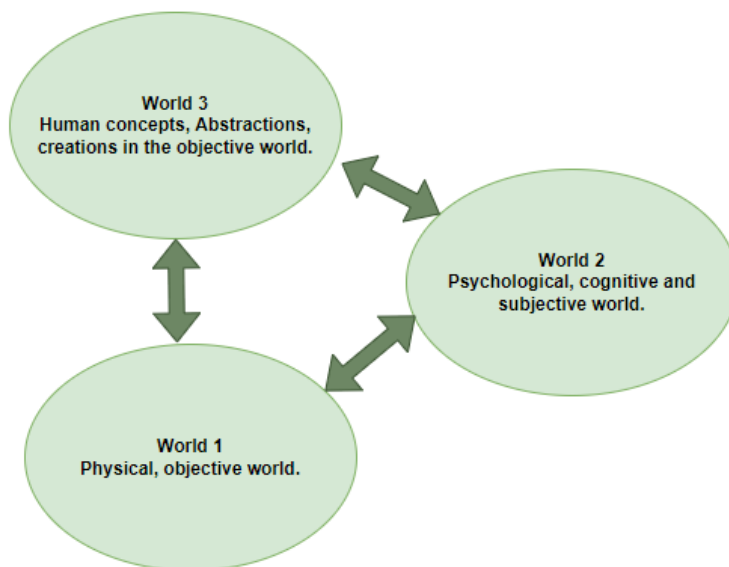


Figure 13. Popper's three worlds (1972)

Ethical guidelines of the Academy of Finland were followed, and the below matters will be taken into consideration:

1. Follow the good scientific practice
 2. Be truthful, meticulous, and accurate in your research, recording, presenting, and judging the results.
 3. Do the data collection ethically
 4. Be transparent when publishing your findings
 5. Note other researchers' work and their scientific knowledge
 6. Give credit to whom it belongs
 7. Plan, conduct and report the research in detail by the standards set to scientific knowledge
 8. Make sure the materials are determined and recorded acceptably. If researching group, discuss the matter with other parties as well and find consensus.
 9. Inform the financing to those participating in the research, but also on your reporting and publications.
 10. Follow good administrative practice.
 11. Handle your documentation and lists of publications with care and ensure the information presented is accurate and truthful.
 12. Take requirements of confidentiality into account
- (Academy of Finland. 2003)

It is vital to work towards transparency during the entire research process. It had to be considered when designing and carrying out the interviews and interpreting data. Also, the strategies for research, the selection of interviewees needed to be transparent. (Hiles & Čermák. 2007)

4.1 Interviews for Data Collection

Outside literature review, the interviews played a crucial role in this research. The insight about what citizen development in many organizations currently looks like, how a company can start developing their employee experience, and what it takes for citizen development to become sustainable came mainly from the interviews. The citizen developer interviews were semi-structured theme interviews, but I will also conduct expert interviews for employee experience and IT experts.

According to Ojasalo, Moilanen, and Ritalahti (2020, 106-113), there are two main categories to choose from when conducting an interview: structured or semi-structured. The semi-structured interview can be divided into three sub-categories; theme interviews, focus interviews, and group interviews (Krueger 2002, 6-7).

Semi-structured interviews are linked to a specific topic and require a high understanding of the topic. The questions have been adopted based on the interviewees' background and experience level as citizen developers. (IfD Qualitative Research Specialists 2018)

I have a citizen developer background and have strong knowledge of how an organization can influence an individual's willingness to develop and expertise in citizen developers' tools. However, to hold interviews on employee experiences point of view, a great deal of research has been done in the literature and as a part of my studies. This has enabled me to conduct the interviews professionally and ask additional questions. In addition, using semi-structured interviews as my research method allows the interviewees to share their stories about their experiences in citizen development and create a good conversation about the topic.

The map of questions I created contained a wide range of open-ended questions. In maintaining the conversation-like interview and getting more in-depth answers, summarizing interviewees' previous responses be necessary. The interviews were started with a broad, general question about the interviewee and their past. It is essential to start the interview with a question that makes the interviewee comfortable and helps them answer more specific questions later on. More in-depth questions were asked after a good conversation had been established. The interview was ended with a conclusion section and by asking clarification questions. (Gibbs 2013)

When conducting the interviews, I aimed to keep the questions straightforward to avoid confusion. In this, I did not always succeed. Only one question should be asked at a time. Active listening, showing empathy, and sensitivity are essential, but the interviewer needs to challenge what the interviewee is saying if necessary. Summarizing, asking probing questions, and mirroring are good tools for an interviewer to show that they are listening and make sure they understand the interviewee correctly (Krueger, 2002). When interviewing, I had to find the balance on how much they should talk. Asking too many questions might feel pushy to the interviewee, and too few might leave them quiet (IfD Qualitative Research Specialists 2018).

Even though the analysis was mainly done after the interview, some of it was done during and right after the interview. This is because during the interview, for example, the sentiments and reactions can be best analysed. The interviews for this thesis were held on Teams and recorded. After the interviews, the recordings were checked for any technical issues. At this point also notes should be checked, and the themes, hunches, and interpretations should be written down for future use. (Krueger, 2002)

I Used the Teams functions to create preliminary transcripts of the interviews. After the interview, I listened to the recording, and the preliminary transcript was corrected. While re-listening the interview, I examined the emerging themes and possible quotes and made typologies of chosen topics. (Krueger, 2002)

The reporting of the citizen development interviews I did narratively. I created stories based on the interviews about their experiences as citizen developers.

The quality of research is the researcher's responsibility (Academy of Finland. 2003). The Ministry of Education has created guidelines for good scientific practice in Finland.

To ensure the high quality of the research and validity and truthfulness of the stories, interviewees' have checked them.

4.2 Interviews

From these interviews, I am looking for real-life stories people have had as citizen developers or reasons why they have not become citizen developers. Depending on my interviewee, I was looking for answers to different research questions.

From the interviews, I attempted to recognize the culture in the company and try to understand what in the company culture is most important for citizen developers. I am also looking for answers on how to become a citizen developer and discuss with my interviewees why they have become citizen developers, what kind of people they are, what skills they have, and what they value.

When drafting questions for the interviews, I decided on having three main themes: Questions about the person as an individual, questions about various aspects of an organization and employee experience, questions about collaboration with IT and development technologies.

By asking questions about the person as an individual, I wanted to create a picture of a development-minded person who already is or would be a potential citizen developer. I wanted to learn about their background, job roles, character, skills, motivators, and preferences, whether to work in a group or alone, and their best experiences to understand the motivators behind their development work.

The questions about the companies and the employee experience were linked to motivation, psychological safety, training, future opportunities, prevention of citizen development, opportunities to use the time for development, and a network of citizen development.

The last set of my questions was about the tools available for citizen developers, collaboration with IT, solutions created, technical assistance needed in development work,

ensuring the sustainability of citizen developer created solutions, and ensuring the security of solutions.

The questions selected varied in the interviews as many were answered before the question was asked. However, in many cases, the discussion with the interviewee created an opportunity to ask probing questions.

The interviewees I have selected from my LinkedIn contacts and those who were voluntaries. I aimed to choose as a heterogeneous group of interviewees as possible and wanted to find people who have worked as citizen developers in the past and continued their career at development, who are working as citizen developers currently and those, whom I saw as potential citizen developers, but have not yet had a chance to develop.

See the reasons behind the interviewee selections below table:

Table 3. Selection criteria for interviewees.

Interviewee	Criteria	Experience in development
1	A person working in financial management and has taken part in IT education.	Working on technical role in business
2	A person with an interest in process automation working in a business role. I saw her as a potential citizen developer.	Not a citizen developer yet, working in a pure business role
3	A person working in a business role who has participated in RPA development	Citizen development with Excel and taking part in RPA projects as SME
4	A person was volunteering as an interviewee. He works as a consultant, selling companies tools suitable for citizen developers.	Consultant for Google Workspace. Past as a citizen developer.
5	A person working in a business role and has created a wide range of Excel and Power BI tools.	Citizen developer
6	A person working in a business role and has created a wide range of Excel and Power BI tools.	Citizen developer
7	A person working in financial management and has taken part in RPA education.	Citizen developer with RPA
8	A person working in business and has worked in RPA development.	Citizen developer with RPA
9	An Employee experience expert	Experience in organizational culture and working with leaders
10	A technical architect	This person has some experience with low-code development in his organization but has a good understanding of citizen development and its requirements.

Most of the interviewees are citizen developers or have been citizen developers in their past positions. Their stories can be found in the following chapters. There are, however, also people amongst the interviewees who have a different point of view on the topic. (Appendix 1, Appendix 2)

Interviewee number four had a professional interest in how consultation companies can help their customer organizations to start citizen development and how the risks could be overcome. In his story, I have combined his story about citizen development and our conversation about citizen development and organization culture. (Appendix 3)

Interviewee number nine was an employee experience expert. She does not have citizen development experience but has a long history of working with companies to improve their organization. I was using her input in the conclusion chapter, where I suggested how companies could ensure that their organization is fruitful for citizen development. (Appendix 4)

Interviewee ten works as a technical architect and brings the IT aspect for the conclusions and help me to produce solutions, which would allow companies to ensure the sustainability of citizen development. (Appendix 5)

4.2.1 Interviewee one - From Excel Templates to ERP System Tailoring

Interviewee one has a clear interest in using technologies to make work more efficient, but she still worked in business. Her education originally was a Bachelor of business administration, Financial Management. Later, she graduated with a Bachelor of business administration and business information technology after taking part in a year-long conversion study.

Interviewee one has worked in a small company with less than five employees, and she gradually started to find more efficient ways of working and became a citizen developer. Before her business information studies, she mainly developed Excel templates and developed processes. When speaking with my interviewee about the organization she works at, it soon becomes evident that she works in a company where everybody can ideate and experiment. Everyone in the company is interested in trying new things, some more quickly than others. The organization enables them to speak directly and give open feedback and improvement suggestions.

None of the company employees are IT professionals. Only my interviewee has technical training, which she describes as superficial. However, with the help of partners, they have been able to change their business line, and the company's primary business is now selling the ERP system to the customers, and they all take part in the development of the system, and it is part of their role descriptions. All employees are encouraged to ideate and develop the work, and even the summer employees have permission to find new, more efficient ways of working. The company leaders are development-oriented, and this has created a fruitful culture for citizen development. The partners lead by example as they do not wish to spend time repeatedly doing the same mundane tasks but look for solutions to remove the unnecessary manual work.

My interviewee is very interested in technologies, and user experience is essential to her from early on. When starting in the company, my interviewee worked in different financial tasks and a cashier rental business. Working in the cash register system maintenance and understanding customer problems with the systems have given her good skills to work on development. At that point, she used Excel to simplify the work of herself and others by creating templates for different purposes. As a part of her bachelor's thesis, she investigated how an open-source ERP system, previously discovered at the company, could be tailored for the use of their customers, and now her primary role is to help their customers create an ERP system fitting their needs. Unfortunately, the low-code solution embedded in the ERP system is not actively used due to its high cost.

When talking to my interviewee, a few things come up repeatedly. First, she wants to have a deep understanding of the task she is planning to develop. Second, she always put the customers and their user experience first. She usually starts by doing it manually first, and only after understanding the process and its needs and opportunities is she ready to develop it.

In her role, she helped the customers develop the open-source ERP system together with outsourced developers and brought her experience and expertise to the development project. User experience is very close to her heart, which seems to be the biggest driver for her, and I would not be surprised if she would be working in that field in the future.

What makes my interviewee a citizen developer is not that she currently works with an ERP system and helps customers tailor the system to their needs, but all the other development she does. Her business intelligence studies give her more competence in development, but the driver for development comes from within her. She has a long history of financial management and has a comprehensive understanding of its tasks, which is a good base for development. She tells me how she quickly gets bored with

routines after working manually and then seeks ways to remove the manual routine by automating it or creating a template with Excel, which is re-usable. My interviewee does not see herself as innovative but instead takes advantage of technical implementations made by others and modifies them to her own needs.

My interviewee describes herself as calm and accurate and tells how her experience in financial management and coding she learned at school bring out those qualities. She also tells me how she is always willing to try new things. As the best experience in work, she names a case where she had problems getting customers' accounts settled after an event they had held. To detect the error causing the problem, she searched the database and tried to understand the cause tirelessly. After finding the mistake, she worked hard to replicate the issue to ensure it would not occur again. That shows persistence and a future-oriented person who does not accept errors as inefficiencies but finds a way to correct them and prevent them from happening again.

Even though my interviewee's company is development-oriented, it has not been as successful in development as it could have. Being a small company brings limitations on how much they can develop their employees' competencies in development. Often, it is the case with short-term employees that they do not get good enough induction to the systems to make actual development. The other employees also lack training, and the company is unable to provide it. My interviewee would be interested in developing her technical skills further, but the company is too small to support her. That is why my interviewee is looking for opportunities elsewhere.

Another challenge in the company is the sustainability of the solutions. They have a structure for documentation for solutions created and changes made to them, but as the employees are not professional IT developers, they do not know version control and documentation very well. They instruct everyone to document the changes made, but they all have their way of recording, and the documents do not include the steps taken during the development but rather the end state.

When reflecting on the interview, it seems that even though the company is idea- and development-friendly, they still have a long way to go to reach their full potential. Working in finance management, they will need to provide their customers with more automated processes created with both RPA and AI in the future. My interviewee did mention that their customers had already started to ask for them. However, the people working in the company and without further training will need to depend on external partners and outsourcing. In addition, most of the solutions their customers require are too big for citizen developers to create, but in those, I would see my interviewee not as a citizen

developer but rather as a business process specialist and user experience expert. She has been a citizen developer and has been lucky to work in an environment where she can try and learn. However, as happens with many citizen developers, they, later on, become professional developers and eventually stop working with the operational business tasks.

4.2.2 Interviewee two - Potential Citizen Developer

The story of my second interviewee is an excellent example of the unfilled potential to make the work more efficient and the rise of citizen development in a company due to employee experience. Her work history is very fragmented, and she has a lot of short employment relationships and periods of unemployment behind her. However, she has bachelor's and master's degrees in logistics and has experienced numerous different ways of working with the same tasks. As a result, she could bring the best practices from other companies to her employees' processes if she were listened to.

What makes her a potential citizen developer is her comprehensive experience in different supply chain management tasks, interest in development, and the skills to develop and automate simple tasks with RPA solutions. In addition, she is goal-oriented and is looking for ways to make implementations that will positively impact the long run and solve a short-term problem. Finally, she describes herself as a fast learner who quickly understands large entities. Thus, she has the mindset of a citizen developer; she has not become one due to her past experiences.

Her past work experiences have lacked psychological safety, and she has not felt like a member of the team but an outsider. She has not been seen as an expert in supply chain processes but has often been labeled a temporary employee. Her experiences have created a vicious circle. Labeling has affected her self-efficacy, and when looking for work, she has settled for less challenging and temporary positions with very few opportunities to develop, and in the end, routine work has bored her. However, the biggest obstacle in becoming a citizen developer has been a fear of making mistakes. She has worked in environments where harsh feedback has been given publicly, even for relatively small failures. It has led to a state where she constantly tries to avoid making mistakes and has been too afraid to try new solutions. Making a mistake has made her feel ashamed, guilty, and passive. As a result, she has not become a citizen developer. In a workplace where she as a person or her skills were not seen as assets, where she has felt like a second-grade employee and only had a short time to make a difference and demonstrate her potential, her willingness to develop has petered out.

In short, my interviewee has not been able to use the potential she has due to organizational reasons. Looking at her experiences from motivation creations' point of view, the corporate culture has suppressed her intrinsic motivation to develop. She has lacked autonomy due to the temporary nature of her positions. She has not experienced mastery because the psychologically unsafe environment has affected her self-efficacy and prevented her from taking on challenges. She has lacked fellowship with her colleagues, and people have not gotten to know her as an individual. They have mostly seen her as a temporary employee who would be leaving soon.

Now she feels that she is working in a company where she could finally become a developer if her fixed-term contract continues and the current workload will become easier to handle. She is currently working in a similar position she has previously held, but something is significantly different, and she feels more motivated and safer. In this company, for the first time in her work history, my interviewee feels trusted, that her skills are appreciated and that she can be herself. She does not need to worry about what others think about her and how she works. Now she feels like a valuable member of the team. The difference between now and her past experiences is that she is not treated as a fixed-term employee but as an equal to those with a long history in the company. She is even a little surprised that no one has called her the summer employee or a substitute for someone, which has happened repeatedly in her previous positions.

My interviewee currently works at a country office of a multi-national company, which has a head office in Germany. The company does not yet have robotic process automation solutions to their tasks in Finland, and she does not know the level of citizen development in the company. In addition, the logistics team in Finland is currently highly understaffed, and due to lack of time, there is no time for development, but once all the open positions are filled, my interviewee is planning to start to develop her, and maybe others work. However, she does wish to cooperate with others, but that would require breaking siloes between functions.

In the future, my interviewee hopes she can become a citizen developer and use, for example, her RPA development skills to streamline work. She already has ideas on what could be automated and how it could help different stakeholders. Her goal in development will be to create simple automation for routine tasks in processes. When we talked about automation creation, my interviewee emphasized that she would want to understand how the solutions are created. Even though she would not be developing them herself, she wishes to have a comprehensive understanding of them.

When we talk about the environment where she could become a citizen developer and maybe use her skills in creating RPA solutions, my interviewee highlights the importance of good communication and cooperation between business functions. She feels that work with meaningful content, appreciation from the community and the ability to co-operate are the key elements in becoming a citizen developer.

4.2.3 Interviewee three - Maverick Developer

The story of interviewee three demonstrates well the benefits that a citizen development can make in the individual's own work experience and what is timesaving that comes from creating minor improvements and simple tools for repetitive tasks. She has a long history in the banking industry, where she has worked in different customer-facing and support functions and is a citizen developer. But unfortunately, she is a loner in citizen development, working in a team where the essential technical skills are relatively low.

Enthusiasm for development was striking when talking to this person, and she is one of those people, who will become citizen developers, no matter what kind of environment she works in. Of course, how much the company benefits from her development work depends on the organization. She often finds herself spending a long time trying to find a solution for the problem at hand but persistently continues until she does. She could have done the task manually more quickly, but she knows how finding a solution to simplify the task at hand will save her time in the future. In doing so, she constantly finds new functionalities and develops as a citizen developer by using the internet to find help in solving the problem.

An interest in different technologies and deploying the full potential of available tools inspires her development work. She is motivated by problem-solving and tells me how she tries to use the available technologies to make work more efficient and remove unnecessary steps from processes, impacting work well-being and minimizing the effort needed for the tasks. In addition, she describes herself as an inquisitive person who gets easily inspired and enjoys fast tempo work.

She does not have experience creating automation with RPA solutions herself or using any other tools for development but Excel, but as she stated, creating solutions with Excel for making the future work more efficient resonates with her problem solver side. She loves the process of finding solutions and is persistent when doing it. When creating her solutions, she visualizes the future work routines to be simpler and wants to remove the manual steps from the process. She is inquisitive, enthusiastic, solution-oriented,

persistent, and has good basic technological and logical reasoning skills, visual memory, and likes to try new things.

When I asked my interviewee how the usage of the tools affects her productivity compared to her colleagues, she mentioned that she had taken part in different development projects during her regular working hours, which the others could not do. Like many citizen developers, my interviewee is quite alone in her development work, and she does not have proper channels for sharing her successful solutions or asking for help. Moreover, she has often been unsuccessful in making her colleagues use her solutions as they are too set on the ways they have always worked and are somewhat afraid of using new tools for performing their tasks. As a result, people are not interested in changing their working methods and learning more comprehensive skills on available tools and are reluctant to use solutions she has created

Luckily, it seems that her abilities and interests have been noticed in the company, not as a citizen developer but as an SME in business processes, and in recent years, she has been able to take part in RPA projects affecting many employees. In these projects, she can use her expertise to make work easier for more people, which she has been unable to do with her citizen development.

The departmental siloes and unwillingness to cooperate with people working in different functions can be detected in this company. Often, the managers communicate cross-functionally, but team members' roles are very restricted, and teams can not cooperate with others. When I asked my interviewee about role models, she was able to name one person who is highly skilled with Excel and has shared tips, but most of her development is self-inflicted, and she looks for solutions by herself from Google.

My interviewee explains that there is a desire for development in the company where she works, but the cost discipline is an obstacle in getting the systems to meet the needs of people working with them, and the software projects are very long. The hierarchical organization also makes it difficult and time-consuming to implement any changes to available software or new applications. This structure makes the cooperation with IT very hard, slow and requires straightforward documenting of needs from the person making the order.

If the company empowered citizen developers and gave people some autonomy to create the most straightforward solutions to their specific needs, they would cut the IT backlog. Now, however, the organization is far from implementing citizen development.

The first obstacle for implementing citizen development in this company is that it is difficult for employees to share their ideas outside their teams. There have been attempts to create an ideation culture in the past. People were asked to initiate and share ideas on what could be done better. As per my interviewee, only a fraction of those ideas was utilized. Sharing the ideas was made easy, and the best ones were rewarded with a small monetary reward and could have company-wide effects. Unfortunately, this proceeding is no longer in place, and it is now more difficult for individual employees to get their ideas heard.

The second is a lack of training provided to employees and the low technical skills people have. That is a case in my interviewee's company, but the same issue can be identified in many other companies. For example, my interviewee's skills in such a standard tool as Excel have helped her save a significant amount of time on her workdays. However, she worries about the level of skills people have to essential tools in general. She can only name one other person in her colleagues with similar Excel skills in the company she works at. She calls for more comprehensive training for the applications people work with daily to help them to understand how they could be used to make work more effective. In addition, she would be interested in learning what is to come and how the technology landscape will look like in the future. Now she hopes to get more in-depth training on Excel and would like to learn basic programming.

The third issue is the lack of cross-team collaboration. Breaking the siloes and making communication more transparent would help people to become citizen developers. My interviewee thinks that the hinderer in citizen development currently is withholding information and that people do not know the development prospects in the company's future.

In my interviewees' dream organization, there would be cross-team and cross-function collaboration. She would have someone to ask for help from and could share and hear different views on the same problem. In her dream organization, people would find ways together to make work more effective and even make some tasks unnecessary. Unfortunately, as do many of my interviewees, the citizen developers, my interviewee is looking for opportunities elsewhere. She is currently on study leave and does not see herself returning to her current position or company. If she leaves, the company loses a great deal of tacit information and an effective and forward-looking employee.

4.2.4 Interviewee five - Graduate Engineer and Developer at Heart

Interviewee five had a different educational background compared to my other interviewees. He is a Master of Science in technology and does not have a business education. However, he has worked in various supply chain and manufacturing positions for the last six years. Currently, he is working on a multi-national company selling and manufacturing products for the retail market.

The developer's role fell naturally for him after he had worked as a temporary summer worker in the company's planning team. After that, he went back to school for some time and worked only part-time. As he could not work total hours and therefore not take responsibility for managing any product category, he became the developer.

Understanding how things work and how they could work better have always motivated him. He likes to know how things are linked together and the entities, and if he sees an opportunity for improvement, he has used Google to find solutions on how to actualize them. Interviewee five aims to find a way to make his daily routines useless and thus create value for the company.

He sees that the essential skill he has as a developer is his intrinsic motivation to learn. When starting at his current employer, he did not find himself an expert in Excel, but he has used significant amounts of time to learn. He currently works with Excel and Power BI. He also tells how his social skills have helped him understand other people and have beneficial conversations. He stresses creativity's role in finding alternative ways of getting the same or even better result. He also has a habit of challenging himself by promising something before knowing how to deliver it.

Interviewee five enjoys learning and understanding the causalities between different tasks and work done in other teams. He describes himself as persistent and finds the same laziness in himself as interviewee six does. He sees himself as rather generous and not an accurate person, and that is why he likes automating manual work and avoiding any possible mistakes he would make himself doing them.

When working in the planning team and afterward, interviewee five has not only developed his own work, but others have often used his solutions. He sees that it is essential to make sure the solutions are highest of quality. To reach it, he spends a significant amount of time making sure they are error-free, polished, and professional-looking. By doing that, he makes sure the users have a positive first experience. He finds that it is vital to understand the user's actual needs, and on company-level development, he sees that sometimes new solutions are searched for wrong things. He says that when

the development idea rises from the real need, the solutions are better received than if the idea comes from somewhere else.

When working with daily routines, it is often the case that an eight-hour workday is not enough if a person wishes to develop. Interviewee six, however, gets the energy and motivation to do his daily tasks if he can do some development work on the side. In most of his roles in the company, no time has been allocated to development. Nevertheless, he has done it, and removing the inefficiencies from his work has freed time to develop more.

Sometimes the solutions done by citizen developers can be timebombs, vulnerable, and dependent on their builder, but the solutions' sustainability is important to interviewee six. So, he makes sure that all the solutions he has built are well commented on and documented. Thereby he can make sure that in case he leaves the position or company, anyone with little technical skills can fix them.

He has done good work and has been rewarded for it a few times, but he finds that there are risks that the reward can have a negative effect. Therefore, he stresses how rewarding should be carefully considered, and there must be a proper justification for it. In addition, he sees that communication about the reward must be done correctly and, if possible, make sure that the person receiving the reward is present. He does, however, tell that the best experiences in work have been those when colleagues have recognized his work.

Interviewee five sees that all the organizations have their faults and therefore do not have a dream organization. However, he does tell that the closest teammates have the most significant effect on his experience at work. If they work towards the common goal and believe in things the others do, it would be a good basis for a good organization. In the dream team, no one is left alone to solve a problem, help is offered, and solutions are found for the way forward. He also sees that working in a team ensures the best solutions in development work. He has had experiences where a team has participated in ideation and planning a development process and has found it very beneficial and meaningful.

Interviewee five tells how he has had the privilege of working in a team with a very supportive and inclusive atmosphere. When he started in the company, he was the only person in the company with a Master of Science in technology education. However, he later witnessed that the organization had become a little more diverse. There it has been safe to speak out and ideate. The people have been open to ideas. In general, he has found that it has been easy to speak up and even give feedback to the management in the local organization.

He sees that to spread citizen development in the company, even more diversity would be needed. Most of the people in the company do not have the intrinsic motivation to develop, and he sees that working with tasks that are truly interesting to them might spark it. He also sees that it would benefit people to understand the work in other teams and functions and how their own work links to the entity. When people would understand cross-functional dependencies, or even what the colleagues closest to them work with and how they work, the basis for development would be more robust than it is now.

Most of his fellow students held a development position in different companies, and due to the lack of technological skills in his own company, he often turns to them for help in a tricky situation.

4.2.5 Interviewee six - Lazy developer working overtime to find solutions

Interview six was held together with interviewee five as they both work at the same company and could complement each other's answers. Interviewee six is relatively young and only has work experience of about five years, of which he has been most a citizen developer. My interviewee's company is a multi-national company, and he has mainly worked in the supply chain roles.

Interviewee six has spent hours and hours finding solutions from the internet to make the work more efficient and remove mundane, repetitive tasks. When he first started at his current employers' customer service team, he quickly noticed the inefficiencies in the processes. When he began, he was given instructions to do his tasks but grew bored with repetitive and mundane tasks in a few days and began to think that there had to be a different way to do them. He was by no means an expert developer. He had basic Excel skills but had the drive to learn. So, he worked long days, trying to learn how he could simplify the work. He had no mentor but had to use different sources found in Google to build up his skills. He learned how to use Excel macros and SAP scripts to automate tasks that required information lookups from various sources, and at best, his solutions did the tasks, which previously had required an hour only in a few minutes.

The spark for his citizen development was the tasks he had to perform in his role in customer service, and ever since, he has constantly looked for different ways to streamline the work. Sometimes he uses Excel, but he has become an expert in Power BI and partially moved away from task automation in his later positions. Interviewee six tells how interviewee 6's solutions have inspired him to learn. They have worked in similar positions and are both skilled Excel and Power BI users.

Interviewee six sees himself as an unyielding person who persistently looks for causes for errors and tries different solutions. He also tells how he has a passion for his development work, and without it, he could not have become a developer as learning the skills sometimes requires looking at YouTube videos in his free time. He also sees himself as lazy, lazy in doing mundane, repetitive tasks.

With his solutions, interviewee six wishes to make it possible for himself and his team to concentrate on the essential things and not spend their workdays looking for information from several different applications. For example, he has used his skills for making the creation of purchase orders in SAP more efficient and created reporting to help others in decision-making. He has never had allocated time in his role for development, but he has prioritized it, and the solutions he has created have freed time, which he has often used for further development.

Even though technical skills are essential to citizen developers, interviewee six finds that one of his most essential development skills is social skills. He sees that those citizen developers who do not have strong social skills often develop only their own work. Interviewee six has been able to help people cross-functionally because he has opened discussions of development opportunities with different people and has demonstrated the benefits of automation or a report to them.

In creating his solutions and reports, he concurs with the interviewee's 6th mission to provide a smooth first impression when people are using them. That he sees as the way to ensure that people will start using them as a part of their daily routines. He recognizes that there is a particular group of people who are not keen on changing their ways of working and do not like change, and that is why he finds the skills of change management essential to citizen developers.

His development and intrinsic motivation to help others work have been recognized in the company, and he has had a chance to work in several interesting roles in the company since his fixed-term position in the customer service team came to an end. He has received few rewards for his work but says the best reward has been the opportunities for new positions. He recognizes how his citizen development and motivation to spend extra, sometimes unpaid hours, looking for solutions and developing his skills has positively affected his career. He sees that his motivation to develop and technical skills have been the differentiating factor, which has helped him when competing against others.

The organization and teams where interviewee six works have a culture in which speaking up and giving feedback are safe, and in local matters, the employees often have

influence. However, on the issues decided centrally on the European level, small countries often cannot impact decision-making.

He could recognize very few individuals in the organization who could be potential citizen developers. In general, he says that the technical expertise is relatively low in the company, and people often do not have the drive for development. Interviewee six sees that for a person to become a citizen developer, they will need to have an inner drive for it. He stresses that sparking the people's intrinsic motivation is the key to amplifying the company's citizen development. It is also possible that there are no suitable people in the company who are potential developers, and in those cases, he thinks the development-oriented people should be looked for when recruiting new people. The company where interviewee six works have offered employees pieces of training on tools available, but they still lack in demonstrating how work could be developed with them and have not been able to spark the employees' interest in development on a larger scale.

When picturing the dream organization, interviewee six stresses that he likes working with people who have passion for the work itself and working together. In addition, he finds it essential that people working on a task understand its effects on the rest of the organization. He mentions an example from his past, where the people working in the planning team collaborated on finding solutions to avoid out-of-stock situations on products. He then experienced how his colleagues took extra effort to help him and understood what was at stake. He also sees that different people can complement each other and bring diverse perspectives. Finally, he sees that it is crucial to do the development work, not always alone, but with other people.

4.2.6 Interviewee Seven - Brave Moves to Get Experience

My interviewee seven already has a long career in financial management. For years, she has been working with different tasks in finance, such as accounting, payroll, and consolidated financial statements. She does not recognize herself as a citizen developer, but her actions tell otherwise. She is the first of my interviewees who have created solutions in her workplace with robotic process automation (RPA) as well as Excel. Unfortunately, her experiences have undermined her skills as a developer and her self-view.

My interviewee has made much effort to start her career as an RPA developer. For a year and a half, she studied the topic in her free time. Unfortunately, she did not get any support for her studies from the company and has been forced to take significant personal risks after her studies to be able to utilize her skills. She had to put her job on the line to

keep her skills up to date and gain experience in building RPA solutions. She gave the management an ultimatum that she would either work full time in development or quit her job. Now she is orientating her replacement for her previous job but is not sure that she can work in development in the long term in her current company but was told that there might not be enough development needs to keep her. However, my interviewee trusts that she will find a new post as an accountant if she does not get a development role somewhere else in case of losing her job.

When she started to plan for the rest of her career, she wondered for a while if she was too old to study something new but did it anyway. She wanted to find something where she could use the expertise she had accumulated over the years, so she enrolled and was accepted to a course on robotic process automation. She spent the next year and a half working during the days and studying in the evenings. My interviewee was surprised to see that instead of young IT wizards, the fellow students were like her, people with long work histories looking for new directions to their careers. Currently, she develops with Excel and UiPath Studio and hopes to learn more skills for Power BI. She is now entering a phase in her career where she will find out how much she enjoys RPA and technical development or will she someday go back to accounting.

Before her RPA studies, my interviewee was already a citizen developer who simplified her work with different Excel solutions, as did many others in the company. Implementation of RPA in the company has not been originated from the management, but it has required persistent sales work from the person I interviewed. She has understood the benefits RPA could bring to the company and sees that RPA will be essential for companies in the future. RPA development has not been included in the company's strategy because the management has not had a good enough understanding of it, and they do not have a tangible touchpoint to the work that could benefit from it. Starting RPA development in the company has required perseverance from my interviewee, but eventually, she has received tacit approval for her work and has been able to implement RPA. Still, she lacks support and would hope to get the management on board.

Social media has played an essential role in her career change. Interviewee seven has not had any role models at work. Being the only person with RPA skills in the company and single-handedly driving the implementation of RPA, she had to look for role models elsewhere. She follows other RPA developers on LinkedIn and learns about their experiences. Her difficulties and feeling that her work is not appreciated or even recognized significantly influence her engagement with the company and even her well-

being. On LinkedIn, she likes to follow people who work with RPA development in companies with the managements and organization's support. She urges to get affirmation that there are places where that is the case as that is currently not her personal experience.

The peers of my interviewee have understood the value of her work. Her RPA solutions have removed many tasks from their workdays and therefore made the work more meaningful. She says she constantly gets requests for new implementations from her colleagues, who are looking for something to help them cope with their workload, and has given her very positive feedback.

Interviewee seven gets quickly bored when working with the same tasks for an extended time, and her best experiences at work are linked to software projects she has taken part in as the system key user. She enjoys seeing the results of her work and how her RPA implementations make the job easier for someone. She also says that she is quick to learn new things and understand vast entities, which helps her understand causes and effects, and her curiosity, perseverance, and laziness are her most important characteristics as a developer. She also reminds us that development often sparks from laziness and how the machinery, such as washing machines or robotic lawnmowers, was born out of a desire to avoid doing the work manually.

By her development work, she wants to ensure that development and the necessary change take place. She likes doing the development partially with other people but says how most often the best ideas come in her free time. For her to get to a creative state, she will need to be in a state of relaxation, and that is not often the case, for example, in organized workshops. However, she does hope that there would be people in the company she could turn to when facing problems. She feels that it would be beneficial if the company would have a team of RPA developers instead of just herself.

She also states that if the company were willing to invest in their employees' learning opportunities and let them take training they see as beneficial for their future career, it would positively affect work satisfaction and even the employer brand. My interviewee has asked for an opportunity to participate in training to learn Power BI, but the management has not seen the opportunities it would bring beneficial enough to grant her permission for it. She also sees that giving people time to develop and seeing it as valuable work would enable them to grow their work satisfaction. She recognizes how spending a few hours searching for a solution to make a repetitive task more efficient might allow more time spent on development in the future and bring an opportunity to devote more time to more

value-adding tasks. Fortunately, if she leaves the company, they have a sustainable arrangement for her RPA solutions and a partner who will take over.

4.2.7 Interviewee Eight - RPA developer

This is a story about a citizen developer and a person who, with more skills on the basic tools available to most of us, could have created much more. My last citizen developer interviewee has a long history in the insurance sector. She has experience working with many different systems and gradually became interested in how they worked and learned how to make the job easier with the opportunities they provide, for example, by in-built macro-creation. However, she realizes that if she had had better skills in using the basic tools available, such as Excel and even Outlook, she could have made a more significant difference as a citizen developer. Her interest in technologies and enthusiasm was recognized, and she was asked to participate in implementing RPA in the company, which she happily did. She acted as an interpreter enabling people from different functions to communicate clearly and reach high-quality solutions. Currently, she is looking for a new position in IT and sees that her past experiences have given her an excellent basis for her future career.

Streamlining work has been my interviewees' motivation for development. She calls herself inquisitive, extrovert, easily approachable, and a little megalomaniac and sees that these qualities make her a good developer. She can see processes in a flow chart kind of manner and therefore has an excellent understanding of entities. If she does not know what affect her work has on others, she is not afraid to ask. She is not afraid of admitting her mistakes but instead tries to learn from them. She also says that she can communicate well with very different people, and when talking to her, it is evident that she values their differences in skills and ways of working and finds open discussion of high value.

She finds it valuable in any development that people working in different roles can better understand each other. Her aunt has been her role model and helped her understand that people should never be valued by, for example, their past or position, but all views are important. She finds that in all development, the end-users understanding should play a key role, and she sees that those working in the business have the best knowledge on how their work should be developed. Often even the line managers do not understand how the people work and why they do specific tasks, let alone people working in a development team. That is why she finds ideation on a team level necessary. One of her

past employers organized ideation competitions for teams and ensured that the best ideas were implemented. Teams were rewarded for finding solutions to make work more streamlined. Ideation together with colleagues had a positive impact not only on the work itself but also on team spirit.

She sees that enabling people working in business roles to automate their work using RPA solutions would be a dream situation as they would know precisely what solutions would benefit them. However, she fears that the fear of losing a job kills people's motivation to develop their work as there is a risk that the citizen developers make themselves redundant by automating tasks and streamlining work. Nevertheless, she sees that training people with such skills would increase their self-efficacy and well-being, improve their sense of control, and provide them skills valuable on the job market. All in all, my interviewee calls for more training for the tools people use daily for their work.

In her experience, many companies have online courses available for different purposes, but people do not have time to take them. She feels that having higher skills on the essential tools used in business would have benefited. She now sees how quality excel solutions could have significantly helped RPA creations as Excel could have already handled parts of processes. She also tells how many processes were not automated due to low profitability even though they could have significantly made work easier and increased individuals' wellbeing. She now sees that the creation of simple Excel tools could have been used, at least in some cases. However, they did not see that as an opportunity at the time due to their own lack of understanding of the tools' potentialities.

She has experienced that many experts are afraid of sharing their knowledge and ways of working with others, fearing others' reactions to doing things differently. She recognized that co-workers and supervisors significantly affect how freely one can share ideas, feedback, or criticism about ways of working. The teams where she has worked before her career with RPA have been diverse a wide age distribution. She reminds that developing a group of people with a wide age scale is not as straightforward as it would be for a more homogenous group. She highlights the importance of open dialogue before changes are planned. She has experienced that in such cases, it is crucial to understand how those with lower technical skills will not experience the changes too challenging and will be able to continue working. People with long work histories often held significant amounts of tacit knowledge, and therefore my interviewee sees that it is important to also understand their needs when developing. She has experienced that younger people tend to look at the work more from a bird's eye view and see work more as a process that can be improved, but then there is a risk of losing important information held by the elderly.

My interviewee is not motivated by monetary rewards, but she finds it important that her work is seen as valuable. Before she started working with RPA solutions and was a citizen developer, she would have hoped to get more recognition from the time savings her development work brought. She tells how important it would be that line managers see the extra work citizen developers do and how their work should be valued and should affect the reviews, and they would not be reviewed only of tasks on their job descriptions. My interviewee's best experiences at work have been those where her peers have seen the value of her work. She also remembers proudly a project where she persistently questioned the developers saying that something could not be done, and finally proved them wrong and made the project a success.

4.2.8 Interviewee four - New Career Opportunities from Citizen Development

My interviewee differs significantly from the first three interviewees. He is currently working as a consultant in an IT company. He has two angles to citizen development; his past as a citizen development and understanding the opportunities citizen development might hold to their customers.

My interviewee four has an interest in citizen development from his current point of view as a consultant. However, it took him years to realize that he had himself been a citizen developer in his previous position. From that position, his current employee spotted him, and he started a new career. This interviewee did not do low-scale Excel, like many other of my interviewees have done, but working in a family company, he had the mandate to do more comprehensive development. He was working in the field of logistics and a conservative company. There, he started to review the processes critically and look for technologies that could be used for development. As do many citizen developers, interviewee four independently looked for solutions he could develop and learned to use the tools he found. As a result, he re-designed processes and created automated workflows. In his development, he used the Google workspace tools together with Zapier and Ultradox.

When discussing what skills make him a good developer, he mentions the ability to perceive and learn processes quickly. He can understand processes as entities, individual steps, and people's roles even if looking at them from outside. Another skill he finds beneficial in citizen development is quickly learning new technologies by trying them out. Interviewee four feels that his development work has benefited the company by growing

productivity since his solutions have saved work time as he has minimized the time spent on repetitive processes.

He did not have any role models in development but had the intrinsic motivation to change things. He describes himself as development-oriented and that he is always looking for ways to work smarter and look for automation opportunities. He enjoys seeing that his success in something has a positive effect on someone else's work and his best experiences are those where he has received positive feedback from the customer after a big project. In best cases, his solutions have brought real added value to people and, for example, have helped them find insights they would not have found without them. He is interested in technologies and readily tries out new solutions, and is not against having to do some investigative work to spot what causes an error in the system. Learning new things and improving his technical skills make work more satisfactory to interviewee four.

As I previously mentioned, citizen development also touches this interviewee from a different point of view. His background and his experiences in various software implementations with customers make him a fascinating interviewee. He has the box seat for many companies, and we spent much time discussing implementing citizen development in companies and what it would take. As a consultancy company, they are currently trying to predict what their customers will require from them in the future and whether the clients' own employees will partially do their developers' development work. If that is the case, they might need to change their offerings to meet that need. However, he does see that someday it could be possible that citizen developers would take over on some development tasks, but for that to happen, the organization will need to support citizen development, which rarely is the case in companies.

In addition, he can recognize from his clients' employees many individuals who have a mentality of citizen developer but do not have the technical skills yet. He sees them as potential citizen developers. His current role is to help companies to bring technological opportunities available to their organization. In some cases, he sees that some individuals working in the client's organization could become the developers and build part of the needed solutions instead of my interviewees' company doing it. He has recognized many individuals working in different business fields who do not realize being citizen developers. He sees that they often have been interested in technologies early on, even if their profession is something else.

Interviewee four sees the implementation of citizen development as he does any other change. The key for successful implementation is to choose how development will be done in the company strategically. For example, will citizen developers partially do it, or

will it be bought as a service as a whole? Interviewee four sees that if the company aims to increase its number of citizen developers, they will need to work towards a culture that supports their choice. The role of supervisors and management is significant in disseminating citizen development in companies. They will need to make a strategic decision to start taking citizen development forward. However, it will be crucial that the person managing the IT department is on board, as it will require that they give autonomy to people with no IT training, and the end products will not always be successful. In addition, he sees that in big corporations where systems are owned by IT, they need to be able to ensure the systems work, their traceability and monitoring implementing new tools for citizen development might be slow or not possible at all. If that were the case, it would make it impossible to implement citizen development in the company.

In general, my interviewee sees IT's role in citizen development as being an enabler. In an ideal situation, IT would offer citizen developers help, consultation, sparring opportunities, and different points of view. He would also see it beneficial that IT would help the citizen developers improve their technical skills. He sees that currently, one of the biggest challenges for citizen development is the lack of sustainability and how the solutions made by citizen developers are bound to their creators or specific teams, and collaboration with IT and documentation could be the solution to tackle this problem. If IT would play a part in maintaining solutions created by citizen developers, they would also get better transparency on their solutions.

Superiors will be the role models. The company culture should be supportive of trial and error. My interviewee four said that people's ideas and suggestions should be heard, and communication should be transparent. He sees that supervisors always have a role in change, and the rise of citizen development will need them to spark interest, offer support and encourage people. However, for people to take an extra role, as citizen development usually is, they need to have a certain self-direction level and hold a relatively high level of responsibility. There is no one way for supervisors to empower citizen development in their team, as all teams are different, and people are individuals. Interviewee four would start by understanding who the people working in the group are and what their roles are. He, however, stresses that recognition of citizen developers' work would be beneficial if the company wishes to increase their number in the organization. Citizen development should not be taken for granted. There is a high chance that a person doing the development stops doing it if his work is not appreciated. Having the right culture and communicating about citizen developers' work is a lifeline in implementing citizen development.

Interviewee four stresses how tolerating one's own mistakes is essential for citizen developers. Citizen developers are doomed to hit a wall now and then and fail in their endeavors, and he reminds us how important it is to learn from those mistakes and value them and not get discouraged. The person who has the developer mentality, interest in technology, and enjoys improving things on a micro-level is potential citizen development. However, he cannot name any specific pieces of training that could be beneficial to potential citizen developers.

When I shared with Interviewee four how I had recognized that citizen developers are rather alone with their development work, he shared my view. He knows how working as a citizen developer in a team where everyone else works on entirely different tasks can sometimes be lonely. He remembers how colleagues could not be less interested in his small successes, and there was no sparring partner nor anyone to share the joy of successes with. The reader of this text will need to understand how the achievements in citizen development can be minimal, finding an error in code or getting a part of the solution to work after endless trying. We talked about networks of citizen development, and he sees how cross-functional citizen development collaboration would bring an opportunity to get peer support and people to celebrate the small victories with.

4.3 Findings from the Interviews with Citizen Developers

The people I interviewed were in different stages of their careers. Some of them have already transferred from business roles to IT roles, many of them are looking for new opportunities in IT, and by the time this thesis is finished, two of them have already started working in new roles.

For most of my interviewees, becoming a citizen development has been inherent. They are people who have a passion for development, the mental qualities of a developer, basic skills in development, and willingness to learn. Many of my interviewees have become citizen developers even though the companies have not had proper structures in place for citizen development. My interviewees have a developer's mindset, and they tend to think about future solutions instead of dwelling on the problems. They have a growth mindset towards development and value the opportunities to learn (Dweck 2019).

None of my interviewees did citizen development to get rewards for it, but they valued the positive feedback received from colleagues highly. They also keep developing themselves simply because they have a strong urge to learn. However, if the citizen developers' development work is not valued in the organization or they run out of opportunities to develop, they will probably start looking for challenges elsewhere. For example, three out

of my eight citizen developer interviewees no longer work in the company where they acted as citizen developers, and two are looking for challenges outside their current employer. Those citizen developers, who have felt that the employer values their development skills and who have been able to do career changes within their employer's organization, have decided to stay.

Many of my interviewees did not feel that their work was supported, and the lack of peer support was apparent. For example, interviewee four mentioned that being a citizen developer in a business team was a lonely role as they work amongst people who do not understand what they do and have no one to ask help from or celebrate successes with. Other interviewees have similar experiences and have felt like outsiders in their teams.

Interviewee three commented that her colleagues are so set in their ways that they are not interested in using solutions she had created. Because of those solutions and the time they have saved her, she has been able to take part in company-wide development projects. This situation was familiar to several interviewees, who had experienced colleagues reluctant to start using new solutions and changing their working ways. As my interviewee five said, a certain level of understanding about change management and strong social skills are helpful in citizen development and sharing the solutions. Those of my interviewees who have been able to share their solutions within the team or cross-functionally believed that it was because they have strong intrinsic motivation and are passionate about developing but also have strong interpersonal skills.

Many of my interviewees were concerned about the lack of understanding of the basic tools in the companies and how it can prevent people from developing their work or even using solutions created by citizen developers. Not everybody is interested in development, but some of those who have not become citizen developers because of their employee experience. Interviewee eight mentioned how her colleagues were afraid to admit that they do the tasks differently than others in fear of getting negative feedback. A few people even used Excel-based tools for doing their work but were not willing to share them. In these kinds of organizations, where people are unwilling to share their best practices with others, citizen development cannot flourish, and immense potential is thrown away. For some reason, the psychological safety those people experience in a team is too weak and prevents them from questioning the ways of working of other team members and failing to reach their full potential (Edmondson. 2002).

My interviewee five mentioned how sometimes the solutions created by citizen developers could be timebombs. The development done by citizen developers can sometimes be risky as the solutions are often very dependent on the person who had created them.

Most of my interviewees understand the risk and try to tackle it by documenting or adding comments on the code or RPA projects to make it easier for someone else to take over, if required. However, the problem is that after the citizen developer leaves the team or company, there might not be any other person in the team who would have the technical skills required for making changes or fixing errors on the solutions.

To the below table, I have gathered findings common to many of my citizen development interviewees.

Table 4. Findings from citizen development interviews

Interview	1	2	3	4	5	6	7	8
Currently a citizen developer			X		X	X	X	
Potential citizen developer		X						
Past in citizen development	X			X				X
Further education on development skills	X	X	X	X			X	X
Learning skills from youtube			X	X	X	X		
Learning from colleagues					X	X	X	
Asked to participate in development processes due to citizen development	X		X	X	X	X		X
Career opportunities due to citizen development	X			X	X	X		
Looking for new opportunities outside current employer	X		X				X	X
Isolated when citizen developer			X	X			X	X
Current role in business	X	X	X		X	X	X	
Current role in IT				X				X

Learning new skills is essential to my interviewees. All but two of them are or have acquired formal education linked to development. The driver for their studies has been to give them new opportunities in IT or other development roles. Four out of those six

interviewees educating themselves are not satisfied in their current position and are looking for new opportunities outside.

Online resources were also commonly used for learning new skills within my interviewees. Four of them mentioned that they had learned the skills they use for development independently from online sources. Companies where my interviewees worked provided online training courses, but they often had a specific solution they needed to learn, and a learning course did not fit their purpose.

Only four citizen developer interviewees have had opportunities to get new challenges in the company where they have acted as citizen developers. Most interviewees have been asked to participate in different development projects, but their base role has remained the same.

Siloing was a problem in many of my interviewees' workplaces, and they felt that cooperation between teams was not possible. My interviewees hoped for more peer support from other citizen developers and closer collaboration between citizen developers working on different teams and functions in the company.

The qualities in the below table are collected from the citizen development interviews. Citizen developers are a divergent group of people. However, they will need to be interested in technologies and be solution-oriented. The interest in development for my interviewees was intrinsic, and they had a passion for development.

Table 5. Beneficial qualities for a citizen developer as per interviewees

Quality	Importance
Curious and keen to learn	Citizen developers often are constantly on the lookout for better ways of doing things. As a result, they will need to learn new skills and find new ways to solve problems. Thus, curiosity is closely linked to willingness to learn and see what opportunities are available and what could be their next development project.
Experimental	The work of citizen developers is all about finding new ways of doing something, and to find a suitable solution, they will need to be willing to experiment.
Persistent	Creating solutions often take a long since citizen developers often lack suitable training. They must simultaneously self-train and look for solutions independently. They will need to be willing to try and be ready to fail often.
Proactive	Citizen developers are hands-on workers who walk the talk and find solutions instead of complaining about problems.
Lazy	Many citizen developers do not like routine tasks and therefore call themselves lazy. However, laziness makes them solution-oriented and often innovative in finding ways to avoid routine work.
Socially skilled	Many of my interviewees were social people who like to interact with people and listen to what they have on their minds.
Precise	Precision is an essential quality for citizen developers and helps them ensure the solutions they deliver are high quality and error-free.
Technology oriented	Citizen developers must be technologically oriented. They will need to be willing to use time in learning new technologies, and quickly learning new solutions is an asset to a citizen developer
Goal-oriented	Learning and developing something new can be a slow process. That will require a certain level of goal orientation. Setting oneself sub-goals will help in reaching the final goal. On the other hand, citizen developers will need to understand when the goal has been reached and development is no longer required.

I also asked my interviewees which of their own skills make them citizen developers. My interviewees' interest in technology and technical skills was common, even though not all of them mentioned them when asked. Understanding processes and entities was also a common answer, as were the skills linked to communication.

Table 6. Beneficial skills for a citizen developer as per interviewees

Skill	Importance
Interest in technologies	Interest in technologies helps in finding the right technology for each purpose. Exploring new technologies will also be beneficial, but for the development to be successful, new technologies will need to be validated by IT.
Technical skills	Citizen development requires that a person gain strong skills in the chosen technology.
Understanding processes and entities	Many of my interviewees said that they understood entities and could picture processes. Understanding the effects the citizen developer's solution has in another part of the process is essential.
Logical skills	When creating automation or applications, logical skills will be needed. No-code/Low-code -solutions often do not require strong mathematical skills but understanding the idea behind programming will make learning easier.
Learning	Citizen developers are often not trained by the company but becoming a citizen developer will require proactive learning. Many of my interviewees were self-taught and used different online sources for learning as they developed.
Communication skills	Excellent communication skills can help understand the work of others, their needs, and where they fit in the big picture. It is also necessary for citizen developers if they wish to share solutions with others. If a person does not have good communication skills, they can become citizen developers, but they may develop only their own work.
Asking questions	If a citizen developer looks for opportunities to do development work for someone else, asking questions will help them understand that person's needs better. There is good literature available for asking questions.
Saying "no"	Citizen developers are often enthusiastic about their development work and getting opportunities. However, to keep the workload manageable, they should also know when to say no. This skill is also vital when citizen developers are asked to do something that is not doable or would take a significant amount of time.
Understanding diversity	Understanding that people are different, have unique needs, and work differently will help the citizen developers create solutions that fit their needs.
Social skills	Good social skills help citizen developers to make the work more visible and share experiences with other people. That might even spark an interest in someone else for becoming a citizen developer. In addition, a citizen developer with good social skills can be a valuable ambassador if company-wide citizen development is implemented.
Experimenting	Citizen developers will need to be ready to try and fail since creating solutions is not straightforward but will require persistence to experiment.
Goal orientation	Learning and developing something new simultaneously can be a slow process. That will require a certain level of goal orientation. Setting oneself sub-goals will help in reaching the final goal. On the other hand, citizen developers will need to understand when the goal has been reached and development is no longer required.

4.4 Interview with Laura Hannola; How to Change the Culture to Better Meet the Needs of Citizen Development

If citizen development is seen as an opportunity in the company, they will need to ensure the company culture supports it. The company will need to be open to innovation and creativity, psychologically safe, and motivate people to develop. In the interview with Laura Hannola, Social Psychologist and employee experience consultant (2021), she says that the creative culture, which enables co-creation, cannot be too hierarchical. According to her, people will need the freedom to make decisions and bring out their ideas about what would support their specific needs, no matter which level of organization they work at.

Hannola (2021) stresses the importance of empowering leadership and how important it is for the management to understand and appreciate the employees' points of view, even if they may differ from their own. They will need to learn to see the realities of different people working in the company and make sure all employees are equal and everyone has a voice. The management will need to broaden their perspective and interact with people working on all levels is essential. The managers are not omniscient, and they will need to accept that. The managers will also need to understand that the people working in the company most probably pursue the company's interests, and they do not necessarily need to be supervised as much as they in many companies are. In a company with creative culture, people have a feeling of psychological safety and trust.

The change often starts from the management, and their interest in changing the organization's culture is central. Sometimes, admitting there is a need for change can be scary for managers as it might require that the managers acknowledge they do not know or understand everything and will need to lean to other people. In a traditional hierarchical structure, the managers look at the subjects from above, and the power distance can sometimes prevent change. (Hannola 2021)

Often it is vital to recognize the current reality and the possible negative things in the organization that may prohibit citizen development. If the negative things are identified and acknowledged, positive outcomes might follow. Admitting mistakes is an excellent example of how the company management can lead by example. It might not be easy and require a fair amount of self-examination, and not all managers have the courage to do it. Simply starting to see problems as opportunities might hide the company culture's concerns and needs for development. (Hannola 2021)

Understanding the current culture in the organization will need to be the starting point for changing it. It is essential to understand what the reality is and how employees experience working in the company or acting as citizen developers. Hannola says that an outsider is often better at recognizing the organizations' culture, and newcomers see it for a while after becoming a part of it. New employees' feedback and observations are often valuable when aiming to change organizational culture.

People who are part of the organization might sometimes realize its culture but cannot necessarily speak out their concerns due to various reasons. Sometimes even an external consultant can be helpful in identifying and changing the company culture. As an external consultant, Hannola has helped organizations identify their culture by, for example conducting in-depth interviews and observing their members' everyday working life. She has often found recurring stories from the discussions about people's past experiences with the organization and its management. Those stories can help identify the positive and negative aspects of the culture – and thereby also help change it in the right direction. She also mentions that different personnel surveys can be used to understand the organizational culture. (Hannola 2021)

Sometimes companies can have historical burdens which depress employees' feeling of psychological safety. People have a long memory, and they often remember what happens to others as well. For example, punishment for failings could affect the company's psychological safety long after the company has started to work towards a better organization. The key to success then is to create new, positive experiences to replace the negative ones. However, to change negative to positive will require many positive experiences. It will require determined work towards the positive and large number of repetitions.

The work for changing the culture should also be consistent and persistent. If a company has chosen to become a place where trial and error are positive, it will need to be a critical factor in all decision-making. Everything a company does should support the goal, and every decision should be weighted to understand if it will support or prevent people from trying new things. (Hannola 2021)

People are often motivated to learn and develop their own skills but may feel that they lack opportunities. Some people have low self-efficacy and feelings of mastery and do not recognize the value of their abilities. Company culture can either support or destroy people's feelings of self-efficacy and mastery. Feedback can help people realize their significance and see that others see the value of their work. Feeling equal to others and equally valuable and being a part of the group is vital. In some organizations, there is a

feeling that some teams or individuals are thought more highly of than others, and the members of the teams which are valued lower feel that the work they do is invisible or not appreciated. That can lead to the result that people in that team stop respecting themselves and their skills. Seeing that one's work is not taken for granted but is valued and that the whole organization understands its significance can improve people's self-efficacy and willingness to learn. This will increase the likelihood of citizenship behavior. In an organization where everyone's work is not respected, people are unwilling to develop and ideate. After a while, the psychological safety is so weak that people are not motivated to help the company succeed anymore and often decide to leave. Losing employees affect the organization's ability to ideate and develop, and much potential will be lost. (Hannola 2021)

Hannola (2021) sees that, for example, the motivating factors from the Deci and Ryans self-determination theory may provide a good guideline for organizational change. She has worked as a consultant in companies trying to improve their culture and tells how management has taken autonomy, mastery, and connectedness as their compass in the change process.

She describes how people's autonomy can be increased by giving them more authority to make decisions linked to their work and demonstrating that the employer trusts them. She stresses how important it is that even though some people abuse autonomy, not all employees should be controlled. As mentioned before, people's feeling of mastery will improve if they get feedback from their work. In addition, giving people opportunities to prove their skills by offering them opportunities and challenges will enhance their feeling of mastery. Finally, demonstrating that they are working towards the same goals with others will increase their sense of connectedness and that they are part of something bigger. (Hannola 2021)

Digital transformation will bring a need for ongoing management of change. It will increase the demand for learning new skills, and it can be scary if a person feels that they do not manage. She stresses the importance of psychological safety and ensures that people are not rushed but supported and allowed to learn at their own phase. If people can show their uncertainty and ask questions, they are more likely to keep up with the change and new requirements. (Hannola 2021)

Laura Hannola (2021) sees that more interaction will be necessary between teams and functions. Breaking the siloes will require that people working in different teams get to know one another and start working together. Teams will need to experience that they are equally valued, and the collaboration between different groups of people can be supported

structurally, but empathy will be the key to success. For example, cross-team meetings, shared goals, or coffee breaks are a good start, but people will need to learn to see others' points of view and accept that they can be just as right or better than their own.

For citizen developers to share their solutions with other groups, structures should be implemented. Hannola urges to find an informal channel where people could meet and share experiences. We spoke with her about establishing communities of practice or centers of excellence where citizen developers could meet, get the needed peer support, and share their solutions cross-functionally. She does see the value and opportunities this kind of support would bring for citizen development. However, to succeed, the management will need to recognize the importance of citizen developers and support the spreading of ideas cross-functionally. Otherwise, she sees a risk of the community of citizen developers becoming a silo itself. (Hannola 2021)

4.5 Talk with a Technical Architect

To get the IT's point of view on citizen development, I wanted to interview a person with a long experience from different positions in IT. Timo Paananen has a background in consultancy, and currently, he is working as a technical architect. He started his career as a coder, has experience as a team leader, project manager, and in different architecture roles. In his current job, he has been a critical player in a significant digital transformation project. He is now changing his position to a more general and is further from the actual development, but instead looks at it from the birds' view.

The term citizen development is not familiar to him from a work context, but he has a good understanding of the concept. He Recognizes that at his current employees' business teams, low-code developers are working with MS Power Platform to create business solutions but are not called citizen developers.

He stresses that to enable the citizen developers to create solutions, the suitable connectors and APIs would need to be made available to them. He does remind that when the low-code platforms are used, there is often a need for connectors and API's which are not readily available on the platform but will require coding, which will require the skills of a professional coder. However, once the connectors or APIs have been built, the citizen developer will be able to create the planned solutions. He does remind that not all development can be done with low-code platforms, but more complex cases will most often require coding. However, he sees that it would be most beneficial to provide citizen developers a safe environment, where they can do their development at, a playground in

which they can concentrate on developing, where they would not need to solve technical problems, but IT has done it for them.

Some salespeople are very credible speakers, and sometimes, for example, low-code or SaaS (Solution as a Service) solutions can be purchased too lightly. It is possible that people who are working in business team purchase solutions without IT knowing about it. Buying cloud-based and SaaS tools are easy nowadays, but it is essential to consider that the solution meets all the requirements. Paananen mentions that business functions have often made purchases without consulting the IT department, such as difficulties in integrating other applications or other pitfalls are common when done so. He stresses that the business should make the selection of tools but in co-operation with in-house IT. It is also always essential to find a few options before making the selection. Consultants working in IT roles can also be beneficial, but often are selling specific products and therefore are not the best people to help in the purchase decision.

Paananen mentions that development done by citizen developers in his company has been useful, and good solutions have been created. Those have been simple tools, which supported the business processes and were built with low-code applications. He sees that low-code platforms are promising if they align with the enterprise architecture and consider user management, data protection, and security. He stresses that investing time in citizen development is necessary and the total workload of a person should be taken into consideration, and the leaders should make sure the citizen developers have enough time to grapple in development. It might require transferring some of their tasks to someone else in the. If enough resources for development are not given, it will easily affect the employee experience. Developing processes and automating tasks free up time when manual work is removed and enables people to develop further.

The solutions built by citizen developers can be risky, says Paananen. Suppose there are no clear processes for citizen development or support structures available for citizen developers, it might lead to a situation where the solutions built by citizen developers are invisible. Relevant parties do not have any information about them. The solution can depend on one person, and if that person leaves the company, the information about the solution itself, its purpose, and use-cases, planned users, and its life cycle will be lost. The solutions built by citizen developers can have a significant role in the business process, and that is why it would be essential to build structures to make their work visible and minimize the risks.

Paananen sees that having metering and analytics in place could make citizen developers' work more visible. Metering would also point out the benefits and problems of

citizen development, and if done very carefully, it could be a base of a rewarding system. For example, it could be beneficial to show how many applications have been created and how much they have saved time or reduced mistakes compared to manually doing the tasks.

Paananen sees that to succeed in making citizen development less risky recognizing citizen development in the organization would be necessary. The company leaders will need to invest in citizen development and realize that it is more than providing access to low-code platforms, watching a few demos, and telling people to start developing. It will require sufficient investing, enough resources to support citizen developers, and a framework to guide them when developing. The continuity of the solution should be ensured, as well as the support from the IT organization. Citizen development's goal often is to get savings, and if the implementation of citizen development is not made sustainably, the benefits can be lost. Paananen sees that in many cases citizen development could be a potential concept, if supported sufficiently. If citizen development is unsuccessful, expensive consultants might be required, and people get negative experiences of the concept and stop believing in it.

Citizen developers will need to have a good understanding of the processes and tasks people work within different business functions. Most often, that should be the case because traditionally, citizen developers work with the tasks themselves. However, Paananen sees that it would be beneficial if a citizen developer also had skills in process development and sufficient technical skills depending on the used platforms. He also reminds that the basic concepts of software development should be familiar to everyone developing solutions. For example, that development should not be done to the production base, but a test base should be used, and that taking solutions to production should be handled in a controlled manner.

Citizen development is a concept that could, according to Paananen, be beneficial in building bridges between business and IT departments. Working together and finding solutions for business needs could break the siloes between functions. He sees that citizen development extends the development resource pool for light automation or other simple software development. He also sees that citizen development does not have the problem of identifying the business requirements, which might be challenging to identify in traditional development projects. If the creator of the solution is the one working with the problem, they often already have an idea on how to solve it, and there will be no need for trying to translate the need for a design document or an order form for IT. Thus, the risk for misunderstanding is not realized, and the solution can be created significantly faster.

Citizen development is also a lot cheaper than hiring consultants to create solutions, and therefore the business case for creating a solution for even low-value problems is better.

Not everybody working in a business role can be a citizen developer, but Paananen sees that a good solution could be at least one person in a team who would do development for everyone. For citizen developers to be able to create solutions for people working in different teams and tasks unfamiliar to the citizen developers is not as simple as developing their own or their teams' work, and it would require clear communication between the citizen developer and the person with the business need to succeed. However, Paananen sees that citizen developers from different teams could collaborate and have a community of practice. It would enable them to assist and learn from each other and offer peer support in solution creation cross-functionally but also collaborate with IT.

It is often a case, according to Paananen, that business and IT looks for answers from technology. It is easily forgotten that purchasing a technology used by others is not the right solution for the company in question. Technology is never the solution itself. It is merely a tool that we need to use, but people will create the actual solution. Simply by making low-code platforms available to people will not be enough but starting citizen development should be a strategic decision from the company, says Paananen, and explain how important it is that the leaders understand and accept that it will require investments and genuinely communicate the goals to the rest of the organization. Citizen development should be marketed within the organization and let people know that tools and opportunities are available for citizen developers and let them know where they can get support. People should be enabled to make changes for their work and make it meet better their own liking. People should be given autonomy to make decisions about their daily work, and the options, for example, automating tasks, should be demonstrated to them.

Identifying citizen developers in the company is not a simple task. Paananen sees that companies might fail to recognize citizen developers and might not succeed in citizen development, especially in hierarchical and top-down organizations. To succeed in citizen development would require that the leaders value the employees' expertise and see that they are the best people to tell what the work demands and are willing to speak up and make changes. It is also essential to understand that some people prefer stable work, have set processes and standards, and are not necessarily interested in development. Then there are those who like to disrupt and find new ways of working.

To keep the citizen developers in the company, Paananen suggests that offering them new opportunities and challenges within the organization would be beneficial. He stresses that career development should not always be vertical as everyone does not wish to become a supervisor, but some people might enjoy more changing to a different role horizontally. Rewarding might help, but according to him, it is essential to remember that the meters should be well considered as they will determine people's actions. Recognizing that people wish to learn new skills and grow as professionals could ensure that citizen developers stay in the company.

5 Implementations

The products of my action research were the “Työnsä Kehittäjät”- website (<https://sites.google.com/view/kansalaiskehittaminen>), which has three main aspects: 1. Basic information about citizen development, 2. instructions for potential citizen developers and those identifying themselves as citizen developers, and 3. guidance for organizations on how to succeed when starting citizen development on a broader scale. (Appendix 6)

I started creating the website in an early phase of the project by comparing different online tools available. The prerequisites for the website creation tool were it needed to be easy to use, sites had to be easy to modify, and I wished it to have a free URL available. I tested three different website builders: Wix, GoDaddy, and Google Sites.

Due to my previous positive experience on Google Sites, I decided to use that for site creation. Google Sites is a tool available to anyone holding a gmail.com address or a company domain in Gmail. This tool is simple to use, and publishing the site is cost-free if the Google-provided URL is used. Google sites are linked to the account’s Google Drive and the documents, forms, and other tools provided by Google. Due to the easy accessibility and collaboration with other Google tools, it is suitable for citizen developers. Therefore, Google Sites was the selected tool in my previous position to create HR intra-site for company employees.

The target groups for my website are the potential citizen developers looking for information on how they could become citizen developers, citizen developers looking for support and ideas, and the company leaders and HR interested in implementing citizen development in their organization. In creating the page, I have used the theories collected for the literature review of my thesis, the citizen developer’s interviews, employee experience, and IT theme interviews.

From the citizen development interviewees, I was looking for individuals' experiences about being a citizen developer, the organization’s culture, and the core skills and qualities the citizen developers had.

From the interview with Laura Hannola about employee experience and company culture, I was looking for solutions and visions about how citizen development should be led in the company to motivate its employees to develop.

From the interview with Timo Paananen, I was looking for a sustainable way to implement citizen development. This interview was made from the point of view of an IT professional, but it also had many cultural aspects as well.

After the interviews were finished, I designed the final structure of the website and decided which themes to include on the site. From the selected citizen developer interviews and my own experiences as a citizen developer, I have authored stories about citizen developers to be shared on the site with potential citizen developers.

5.1 A Page to Make Citizen Development Known

The content of this page is collected from the literature review and the interviews of this thesis. The front page gives high-level answers to questions: What is citizen development? Why is citizen development important? How can citizen development increase the motivation of employees? Who are the citizen developers? How to recognize a potential citizen developer?



Figure 14. the structure of the sites about citizen development.

The front page and the page for benefits are solely based on this thesis's findings from this set of pages.

Benefits of citizen development:

- Citizen developers can experience the benefits of rapid development, both in their daily work and skills development.

- Citizen developers can develop solutions to their own unique needs that would otherwise not have a sufficient business case
- They can create more efficient processes and automated workflows.
- They can speed up and simplify the conversion of ideas into applications
- Citizen development helps people shape their job role to look their own
- The feeling of autonomy increases
- Citizen developers have a good understanding of the weaknesses of the processes and what is vital for their development
- No complicated design documentation is required
- Development is rapid
- Implementations are created for real need
- If citizen development is carried out correctly, citizen developers will be supported, and IT will play an active role.
- IT backlog is getting shorter
- Solutions can be recycled, and the risk of duplicates is eliminated
- The tools made by Citizen developers will be visible
- The creation of new products and services is accelerating
- The risk of early IT is reduced if done correctly. IT must play the role of an enabler in Citizen development.
- Citizen development can create bridges between different functions
- Stimulates widespread innovation throughout the organization
- Help cut costs
- It helps increase resilience in times of instability
- Accelerates digital change and speeds up project-specific work
- Increase collaboration between teams

To the page links and articles, the content was selected based on the topics of this research. For example, I added links and book recommendations to the sites about topics of citizen development, psychological safety, motivation, employee experience, and change.'

The page website's background shares my own experiences and visions about citizen development and explains to the reader why the website was created.

5.2 A page for Potential and acting Citizen Developers

The second main page is for potential and acting citizen developers, how they can get started, what they could develop, what skills they should have, and how to find good learning platforms. This page gathers the topics of the subpages.



Figure 15. the structure of the sites for potential, and acting citizen developers

The subpage “Identifying strenghts and believing in oneself” was created due to findings on citizen development interviews. Many interviewees who have developed their work with technological tools do not identify their strenghts very well. As a result, they often are insecure about their development work and its value. The issue seems to be even bigger with my interviewees' team members. Many of them do not see themselves as developers and need help finding their roles in the changing world. Therefore, I have created this subpage with a link to a quiz (Appendix 8) they can take to get feedback on their strenghts in development and information and links to videos about self-efficacy and growth mindset.

The citizen developer’s stories are my interviewees' selected stories, but I also share my own story and path as a citizen developer. This page aims to create role models for potential citizen developers and make them realize that they will not need to be professionals in IT to develop. There is also a link to Google forms if anyone wishes to share their story with me and links to other citizen developers.

The ideas of solutions citizen developers could build include a few examples of viable solutions. The no-code/low-code platform providers often have a wide selection of templates, and to this page, I have added links to their websites.

The skills needed for the citizen development page are mainly based on the citizen development interviews supplemented with skills mentioned in the literature review. This page also includes a list of qualities beneficial for citizen developers.

Qualities:

- Experimenting
- Persistence
- Curiosity
- Questioning
- Precision
- Being social
- Proactivity
- Laziness

Skills:

- No need to be good at maths
- Understanding of business needs
- Understanding entities and effects changes can have to another part of the process
- Interest in technologies
- Understanding the basic rules of software development
- Logical thinking
- Continuous learning
- Accepting criticism and learning from it
- Independent working
- Passion about one's work and inspiring others.

For the "training" page, I have collected academies offered by the platform providers and suggested training to gain sufficient skills to develop. The aim was to look for free or low-cost training because, according to the findings in the interviews, the citizen developers often look for new skills proactively and might not have a company supporting them.

The chosen tools for this thesis were MS Power Platform, UiPath StudioX, Betty Blocks, Zapier, Appsheet, and Excel and Google Sheets. I also added training suggestions for service design and lean courses, which are beneficial skills in planning citizen development created solutions.

5.3 A page for Company Leaders and HR

The third page of the website is targeted at organization leaders and HR professionals. Its main page answers the questions; what citizen development requires from the organization and instructions on identifying its culture? The main page is based on the literature review and the interview with Laura Hannola.



Figure 16. the structure of the sites for leaders and HR

This part of the web page is the most theory-oriented and strongly based on the literature review findings and interviews. The subpages for employee experience motivated employees and psychological safety was part of the preliminary plan as they are also widely handled in this thesis. After conducting the interviews, I saw it beneficial to add web pages about role models. This page also addresses the self-efficacy and growth mindset but from the point of view of organizational development. Another page I added was the networking and peer support. It helps the people in high positions understand the solitary of citizen developers and how they could tackle it in the organization by creating support structures for citizen developers.

An organization where people want to develop is the main page and includes links to the relevant pages in the form of questions.

- What are the benefits of citizen development?
- Citizen development requires constant brainstorming and experimentation. Is it possible to speak directly in your organization, or do you have to fear failures?
- Do your employees have the right to make decisions independently? Will they be able to reach their full potential while learning something new? Do employees understand what their role is in the organization, why they do their work, and who makes the most of their work?
- Citizen development brings constant change. How flexible is your organization, and how do you respond to change?
- Are there identifiable citizen developers for your employees as role models? Where would you find role models for them?
- Do citizen developers in your company work by themselves? What if you helped them create a network where citizen developers from different business areas get to share their experiences and get peer support?
- What skills do citizen developers need?
- Where do development ideas come from?
- What are the risks of citizen development, and how are they tackled?

There is also a short section on how a company could evaluate the existing employee experience and culture.

The page about employee experience describes the concept itself and shows how it is linked to citizen development. It also shares links to pages you will find more information about the employee experience from a cultural perspective:

- Psychological safety
- Motivational factors
- Adequate competence
- Change and resilience
- Examples
- Peer support

From the point of view of technology, issues affecting Citizen development:

- Tools and the skills they require

The page about motivated employees includes information about what kind of rewarding can motivate employees and intrinsic motivation. It also handles the elements of motivation, autonomy, mastery, purpose, and connectedness. From autonomy, the page shares facts about the organization where the people have the freedom to work on their chosen projects. The part about mastery includes the topics of flow, self-efficacy, and

growth mindset. The parts about purpose and connectedness are shorter but explain the topics. Finally, I have added the link to the page about peer support for citizen developers.

The page "Licence to fail" is about psychological safety. It includes information about psychological safety and why it is essential in the citizen development movement. It also shares two lists:

This is how you create a psychologically secure organization:

- People have clearly defined roles
- The teams have clear goals
- People's skills are sufficient
- The team has adequate resources to do the job
- People also see management understand their own ignorance and that their thoughts should be challenged
- Lead by example
- Providing constructive feedback
- Showing their ignorance and asking clarifying questions
- Show failures are accepted and that they do not lead to severe consequences
- Make speaking about ideas safe, no matter how unorthodox they are

Strengths of a psychologically safe organization

- People are accepted as their own, diverse selves
- People learn from mistakes
- Ideation increases
- Feedback increases
- Innovation increases
- Creativity increases
- People want to work together and strengthen relationships
- Less negative thinking and experiences of anxiety

The page about change and resilience demonstrates how strongly citizen development and change are linked together. This page summarises the theory of change and how an organization can succeed in change.

The page "The role models bring the courage to try" shares the view of having ambassadors of citizen development in the company. On this page, I also remind that having a growth mindset and others' experiences can also effect on an individual's self-efficacy and willingness to try new things.

The page for networks and peer support shares the feelings of solitude identified in many citizens developer interviews. I also share views on how an organization could help citizen developers feel less alone.

- Help the organization see the value of the development work done by Citizen developers
- Give them a chance to get to know each other
- Allow them to collaborate, for example, set up their own community or discussion forum to ask for help when needed and share successes with someone.
- Bring Citizen developers' colleagues into development. They have potentially brilliant ideas for Citizen developers, and listening to them will ensure a successful outcome. When the whole team is involved in Citizen development somehow, they all have the same goal and are much better able to support Citizen developers.

The last page demonstrates the risks of citizen development and how they could be tackled.

How to succeed in Citizen development:

- Be aware of the risks
- Break the silos between functions
- Invest in sufficient skills
- Make Citizen development visible
- Give Citizen developers a safe place to develop
- Create a framework and processes for development
- Understand that development does not come from technologies but from people
- Help Citizen developers understand and avoid risks
- Provide the necessary interfaces and connectors
- Allow Citizen developers to collaborate
- Give developers enough time to try and learn
- Ensure that the IT function has sufficient resources to support Citizen development
- Measure and monitor the benefits and risks of implementations

How to make Citizen development more visible?

- Providing an IT-managed platform for citizen developers
- Create your own community for citizen developers where you can share expertise and get support
- Tell all employees about citizen development and give examples
- Help citizen developers advance in their careers but remember that not everyone wants to be a leader
- Create positive role models

6 Findings

This chapter lists the key findings from the whole thesis. Based on the literature review and interviews in this research, it will also include suggestions to issues identified in empowering citizen development in the company.

Citizen development is coming. Companies' IT departments cannot meet the increasing need for niche business purposes (Gartner, Newsroom 2021). There is a shortage of IT professionals with specific skills. That will lead to a situation where it is necessary to find ways to fill the gap. Business-led IT will be able to take simple tasks away from IT's backlog and make their workload easier to handle (Wong 2017).

There are citizen developers in many companies, but they are not called that.

Historically, but also now, some people working in business roles have been creating solutions with Excel (Eerola & Luuppala 2021). Nowadays, in many companies, solutions as MS Power Platform offer more powerful tools for people working in business roles, and they are used for task automation, app-building, or reporting. However, my interviews showed that the people themselves or the organization they work at do not know the concept of citizen development, and their extra role and the work they do might be invisible to others.

Many companies use external consultants or have a separate team, for example, for automation creation. As a result, the opportunities citizen development might bring are still somewhat under leveraged in companies. In many cases, the company leadership and IT department do not recognize the potential people outside IT could have in development. That can be caused by siloed organizations where different functions are not customized to communicate or collaborate. Several of my interviewees mentioned that the actual development was outsourced or done by, for example, a separate RPA team in the company.

Implementing company-wide citizen development will need to be a strategic choice.

It will often mean a notable change and need to be led as any other change (Paananen 2021). The organization's culture will need to be re-designed to empower citizen development, and the hoped culture will need to affect every decision made in the company in the future (Hannola 2021). A change of this magnitude will need to have the support of every manager in the company, and their actions will need to take the company in the right direction (Kotter 2021, Chapter 4).

If citizen development is a strategic choice in the company and the management is willing to invest in it, it will be more successful than without it. However, my interviews revealed that citizen development would exist without strategic choice, but few people will enjoy its outcomes, and it remains invisible to others.

Citizen developers exist in companies, but often their development is invisible or done with basic office tools. Based on my interviews, even though more powerful tools are available for citizen development, citizen developers often use Excel to streamline their work. The solutions created with Excel can have a critical role in the business process but usually do not have any support after its creator leaves the company. Many citizen developers develop solutions to streamline their own work, and the development work they do can be invisible to people working in other parts of the organization. If the organization has a structure and guidelines for citizen development, it can offer citizen developers more versatile tools and make their work more visible across the whole organization.

Citizen developers lack support and contacts with other developers. Many of my interviewees mentioned how they felt lonely. They were a part of a business team but worked with different problems than their peers. They would have hoped to get more contact with people in a comparable situation. They wished for opportunities for sharing ideas, getting support, and celebrating successes

Intrinsic motivation is essential for citizen developers. My interviewees were driven by the development and enjoyed finding solutions. They had intrinsic motivation and wanted to take the extra step to find solutions. Citizen development requires perseverance to keep trying time after time. Without intrinsic motivation, people will not succeed in citizen development as they will give in too quickly (Greene 2018, Chapter three).

6.1 Implications to Managers

It is possible to ensure that citizen developers' solutions have continuity and sustainability. A strategic decision can make citizen development more sustainable. The below issues should be included in the strategy:

1. Create a framework and processes for which citizen developers should follow (Paananen 2021; PMI 2021, 105-118).
2. Make sure people have sufficient skills (Pink 108-130; PMI 2021, 128-137; Wilson 2018)
3. Enable and support collaboration across the organization by breaking the possible silos between functions (Edmondson 2004; Hannola 2021; Paananen 2021; PMI 2021, 105-118; Wilson 2016).

4. Find a way to provide citizen developers a “sandbox” to do their development work transparently and supervised by IT professionals or more experienced citizen developers (Paananen 2021; PMI 2021, 105-118).
5. Look beyond the technology. Citizen development is not about technologies but people. Invest in your people (Paananen 2021; PMI 2021, 105-118).
6. Educate people about risks in citizen development and how to avoid them (Paananen 2021; PMI 2021, 105-118).
7. Provide citizen developers tools for development. Make sure the necessary connectors are in place (Paananen 2021).
8. Create support structures for citizen developers. For example, a center of excellence or a community of practice would help citizen developers get peer support if needed. (Hannola 2021; Paananen 2021; PMI 2021, 105-118).
9. Development takes time. Ensure the citizen developers have enough time to learn sufficient skills and do the development work.
10. Ensure that the IT department can support citizen developers and have enough resources. (Paananen 2021; PMI 2021, 105-118).
11. Measure and monitor the benefits and risks of implementations (Paananen 2021; PMI 2021, 151-155).

Low employee experience might not stop people from developing but will influence their decision to stay or leave their jobs. Even though the company culture did not support my interviewees' development, they had the intrinsic need to do so. Those individuals are proactive in learning because they do not wish to spend time doing mundane tasks and remove them from their workdays.

If citizen developers' work and solutions are not valued, or their employer does not offer them new challenges, their employee experience and engagement decreases (Csikszentmihalyi 2009, Chapter 5; PMI 2021, 128-137). That was the case for several of my interviewees, and it was why they were looking for opportunities outside their current employer.

Citizen development is valuable for an individual. Becoming a citizen developer requires learning new skills. Citizen developers often aim to get sufficient skills to make work more streamlined or automated with different methods. Having a skill set that includes strong business skills and enough technical skills to create solutions will be an asset when looking for new opportunities.

6.2 Correctness of Assumptions

In chapter 1.2, I made the following assumptions when starting my research. In this section, I will open the assumptions and on what level this research confirmed them.

Assumption 1: some individuals will develop their work because they enjoy it, and they would do it in any environment. This assumption was confirmed by talking to my interviewees. Even though the company culture did not support them to develop, they had

the intrinsic need to do so. Moreover, those individuals are proactive in learning because they do not wish to do mundane tasks and remove them from their workdays.

Assumption 2: If the employee experience is not positive, they might not be sharing their solutions. This assumption was only confirmed partially. As mentioned, some people become citizen developers simply due to their passion. However, most people need better guidance and a push to start developing. Negative employee experience and lack of support often impact existing citizen developers. They find sharing solutions more challenging, and sometimes they feel that mentioning even using them with other team members means taking an interpersonal risk (Clark 2020, Stage 2. Learner safety; PMI 2021, 122-128)

Assumption 3: Citizen development is risky. This assumption was partially confirmed. If citizen development is not done sustainably, it can cause significant problems if the citizen developer leaves the company or a team. However, the risks can be minimized by having proper structures for citizen development. For example, if the IT department becomes a part of citizen development and the solutions are created with the platforms IT provides, the risk of shadow IT is reduced, and the business-led IT can work together with the company's IT department. (Paananen 2021; PMI 2021, 22-29)

Assumption 4: citizen developers within the company will be the best people to inspire other people to become citizen developers. This assumption was partially confirmed. The literature review confirmed this assumption, but it was rarely a case for my interviewees. Only a few of my interviewees could name role models for citizen development. Instead, they said they had an intrinsic need to develop and learn new skills. Some of my interviewees had role models outside their own organizations, whose work and achievements they followed in LinkedIn. However, if the person does not have the intrinsic motivation to develop, they might benefit from role models (PMI 122-128).

Assumption 5: Citizen development can be prevented by not giving the employees time to learn or develop. This assumption was partially confirmed. In many cases, my interviewees could free time for further learning and development by creating technical solutions to streamline their work. However, when they started development, it was common that they would use their free time for learning and finding solutions. If people do not have enough time for learning, they will not be able to gain strong skills in available software and do not know all the potential they hold.

7 Conclusion

This chapter explains the conclusions found from the literature review and interviews. This thesis has introduced citizen development more widely and helped people understand its opportunities to organizations and individuals. The research looked for answers to five questions.

RQ1. What kind of employee experience supports citizen development?

Citizen development is an extra role, organizational citizenship behavior, which people adopt if they have strong enough intrinsic motivation to develop and courage to disrupt the current ways of working. Some have an inbuilt incentive to develop by nature, but those who do not have it could still become citizen developers if the organization supports it. The company will need to give employees autonomy, opportunities to learn, license to try and fail, and help them see citizen developments opportunities.

The organization will need structures to support citizen developers and ensure they do not become outsiders in their teams (Edmondson. 2004). To ensure that citizen development spreads in the company, the employee experience will need to be designed to support it (Bridger and Gannaway 2021, 112-140). Otherwise, there is a risk that citizen developers in the company are not satisfied with the company and look for opportunities outside.

RQ2. How to achieve such an employee experience?

Creating an employee experience is time-consuming and must be a strategic decision (PMI 2021, 22-29). Executing the strategy requires that it affects all the decisions and actions taken in the company (Hannola 2021). The leaders will need to set the example and repeatedly show that they are full-heartedly behind the change, and the employees are allowed to try new things and disrupt old ways of doing things.

Structures will need to be in place for citizen development to create psychological safety (Edmondson. 2004). IT will need to play a role and support citizen developers (Wong 2019) and a centralized development environment (PMI 2021, 22-29), but also peer support and connectedness will need to be ensured (Martela & Jarenko 2015, 71-91). All people in the organization should have an equal opportunity to become a citizen developer or work in other roles in citizen development.

RQ3. How to become a citizen developer?

An excellent place to start citizen development is to try and find out if there already are citizen developers in the organization and if the company has set guidelines for it. Becoming a citizen developer requires that a person has a growth mindset and willingness to solve problems as they come across (Watts 2020). In addition, citizen development requires sufficient technical skills on the chosen solution and understanding tasks, processes, and entities. Finally, to avoid problems in other parts of the process by the developed solution, understanding or to ask relevant questions about the work of others is essential (PMI 2021, 15-17).

RQ4. How to make sure the development made by citizen developers is sustainable?

It is essential to be aware of the risks brought by citizen development. If citizen development is invisible, and IT does not have information or skills to support the solutions, the risk is evident. Creating clear structures and guidelines for citizen development and ensuring the developers have sufficient skills and support will help it become sustainable (Paananen 2021).

RQ5. What tools are available

There is a wide selection of no-code/low-code tools available for citizen development. No-code solutions have narrower opportunities than Low-code solutions (Johannessen, Davenport 2021). There are solutions for automating tasks and processes. Such as MS Power Automate, UiPath Studio, UiPath Studio X, Appsheets, Zapier. Tools for application creation: MS Power App, Betty Blocks, Appsheets. Tools for business intelligence: MS Power BI. MS Excel and Google Sheets can also be used for creating solutions, and in many companies, they are the only software available for citizen development. They are, however, still good, and versatile tools for citizen developers

8 Discussions and Evaluation

The aim of this thesis was to make the concept of citizen development more familiar and open discussion about it. It will be important to help the people who already develop their work with technical tools to understand that they indeed are citizen developers and their work make a difference. When the citizen developers feel valued and enthusiastic, they will naturally become role models to others. I hope this research inspires organizations to take actions to empower citizen development. Only after citizen development is a strategic choice and citizen developers are recognized in all hierarchy levels, it can flourish and fully benefit the organizations.

There are solution-oriented people interested in developing in most organizations who understand precisely how they could make their own or their colleagues work better but do not have the tools or skills to do it. Many of them, however, have on their own initiative, by using different online resources, learned how to create, for example, Excel solutions to make tasks easier to handle and, because of that, are often more efficient than their colleagues in performing repetitive, manual tasks.

By identifying people, who already act as citizen developers in the company, helping them bring their work more visible, and allowing them to learn new tools for development, the company can create role models for the rest of the organization. The citizen developers whose work is visible to others and who are passionate about development will be the best ambassadors to help spark interest in citizen development in the organization. (PMI 122-128)

Citizen development is an extra role people adopt if they have strong enough intrinsic motivation to develop. Based on my discussions with citizen developers, I dare say that some people will become citizen developers in any kind of environment. Many of them call themselves lazy as they grow quickly bored in doing routine work and start looking for solutions to avoid doing it in the future. They are interested in different technologies and want to understand how to use their full potential.

My interviewees told me they have experienced time-saving solutions and want to share them with others. They are incredibly persistent and can spend a long time searching for an error that prevents them from finishing their solution, even if they must sacrifice their free time for finding it. They might not be the best employees in a traditional way, but they can help others become even better if given a chance. Those people's enthusiasm can be beneficial to the citizen development movement as they will make good ambassadors for the cause (PMI 122-128).

Working together as a team is also beneficial in citizen development (PMI 2021, 22-29). Citizen developers, however, will need to be able to disrupt the current ways of working. Enabling people across the organization to get to know each other and creating structures for sharing experiences, solutions, and getting peer support would make citizen developers less alone. Making sure that the citizen developers would have someone they could turn to when in need of help would also be beneficial (Paananen 2021). They could be a group of people working in IT or other citizen developers (PMI 2021, 22-29). My interviewees saw starting a community of practice for those interested in citizen development as a good option.

To keep the citizen developers in the company, it will be essential to find ways to support them and allow them to collaborate cross-functionally with other citizen developers. They will need to feel valued, and they will need to see that their work is recognized and celebrated. Seeing citizen developers as individuals and showing interest is the best tool the management and other organization members have (Morgan 2019, chapter 7).

Citizen developers are often the only people in their teams creating technical solutions. It would be important that the team understand the value of their work and become active members in the citizen development movement. For the employees to get the courage to share their solutions, they will need to feel that the workplace is psychologically safe. They might think that their skills are not valued at a team or company level. They might question their own thinking and are afraid of being wrong. Often, when a citizen developer creates a solution, it means that they challenge the past ways of working and the way other people think. If the workplace is not psychologically safe, the citizen developer might create tools that help themselves but do not share them with others.

Citizen developers might get alienated from their teams due to different interests and goals. To integrate citizen developers back to the team they work at could be done by challenging the team to develop their work together. Those individuals in the group, who are not fit for creating solutions, would become participants in the ideation and design processes, and they would all work towards a shared goal (PMI 2021, 42-55). If all the team members are part of development somehow, they would have common interests with citizen developers.

To ensure the employees are motivated to take on an extra role and start developing, they need autonomy, mastery, purpose, and connectedness (Martela & Jarenko 2015). Citizen developers will need to feel trusted and have the freedom to craft their work better to meet their own and customers' needs and wishes (Lyytinen, Hakanen 2021). They will need to have enough time to learn new and maintain their theory and practice skillset (Edmondson

2004). People will need to get challenging tasks to make work enjoyable but possible. Demonstrate the importance of citizen developers' work by offering them career opportunities. Help citizen developers share their skills and show that their work is valued and celebrated. When people feel good at something, they will be motivated to become even better (Pink 2009, 108-130).

In many organizations, the performance of employees is measured purely against the tasks in a person's job description. Citizen development often is not a part of a person's job description and might be ignored easily. However, the citizen developers must be recognized for the extra work they do (PMI 122-128). If a company wishes to keep the citizen developers in the company, they will need to be seen as valuable players in a team, even if they might not be the best employees in a traditional way. The company would have to value diversity, see employees as human beings, and celebrate their differences (Edmondson. 2004). Citizen development is a very cognitive task, and rewarding will have to be done with care. To keep the citizen developers intrinsically motivated, a reward could be a higher basic salary compared to those who do not develop (Martela & Jarenko 2014, 15)

Understanding the company culture is essential when starting to change it. Outsiders are often the best people to analyze the culture as those who are a part of it might not see it or bring forward its problems (Hannola 2021). Working towards a better employee experience can only be done by creating a large number of positive experiences, which will replace the bad ones. The managers will need to become leaders, and empathy plays a crucial role in a Psychologically safe workplace, as does trust and valuing employees. In addition, Edmondson (2004) mentioned that good leadership and support structures, well-defined tasks, team goals, and sufficient knowledge and resources for doing the job help create Psychologically safe teams.

Sharing the results and stories from this thesis to the public will be done via the website (Appendix 6). I am planning to share the website via several channels with its audience. Firstly, it will be shared through the LinkedIn post, and the link will be added to the citizen development support group. Furthermore, I will look for opportunities to share information about citizen development and the website on different blogs and publications. Moreover, I plan to share the website and this thesis with organizations that help others develop—such as consultancy companies in HR, training citizen developers, creating automation, or supporting organizations in other ways to meet needs brought by the digital transformation. I will also approach companies providing no-code/low-code tools for

citizen developers. Finally, I will look for people working in large organizations who could start the citizen development movement in the organizations.

- The Finnish website can be visited at <https://sites.google.com/view/kansalaiskehittaminen>.
- This quiz can help individuals to understand what their role could be in citizen development:
https://docs.google.com/forms/d/e/1FAIpQLSfd27t1yx7ZoRWVMxDIeoyUk_IcV8Foz8aZAxFHb9t7bbCrCw/viewform
- If the reader is a citizen developer, who wishes to share their story, it can be done through this form:
https://docs.google.com/forms/d/e/1FAIpQLSdobisk4XHMDsBq7ueEhKD75jvFS_SUMpeZxdWhjLRPTXuStA/viewform.
- LinkedIn group for Finnish speaking citizen developers is here:
<https://www.linkedin.com/groups/9104446/>

This thesis introduced citizen development and how it could be augmented in organizations. Research has been done previously on how, for example, robotic process automation has been implemented in organizations but not in citizen development. I would find it valuable that this topic would be researched more widely in the future. Possible future research could be linked to the below topics:

- How citizen development has improved employee experience in an organization
- Sharing experiences in implementing citizen development in an organization.
- Creating measurements for citizen development
- What kind of skills do citizen developers benefit from, and how many people already possess them.
- Research on how many citizen developers already work in the organization and how they could become role models to others.
- Research on how many employees are interested in citizen development
- How to ensure citizen development becomes business-led IT and not shadow IT?
- Safe environment for citizen developers to develop in

References

- Academy of Finland. 2003. Guidelines on Research Ethics. Academy of Finland. <https://www.aka.fi/globalassets/awanhat/documents/tiedostot/julkaisut/suomen-akatemiaan-eettiset-ohjeet-2003.pdf>. Accessed 19 September 2021
- Andersson, M., Moenb, O. & Brett P. O. 2020. The organizational climate for psychological safety: Associations with SMEs' innovation capabilities and innovation performance. Science Direct. <https://www.sciencedirect.com/science/article/abs/pii/S0923474820300023>. Accessed 15 August 2021
- Anttila, P. 1998. Tutkimisen taito ja tiedon hankinta. Metodix. Pirkko Anttila: Tutkimisen taito ja tiedon hankinta. – METHODIX. Accessed 2 December 2021
- Bandura, A. 2011. On the Functional Properties of Perceived Self-Efficacy Revisited. Sage Journals. <https://journals.sagepub.com/doi/full/10.1177/0149206311410606>. Accessed 13 October 2021
- Bratincevic, J. 2021. The Forrester Wave™: Low-Code Platforms For Business Developers, Q4 2021. Forrester. <https://reprints2.forrester.com/#!/assets/2/1434/RES176440/report>.
- Bridger E. & Gannaway B. 2021. Employee experience by design. How to create an effective EX for competitive advantage. Kogan Page. Croydon.
- Clark, T. R. 2020. The 4 Stages of Psychological Safety, Defining the Path to Inclusion and Innovation. Berrett-Koehler Publishers. Inc. Ebook. Accessed 15 August 2021
- Coghlan, Da. & Shan, A. B. . 2018. Conducting Action Research for Business and Management Students. SAGE Publications Ltd. Ebook. Accessed 5 December 2021
- Csikszentmihalyi, M. 2009. Creativity. HarperCollins. Ebook. Accessed 13 October 2021
- Daugherty, P. R. & James, H. 2018. Human + Machine, Reimagining Work in the Age of AI. Harvard Business Press. Audiobook. Accessed 11 August 2021
- Dweck, C. 2019. Mindset - Updated EditionUnabridged. Unabridged. Audiobook. Accessed 11 August 2021

Edmondson, A. 2002. Managing the risk of learning: Psychological safety in work teams. Harvard Business School. https://www.hbs.edu/ris/Publication%20Files/02-062_0b5726a8-443d-4629-9e75-736679b870fc.pdf.

Edmondson, A. 1999. Psychological safety and learning behavior in teams. ResearchGate. https://www.researchgate.net/publication/313250589_Psychological_safety_and_learning_behavior_in_teams. Accessed 19 September 2021

Edmondson, A. 2018. The Fearless Organization. Harvard Business School. Ebook. Accessed 15 August 2021

Edmondson, A. & Mogelof, P. 2004. Explaining Psychological Safety in Innovation Teams: Organizational Culture, Team Dynamics, or Personality?. Taylor & Francis. <https://www.taylorfrancis.com/chapters/edit/10.4324/9781410615732-16/explaining-psychological-safety-innovation-teams-organizational-culture-team-dynamics-personality-amy-edmondson-josephine-mogelof>.

Eerola, S. & Luuppala, J. 2021. Microsoft Power Platform hanke – näin lähdet liikkeelle. Sofor. <https://register.gotowebinar.com/recording/viewRecording/8216816837896631052/4279420619316881671/hanna-mari.itakyla@myy.haaga-helia.fi?registrantKey=3921065590215206669&type=ATTENDEEEMAILRECORDINGLINK>. Participated 16 September 2021

fD Qualitative Research Specialists. 2018. Semi-structured interviews guide I semi-structured interview protocol. Youtube. <https://www.youtube.com/watch?v=8z8XV1S7548>. Accessed 19 September 2021

Frankl, V. E. 2010. Man's Search for Meaning: An Introduction to Logotherapy. Blackstone Publishing. Audiobook. Accessed 19 September 2021

Gartner for HR. 2021. CHRO Guide: Reinvent Your EVP for a Post pandemic Workforce Gartner for HR CHRO Guide: Reinvent your EVP for Postpandemic Workforce. Gartner. <https://emtemp.gcom.cloud/ngw/globalassets/en/human-resources/documents/trends/reinvent-your-evp-for-a-postpandemic-workforce.pdf>. Accessed 1 October 2021

Gartner, Newsroom. 2021. Gartner Forecasts Worldwide Low-Code Development Technologies Market to Grow 23% in 2021. Gartner.

<https://www.gartner.com/en/newsroom/press-releases/2021-02-15-gartner-forecasts-worldwide-low-code-development-technologies-market-to-grow-23-percent-in-2021>. Accessed 1 October 2021

Gartner, Newsroom. 2019. Gartner Identifies the Top 10 Strategic Technology Trends for 2020. Gartner. <https://www.gartner.com/en/newsroom/press-releases/2019-10-21-gartner-identifies-the-top-10-strategic-technology-trends-for-2020>. Accessed 1 October 2021

Gibbs, G. 2013. How to do a research interview. Youtube. https://www.youtube.com/watch?v=9t-_hYjAKww.

Gichohi, P. 2014. The Role of Employee Engagement in Revitalizing Creativity and Innovation at the Work-place: A Survey of Selected Libraries in Meru County - Kenya. Library Philosophy and Practice. ResearchGate. https://www.researchgate.net/publication/280048482_The_Role_of_Employee_Engagement_in_Revitalizing_Creativity_and_Innovation_at_the_Workplace_A_Survey_of_Selected_Libraries_in_Meru_County_-_Kenya. Accessed 19 September 2021

Greene, B. A. 2018. Self-Efficacy and Future Goals in Education. Taylor & Francis. Ebook. Accessed 14 October 2021

Heikkonen, H. 2019. Enhancing engagement through employee experience design. Laurea. Ebook. Accessed 1 December 2021

Hiles, D. & Čermák, I. 2007. Qualitative Research: Transparency and Narrative Oriented Inquiry. Faculty of Health and Life Sciences, De Montfort University. Leicester, UK, and Institute of Psychology, Academy of Sciences, Brno, CZ. https://hhmoodle.haaga-helia.fi/pluginfile.php/2309724/mod_resource/content/2/transparency.pdf. Accessed 19 September 2021

Hämäläinen, V., Maula, H. & Suominen, K. 2016. Digi Ajan Strategia. Alma Talent.

Johannessen C. & Davenport T. 2021. When Low-Code/No-Code Development Works — and When It Doesn't. Harvard Business Review. <https://hbr.org/2021/06/when-low-code-no-code-development-works-and-when-it-doesnt>. Accessed 4 November 2021

Kotter, J. P. 2021. CHANGE; How Organizations Achieve Hard-to-imagine Results in Uncertain and Volatile Times. Harvard Business School. Ebook. Accessed 4 November 2021

Kotter, J. P. & Cohen, D. S. 2008. e Heart of Change: Real-Life Stories of How People Change Their Organizations. Harvard Business Review Press. Audiobook. Accessed 4 November 2021

Krueger, R. 2002. Designing and Conducting Focus Group Interviews. St. Paul.

Litmos Heroes. 2014. What Is Six Thinking Hats?. Youtube.

<https://www.youtube.com/watch?v=UZ8vF8HRWE4>. Accessed 19 September 2021

Kärnä, E. & Nikina-Ruohonen, A. 2021. Master ONT tekoälyn ja uusien teknologioiden teemaryhmä 2021-2022

TT TOY Tekoäly tulee! – Tuki, osaaminen ja yhteistyö kuntoon. Haaga-Helia.

Kärnä, E. & Nikina-Ruohonen, A. 2021. TT TOY – Tekoäly tulee. Haaga-Helia.

<https://www.haaga-helia.fi/en/current/projects/tt-toy>. Accessed 15 November 2021

Luukka, P. 2019. Yrityskulttuuri on kuningas - mikä miksi miten. Alma Talent. Audiobook. Accessed 15 August 2021

Lyytinen N. & Hakanen J. 2021. Psykopodiaa. 63. Työn imu. Vieraana Jari Hakanen. Psykopodiaa.

<https://open.spotify.com/episode/1qRsSMILxTkVzqJLgmm60y?si=YkrRUUHwS5mjaNECWRMw-w>. Accessed 4 November 2021

Martela, F. & Jarenko, K. 2015. Draivi, voiko sisäistä motivaatiota johtaa?. Talentum. Ebook. Accessed 2 December 2021

Morgan, J. 2019. The Employee Experience Advantage: How to Win the War for Talent by Giving Employees the Workspaces they Want, the Tools they Need, and a Culture They Can Celebrate. Ascent Audio. Audiobook. Accessed 28 August 2021

Ojasalo, K., Moilanen, T. & Ritalahti, J. 2020. Kehittämistyön menetelmät. Uudenlaista osaamista liiektöimintaan. Sanoma Pro.

Pink, D. 2010. Drive, The Surprising Truth About What Motivates Us. Canongate.

Project Management Institute (PMI). 2021. Citizen Development, The Handbook for Creators and Change Makers. Project Management Institute.

Robiquity Limited. 2020. Spoiler Alert! Ninety Percent of Citizen Development Programs are Doomed (But Maybe Not Yours). Robiquity Limited. <https://robiquity.com/blog/spoiler->

alert-ninety-percent-of-citizen-development-programs-are-doomed-but-maybe-not-yours/. Accessed 1 October 2021

Roussey, B. 2017. Roll Your Own: What The Citizen Developer Wave Means For Your Enterprise It Security. TechGenix. <https://techgenix.com/citizen-developer-enterprise-it-security/>. Accessed 1 October 2021

Schein, E & Schein, P. 2018. Humble Leadership the Power of Relationships, Openness, and Trust. Berrett-Koehler Publishers, Inc. Ebook. Accessed 2 November 2021

Schein, E & Schein, P. 2016. Organizational Culture and Leadership. Wiley. Ebook. Accessed 2 December 2021

Twaronite, K. 2019. The Surprising Power of Simply Asking Co-workers How They're Doing. Harvard Business Review. <https://hbr.org/2019/02/the-surprising-power-of-simply-asking-coworkers-how-theyre-doing>. Accessed 4 November 2021

Verlinden, N. Organizational Citizenship Behavior: Benefits and 3 Best Practices. AIHR Academy. <https://www.aihr.com/blog/organizational-citizenship-behavior/>. Accessed 4 November 2021

Veselinovic, N. 2017. Co-Creating Knowledge Work Automation. Laurea. https://www.finna.fi/Record/theseus_laurea.10024_122868. Accessed 2 December 2021

Wahl, D. C. 2017. The Art of Facilitating Change Processes. Daniel Christian Wahl. <https://designforsustainability.medium.com/the-art-of-facilitating-change-processes-ab124133b7e3>.

Watts, S. 2020. What Is a Citizen Developer?. bmc. <https://www.bmc.com/blogs/citizen-developer/#>. Accessed 1 October 2021

Waxer, C. 2020. What is Citizen Development? The Low-code/No-code Revolution Organizations Should All Go On. Forbes. <https://www.forbes.com/sites/pmi/2020/12/01/what-is-citizen-development-the-low-codeno-code-revolution-organizations-should-go-all-in-on/?sh=30b76db71da9>. Accessed 1 October 2021

Wilson, H. J. 2018. Human + Machine: Reimagining Work in the Age of AI. Audible Studios. Audiobook. Accessed 1 June 2021

Wong, J. October 2019. The Importance of Citizen Development and Citizen IT. Gartner. URL: <https://blogs.gartner.com/jason-wong/importance-citizen-development-citizen/>. Accessed 18 August 2021

Wong, J. 2017. Citizen Development Is Happening, and IT Needs to Be More Engaged. Gartner. https://blogs.gartner.com/jason-wong/citizen-development-is-happening-and-it-needs-to-be-more-engaged/?_ga=2.62848812.1612004547.1633073981-1266225197.1633073980&_gac=1.20131146.1633074156.CjwKCAjw49qKBhAoEiwAHQVTo2SahqXiwvglFj-jCVKlyt5_ucLYmWNbsYfs91_L_4Fp6L0woO3nshoCP-QQAvD_BwE. Accessed 1 October 2021

Attachments

Appendix 1. Questions for Citizen Developer Interviews

- Tell me a little about yourself and your background
- Tell me about the company you work for
- What kind of job do you get the most satisfaction from?
- What kind of background do you have as a developer?
- Are you developing your own work or others?
- Did you have role models?
- Is development part of your job?
- What has been your best experience in working life?
- Tell us about your three most vital traits that make you develop
- Skills for development
- Why do you want to develop?
- Does the company have a development culture?
- What has been your biggest hurdle in the development
- Do you prefer to develop alone or in a group?
- Is time allowed for development?
- Is training available for development?
- Is support available, for example, a network of civic developers
- How does a company ensure that people dare share their development ideas and try them?
- Does the company reward development?
- How do you see that the company could increase system development in business functions?
- What kind of training would you like
- What kind of opportunities would you miss?
- Are companies considered by developers?
- What kind of implementations do you have?
- What tools are used for development?
- Does IT play a role in civic development?
- What kind of help do you need from technical experts?
- What kind of implementations have you been able to do?
- Ensures application lifecycle management in the enterprise
- How do you ensure that your applications are secure?

Appendix 2. Questions for the Potential Citizen Developer

- Tell us a little about yourself and your background
- Tell us about the company you work for
- What kind of job do you get the most satisfaction from?
- Is development part of your job?
- What kind of background do you have as a developer?
- However, you have an interest in technology, why don't you develop in your job?
- Did you have role models?
- What has been your best experience in working life?

- Tell us about your three strongest character traits, which is why you could be a good developer
- Skills for development
- Why do you want to develop?
- Does the company have a development culture?
- Is time allowed for development?
- Is training for development?
- How does a company ensure that people dare to share their development ideas and try them?
- Does the company reward development?
- In what ways do you see that the company could increase system development in business functions?
- What kind of training would you like
- What kind of opportunities would you miss?
- How does the company view the idea of experimentation and failure?
- Are companies considered by developers?
- What tools are used for development?
- Does IT play a role in civic development?
- What kind of help do you need from technical experts?
- What kind of implementations have you been able to do?
- Ensures application lifecycle management in the enterprise
- How do you ensure that your applications are secure?
- In what kind of company would you think you would start as a civic developer?
- What are your dreams for the future?

Appendix 3. Questions to Interviewee 4

- Tell me about your background
- How citizen development links to your work
- How many solutions you do to your customers could be done by citizen developers?
- Are you a citizen developer?
- What tools did you use as a citizen developer?
- What characters made you a good citizen developer?
- Have you been able to talk openly about your ideas in the organizations you have worked at?
- What would you see as IT's role in citizen development
- How could citizen development become sustainable?
- Is development part of your job?
- What kind of work do you enjoy?
- What has been your best experience at work?
- What have been the skills that have made you a good citizen developer?
- What trainings do you think would benefit citizen developers?
- How could they demonstrate that they are citizen developers and do meaningful work?
- How would you think organizational culture could support citizen development?
- How would you motivate your subjects to become citizen developers if you were a supervisor?
- What do you see as role models' role in spreading citizen development?
- How would you start citizen development in a team?
- What about collaboration with no citizen developers in a team?
- What would you see citizen development required from company management?
- How do you think the citizen developers benefit from?
- What has been the best reward to you as a citizen developer?
- Do you see that your clients' organizations have potential citizen developers?
- What makes a citizen developer?
- What is the actual benefit you have got from solutions you created as a citizen developer?
- Has your development work been recognized?
- How about the sustainability of citizen development?

Appendix 4. Questions for Laura Hannola

- How can a company build a creative culture?
- How can the need for continuous development of a company be sold to company management if they do not realize it themselves?
- How does company management see grassroots workers' potential for the company?
- How to get staff to produce ideas?
- How do you get staff to try?
- How is it used to help staff bring out, and understand, the value of their skills?
- How do you get people to step into their area of discomfort and use tools they do not imagine they can use?
- In what ways can the staff be motivated to develop?
- In what way is it possible to motivate staff to develop?
- How the company can enable continuous learning
- What kind of experience do you have in using organizations based on strengths?
- How to ensure learning from mistakes, not just at the individual level but also at the team and organizational levels?
- How to enable staff autonomy in an old company
- What is the role of company management in that?
- How to enable leaders to be open to bottom-up thinking?
- What is the easiest way to identify people who would be potential business developers?
- How to ensure that silent people are also noticed?
- How should people be rewarded for their progress?
- How to create a psychologically safe team?
- What benefits do you see in the digital transformation of a psychologically safe environment?
- Ways to bring out to staff why they want to develop?
- Tools for understanding staff
- Effective ways to measure the employee experience

Appendix 5. Questions for Timo Paananen (Technical Architect)

- Tell about yourself
- So, what about the subject of citizen development? How familiar is it with the topic?
- Who develops with low code platforms in your organization?
- Can the business continue development after the connectors and APIs are added by IT?
- How much do you know how much you are developing? Such not-so-complex solutions with some power platform or someone.
- How then will those solutions show you?
- Do you have any idea how to avoid a situation like this? (IT not knowing about a solution)
- Would you see something prescribed and skills, for example, that a citizen should teach developers to make it sustainable?
- What Low-code platforms do you have in use?
- Is there a risk of someone using something but you do not know?
- Do you see It would be more manageable for IT to choose the tools your organization can use?
- What opportunities would you see that citizen development could bring to the company?
- Do you have a view where IT can keep track of what implementations have been done?
- What would you see that they would be able to develop even at the team level that work is not just their own.
- How do you see then? Organization if you think about What does it take for an organization to succeed in developing a citizen?
- How would you leave if you were the head of a company? How would you go about motivating people to become Citizen Developer?
- How would you go about your organization taking citizen development forward?
- How would you recognize potential citizen developers?
- Citizen development is often quite invisible. So, what benefits would you see that it could be more visible than people talked about it more?
- How to produce? That would ensure that these citizen developers did not end up leaving the company.

Appendix 6. Website Print Screens

Työnsä Kehittäjät Työnsä kehittäjät Kansalaiskehittäminen Kehittävä organisaatio Miten sinä voit kehittää?

Löydä yrityksesi piilotettu potentiaali ja tehosta työntekoa!!

Kansalaiskehittäminen

Kansalaiskehittäminen on sitä, kun IT:n ulkopuolella työskentelevä henkilö oman työnsä ohessa kehittää työtehtäviään saatavilla olevien teknisten työkalujen avulla.

Johdon tehtävä on mahdollistaa!

Järjestelmäkehitys ei asu tulevaisuudessa enää ainoastaan IT-tiimissä, vaan sen demokratisoiminen on jo tätä päivää ja tuo yrityksellenne aivan uudenlaisia mahdollisuuksia!



Kuva: Pixabay

Tulevaisuuden kansalaiskehittäjät!

Jatkuva kehitys on tulevaisuutta ja teillä on nyt mahdollisuus olla osa sitä. Tältä sivulta löydät tietoa ja vinkkejä siitä, miten voit oppia tehostamaan omaa ja muiden työtä erilaisia teknologioita hyväksikäyttämällä.



Kuva: Ivan Samkov (Pexels)

Olemme nyt kaikki kehittäjiä (Gartner 2015). Kansalaiskehittäminen lähtee ruohonjuuritasolta.

Kuka muu olisi paras kehittämään työtä, kuin se, joka sitä päivittäin tekee?

Tämän sivuston on tarkoitus palvella sekä kehittäjiä, että organisaatioissa päättävissä asemassa olevia henkilöitä.

Tiedot perustuvat erilaisiin kirjallisiin lähteisiin, videoihin, tekemiini haastatteluihin, sekä omaiin kokemuksiini kansalaiskehittäjänä.

Tulen sivuillani jakamaan vinkkejä siitä, mistä voi kulloisesta aiheesta lukea lisää tai mihin videoihin tai koulutuksiin kannattaa tutustua.

Sivut olen aiheen mukaisesti rakentanut lähes meille kaikille kansalaiskehittäjille saatavilla olevalla Google-sites -alustalla, joka sinulla siis on, jos omistat Gmail-osoitteen.

Mitä on kansalaiskehittäminen

Miksi kansalaiskehittäminen on tärkeää?

Kansalaiskehittäminen toimii myös motivaation lisääjänä yrityksen henkilöstölle.

Ketkä ovat kansalaiskehittäjiä?

Mistä tunnistat potentiaalisen kansalaiskehittäjän

Mitä on kansalaiskehittäminen

Termi "kansalaiskehittäjä" tai "citizen developer" on monelle vieras, mutta olen varma, että jokaisesta työpaikasta ja jopa tiimistä tällainen henkilö löytyy. He ovat yleensä liike-toiminnan tehtävissä työskenteleviä henkilöitä, jotka käyttävät saatavilla olevia teknologioita tehostamaan omaa ja kollegojensa työtä.

Kansalaiskehittäjät ovat ongelmanratkaisijoita, joilla on taustansa vuoksi erittäin hyvä ymmärrys siitä, minkälaiset tarpeet juuri heidän omalla tiimillään on teknologioiden suhteen ja halu kehittää ratkaisuja omaa tai kollegojensa työtä helpottamaan.

Kansalaiskehittäjien työkalut ovat muuttuneet erittäin paljon viime vuosien aikana. Kun itse asiakaspalvelun roolissa aloitin kehittämisen, lähes kymmenen vuotta sitten, oli minulla käytössä vain Excel ja itse opettelin Googlasta koodinpätkä kerrallaan sen, mitä uskoin tarvitsemani.

Tänä päivänä kansalaiskehittäjille on tarjolla suuri määrä erilaisia ns. No-code-työkaluja, jotka eivät vaadi koodaustaitoja ollenkaan ja netti täynnä kattavia koulutuksia. Hieman koodausta ymmärtäville henkilöille on puolestaan tarjolla low-code-työkaluja, joilla pystyy toteuttamaan hieman monimutkaisempia ratkaisuja.

Kuten jo aikaisemmin mainitsin, low-code/no-code työkalujen käyttö tulee lähivuosina lisääntymään huomattavasti. Kaikki niillä tehtävä kehittäminen ei toki tule olemaan kansalaiskehittäjien tekemää, vaan niiden käyttö yleistyy kaikessa kehittämisessä.

Tämän päivän kansalaiskehittäminen voi olla esimerkiksi PowerBI raporttien luomista, prosessien automatisoimista tai sovellusten tekemistä.



Kuva: Anthony Shkraba (Pexels)

Kuka tahansa tietotyöläinen voi olla kansalaiskehittäjä

- Auta työntekijöitäsi ymmärtämään heidän osaamisensa arvo
- Anna onnistumisen kokemuksia, toisinsanoen pilko haastavimpien tehtävien oppimisen pienempiin osiin jotka on helpompi sisäistää
- Auta tiimejä työskentelemään yhdessä. Siiloutuminen on haitaksi kaikelle kehittämiselle
- Kuuntele hiljaisia
- Kysy kysymyksiä
- Älä teillaa

Miksi kansalaiskehittäminen on tärkeää?

Digitaalinen transformaatio tulee muuttamaan, ja on osittain jo muuttanut kehityksen tarpeita yrityksissä. Jatkuvasti muuttuvat tarpeet ja kova kilpailu yritysten kesken esimerkiksi asiakkaille tarjottavista teknisistä ratkaisuista vaatii paljon yritysten IT-organisaatioilta. Kun samaan aikaan on jatkuva pula osaavista IT ammattilaisista, on yritysten löydettävä uusia tapoja kehittää.

Samaan aikaan kuin IT:n työjonoit kasvavat ja usein mitättömiltä tuntuvat pyynnöt, joilla kuitenkin olisi tehostava vaikutus ihmisten työhön, joutuvat romukoppaan, on liike-toiminnan funktioissa paljon tunnistamatonta potentiaalia. Siellä ovat he, joilla on paras ymmärrys prosessien pullonkauloista ja asiakkaiden tarpeista. Kansalaiskehittämisellä tarkoitetaan juuri tuon potentiaalini hyväksikäyttämistä kehityksessä. Sillä tuodaan suuria määriä pieniä, mutta työtä tehostavia tai asiakkaiden kaipaamia ratkaisuja yrityksen kilpailukyvyyn säilyttämiseksi.

Kansalaiskehittäjät ovat juuri niitä, jotka kokevat työtä tehdessään työkalujen ja prosessien tehottomuuden. Usein he myös työskentelevät hyvin lähellä asiakasta ja siksi ymmärtävät asiakkaiden tarpeita enemmän, mitä yrityksissä usein ymmärretään.

Gartner ennustaa, että:

- vuoteen 2023 mennessä yli 50% yrityksistä tulee käyttämään erilaisia low-code -alustoja kehittämiseen. ([Forbes](#))
- Vuoteen 2025 mennessä yritysten kehittämistä uusista sovelluksista 70%:n käytetään low-code/no-code alustoja. (vuonna 2020 vastaava luku on ollut 25%)
- Vuoteen 2025 mennessä 75% suurista yrityksistä käyttää vähintään neljää low-code kehittämistyökalua sekä IT-sovellusten kehittämiseen että kansalaiskehittämiseen. ([DevOps.com](#))



Kuva: cottonbro (Pexels)

Kun kehitys siirretään osittain siihen osaan organisaatiota, joka on kehityksen kohteena, voidaan käyttää hyväksi siellä työskentelevien henkilöiden ammattitaitoa ja kokemuksia.

Monilla tietotöissä työskentelevillä henkilöillä saattaa jo olla vahva tietotekninen osaaminen, mutta kouluttamalla rivityöntekijöitä kouluttajiksi yritykset moninkertaistavat mahdollisuudet kehittää.

Lue lisää kansalaiskehittämisen hyödyistä [täältä](#).

Kansalaiskehittäminen toimii myös motivaation lisääjänä yrityksen henkilöstölle.

Kun rivityöntekijälle annetaan lupa kehittää, viestii se häneen kohdistuvaa luottamusta. Luottamus ja autonomia auttavat henkilöä muokkaamaan omaa työtään itselleen mieluisaksi ja jos yrityksessä on esimerkiksi joka tiimissä muutama kansalaiskehittäjä, pystyvät he muuttamaan myös muiden työtä miellyttävämmäksi.

Kansalaiskehittäminen on parhaillaan saumatonta tiimityötä. Kun kehittäjä on lähellä ja tuntee kollegoidensakin työn, on hänen kanssaan helppo ideoida ja kertoa työhön liittyvistä ongelmista. Kun yhdessä ideoidaan, kokeillaan ja lopulta löydetään ratkaisu, on kehityksessä ollut mukana juuri ne henkilöt, joita muutokset koskevat. Muutosjohtamista ei erityisesti tämän jälkeen tarvita yrityksen johdon taholta.

On kuitenkin muistettava, vain sitoutuneet työntekijät ovat halukkaita antamaan parhaansa. Kehittäjiä saattaa olla niissäkin organisaatioissa, joissa voidaan huonosti, mutta kehitysten tuomaa hyötyä ei välttämättä olla halukkaita jakamaan edes kollegoiden kesken, saati sitten toisiin liiketoiminnan funktioihin.

Ketkä ovat kansalaiskehittäjiä?

Teoriassa kuka tahansa järjestelmien loppukäyttäjä voi tulla kansalaiskehittäjäksi, jos sille annetaan mahdollisuus ja jos hän muuten on tehtävään soveltuva. Potentiaalisten kansalaiskehittäjien määrä yrityksessä on paljon suurempi kuin ammattimaisten kehittäjien määrä.

"Kansalaiskehittäjät ovat yleensä jonkun liiketoiminta-alueen asiantuntijoita, joilla on syvä ymmärrys organisaatioissa suoritettavien tehtävien liiketoimintaprosessista." (Project Management Institute. 2021)

Kansalaiskehittäjiä ovat esimerkiksi he, jotka muokkaavat omia työskentelytapojaan tehokkaammaksi käyttämällä hyväksi teknisiä apuvälineitä. Heitä on jo yrityksissä olemassa, mutta usein he eivät itsekään ymmärrä olevansa kehittäjiä, vaan pitävät omaa toimintaansa näpertelyinä.

Ennen tehokkaampien työkalujen markkinoille tuloa työkalut, kuten perus Office ohjelmat ovat toimineet kansalaiskehittäjien työkaluina. Voisin vannoa, että jokaisessa yrityksessä työskentelee jokin henkilö, joka tunnetaan ns. Excel-guruna. Vaikka kansalaiskehittäjä-termiä ei ole välttämättä käytetty, voidaan sellaiseksi laskea esimerkiksi heidät, jotka ovat luoneet helposti päivitettäviä raportteja, lomakepohjia ja automatisoineet työtä macrojen avulla.

Jokainen saavutus vaatii päätöksen yrittää!



Kuva: Google Images

Mistä tunnustat potentiaalisen kansalaiskehittäjän

- Ratkaisukeskeinen
- Ymmärtää kokonaisuuksia
- Kiinnostuneet teknologiasta
- Omaavat loogista päättelykykyä
- Kehitettävän työn asiantuntija
- Rutiineihin kyllästettyä
- Oppimishaluinen
- Sinnikäs
- Ideoija
- Välittää muiden hyvinvoinnista
- Halukas auttamaan muita

Lue tarkemmin aiheesta [täältä](#).

Tehdään yhdessä työelämästä parempaa!

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Tule mukaan kansalaiskehittäjien omaan ryhmään

Kansalaiskehittämisen hyödyt

Kansalaiskehittämisen hyödyt

Kansalaiskehittäjät voivat kokea nopean kehittämisen hyödyt, niin päivittäisessä työssään, kuin osaamisen kehittymisenä:

1. Kansalaiskehittäjät voivat kehittää ratkaisuja omiin uniikkeihin tarpeisiinsa, joilla muuten ei olisi riittävä business case
2. He voivat luoda tehokkaampia prosesseja ja automatisoituja työnkulkuja.
3. He voivat nopeuttaa ja yksinkertaistaa ideoiden muuntamista sovelluksiksi
4. Kansalaiskehittäminen auttaa ihmisiä muokkaamaan omaa työrooliaan oman näköiseksi
5. Autonomian tunne lisääntyy
6. Kansalaiskehittäjillä on hyvä ymmärrys prosessien heikoista kohdista ja siitä, minkä kehittämisellä on suuri merkitys
7. Ei tarvita monimutkaista suunnitteludokumentaatiota
8. Kehitys on nopeaa
9. Toteutukset luodaan todelliseen tarpeeseen

Jos kansalaiskehittäminen toteutetaan oikein, kansalaiskehittäjiä tuetaan ja IT:llä on siinä aktiivinen rooli.

10. IT backlog lyhenee
11. Ratkaisuja pystytään kierrättämään ja duplikaattien riski poistuu
12. Tulee kansalaiskehittäjien tekemät työkalut näkyviksi
13. Uusien tuotteiden ja palvelujen luominen nopeutuu
14. Varhi IT:n riski vähenee, jos tehdään oikein. IT:lla pitää olla kansalaiskehittämisessä mahdollistajan rooli.

Kansalaiskehittäminen voi luoda siltoja eri funktioiden välille

15. Stimuloi laajaa innovaatiota koko organisaatiossa
16. Auttaa leikkaamaan kustannuksia
17. Auttaa lisäämään resilienssiä epävakaina aikoina
18. Nopeuttaa digitaalista muutosta ja nopeuttaa projektiokohtaista työskentelyä
19. Lisää tiimien välistä yhteistyötä

Linkkejä ja artikkeleita

Kansalaiskehityksestä

PMI (Project Management Institute) on ainoa taho, joka on julkaissut [kirjan](#) kansalaiskehittämisestä tähän mennessä. Sitä on myynnissä ainakin Adlibriksessä. He tarjoavat myös kattavaa tietopakettia aiheesta [kurssien](#) muodossa eri näkökulmista ja aiheeseen liittyvä [FAQ](#).

Forbes

- [Pros and cons of citizen development](#)
- [What is citizen development](#)
- [Low-Code/No-Code: Empowering Citizen Developers](#)
- [5 Myths Of Citizen Development](#)
- [How To Activate Your Citizen Developers](#)
- [How Organizations Can Embrace Citizen Developers](#)
- [Citizen Developers Are Filling The Gaps During Covid-19 And Beyond](#)
- [Bring Shadow IT Into The Light And Capitalize On Citizen Developers](#)

Gartner

- [The Importance of Citizen Development and Citizen IT](#)
- [The Future of Apps Must Include Citizen Development](#)

Digital Illustrated

- [Kansalaiskehittäminen](#)

Efima

- [LinkedIn posts](#)

Hedelmällinen organisaatio

Sivustollani olen tosiaan käyttänyt laajalti erilaista kirjallista materiaalia saadakseni luotua kattavan tietopankin organisaatiokulttuurista ja työntekijäkokemuksesta, jotka vaikuttavat kansalaiskehittäjiin.

Psykologinen turvallisuus

- **The organizational climate for psychological safety: Associations with SMEs' innovation capabilities and innovation performance.** Kirjoittanut Andersson, Marius. Moenb, Oystein. Brettc Per Olaf Vuonna 2020. Luettavissa: <https://www.sciencedirect.com/science/article/abs/pii/S0923474820300023>
- **The 4 Stages of Psychological Safety, Defining the Path to Inclusion and Innovation.** Kirjoittanut Clark, Timothy R. Vuonna 2020
- **Managing the risk of learning: Psychological safety in work teams.** Kirjoittanut Edmondson, A. Vuonna 2002. Luettavissa: https://www.hbs.edu/ris/Publication%20Files/O2-062_Ob5726a8-443d-4629-9e75-736679b870fc.pdf
- **Psychological safety and learning behavior in teams.** Kirjoittanut Edmondson, A. Vuonna 1999. Luettavissa: https://www.researchgate.net/publication/313250589_Psychological_safety_and_learning_behavior_in_teams
- **The Fearless Organization.** Kirjoittanut Edmondson, A. Vuonna 2018
- **Explaining Psychological Safety in Innovation Teams: Organizational Culture, Team Dynamics, or Personality?** Kirjoittanut Edmondson, A., Mogelof, P. Vuonna 2004. Luettavissa: <https://www.taylorfrancis.com/chapters/edit/10.4324/9781410615732-16/explaining-psychological-safety-innovation-teams-organizational-culture-team-dynamics-personality-amy-edmondson-josephine-mogelof>

Motivaatiotekijät

- **Drive, The Surprising Truth About What Motivates Us.** Kirjoittanut Pink, D. Vuonna 2010
- **On the Functional Properties of Perceived Self-Efficacy Revisited.** Kirjoittanut Bandura, Albert Vuonna 2011. Luettavissa: <https://journals.sagepub.com/doi/full/10.1177/0149206311410606>
- **Self-Efficacy and Future Goals in Education.** Kirjoittanut Greene, Barbara A. Vuonna 2018
- **Creativity.** Kirjoittanut Csikszentmihalyi, Mihaly Vuonna 2009
- **Mindset - Updated Edition Unabridged.** Kirjoittanut Dweck, Carol Vuonna 2019
- **Man's Search for Meaning: An Introduction to Logotherapy.** Kirjoittanut Frankl, Viktor E. Vuonna 2010
- **Conversations Worth Having: Using Appreciative Inquiry to Fuel Productive and Meaningful Engagement.** Kirjoittanut Stavros, Jackie. Torres, Cheri. Cooperrider, David L. Vuonna 2018
- **The Surprising Power of Simply Asking Coworkers How They're Doing.** Kirjoittanut Twaronite, Karyn Vuonna 2019. Luettavissa: <https://hbr.org/2019/02/the-surprising-power-of-simply-asking-coworkers-how-theyre-doing>

Työntekijäkokemus

- **Employee experience by design. How to create an effective EX for competitive advantage.** Kirjoittanut Bridger Emma, Gannaway Belinda Vuonna 2021
- **The Employee Experience Advantage: How to Win the War for Talent by Giving Employees the Workspaces they Want, the Tools they Need, and a Culture They Can Celebrate.** Kirjoittanut Morgan, Jacob Vuonna 2019
- **Yrityskulttuuri on kuningas – mikä miksi miten.** Kirjoittanut Luukka, Panu Vuonna 2019
- **Psykopodiaa. 63. Työn imu. Vieraana Jari Hakanen.** Spotify: Lyytinen Nina, Hakanen Jari Vuonna 2021. Kuunneltavissa: <https://open.spotify.com/episode/IqRsSMILxTkVZqJLgmm6Oy?si=YkrRUUHwS5mjaNECWRMw-w>

Muutos

- **Human + Machine, Reimagining Work in the Age of AI.** Kirjoittanut Daugherty, Paul R., James, H Vuonna 2018
- **Digitiajan Strategia.** Kirjoittanut Hämäläinen, V., Maula, H., Suominen, K. Vuonna 2016
- **CHANGE; How Organizations Achieve Hard-to-imagine Results in Uncertain and Volatile Times.** Kirjoittanut Kotter, John P. Vuonna 2021
- **e Heart of Change: Real-Life Stories of How People Change Their Organizations.** Kirjoittanut Kotter, John P. Cohen, Dan S Vuonna 2008
- **The Art of Facilitating Change Processes.** Kirjoittanut Wahl, Daniel Christian Vuonna 2017. Luettavissa: <https://designforsustainability.medium.com/the-art-of-facilitating-change-processes-ab124133b7e3>

Keitä kansalaiskehittäjät ovat?

Lue täältä kansalaiskehittäjien kokemuksista ja ajatuksista

[Oma tarinani alkoi kauan sitten Excelistä](#)

[Väsymätön uuden oppija - haluaa vapauttaa aikaa merkitykselliseen työhön](#)

[Kehityksen ammattilainen luomassa lisäarvoa työnantajalleen kansalaiskehittäjänä](#)

[Joskus kansalaiskehittäminen ei ole helppoa](#)

Oma tarinani alkoi kauan sitten Excelistä

Citizen developer on suhteellisen uusi termi ja muistan hyvin, kun kyseiseen termiin ensimmäisen kerran törmäsin. Olin jo pitkään tehnyt erilaisia työkaluja omaa työtäni tehostamaan ja nautin niiden tekemisestä, mutta en kuitenkaan osannut nimetä tuota kehittäjän rooliani ja tunsin itseni vain erilaiseksi kuin muut. Minulla ei ollut kiinnostusta tehdä asioita kyseenalaistamatta aina samalla tavalla, vaan etsin jatkuvasti parempia tapoja tehdä niitä.

Tarinani kansalaiskehittäjänä alkoi suuressa sinisessä rakennuksessa, jonka ikkunasta näkyi lampaiden ja lehmien laidun. IBM:n data validation-tiimissä työskennellessäni sain käyttööni Excel:n jossa oli iso musta laatikko, johon sai lisättyä listan asiakasnumeroita ja jonka alapuolelta nuo samat numerot sai kopioitua pilkuttettuina. Listan sai muotoon, jota yrityksen crm-järjestelmä ymmärsi ja työn tekeminen nopeutui huomattavasti. Yrityksessä seurattiin työn tehokkuutta tarkasti ja loistin viikoittain listojen kärjessä, koska olin onnistunut lisäämään tuohon neliöön toisetkin kymmenen asiakasnumeroa ja sen ansiosta olin muita nopeampi.

Vaikka edellinen tarina kertookin vain kymmenen rivin ja kaavan lisäämisestä Exceliin, olin jo tuolloin tietämättäni kansalaiskehittäjä, joka tehosti työtään yrityksen hyväksymien teknologioiden avulla. Meni vielä muutama vuosi, jonka jälkeen aloin käyttämään Exceliä enemmän työn tehostamiseen ja työkalut kehittyivät vuosien mittaan kaavoilla rakennetuista laskureista puoliautomaatioihin, useammalla ihmisellä käytössä oleviin työkaluihin.

Olen monesti sanonut, että rakennan työkaluja, koska olen laiska. En vaan yksinkertaisesti jaksakaan tehdä samaa asiaa moneen kertaan, jos pystyn tekemään sen kerran ja tekemään työkalun, joka seuraavalla kerralla tekee sen puolestani. Olen myös luonut työkalujani sillä ajatuksella, että minun ei tarvitse jatkuvasti käyttää niin paljon muistikapasiteettiani, kun työkaluni ovat esimerkiksi tarkastaneet puolestani jonkun tuotteen sen hetkisen saatavuuden. Entiset kollegani luottivat tässä muistiinsa ja minusta ei siihen ollut.

Monen vuoden jälkeen löysin yrityksen koulutusportaalista koulutuksen nimeltään "Citizen Development Foundation" ja vasta tuon koulutuksen jälkeen ymmärsin olevani osa suurempaa kansalaiskehittäjien yhteisöä. En tuntenutkaan itseäni enää tiimin outolinnuksi, joka tykkää Excelistä, vaan siitä hetkestä lähtien tunsin itseni kehittäjäksi.

Tästä on jo muutama vuosi ja viime vuodet olenkin pyrkinyt jatkuvasti kehittymään kehittäjänä. En kuitenkaan koskaan tule unohtamaan juuriani ja siitä syystä haluan oppinnytetyöni ja tämän sivuston avulla tuoda kansalaiskehittäjyyttä tutuksi.



Tarinoita tarvitaan aina lisää!

[Jos haluat jakaa oman kansalaiskehittäjätarinasi, lähetä se tämän lomakkeen kautta minulle ja luodaan yhdessä esikuvia tulevaisuuden kansalaiskehittäjille!](#)

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13241,21525251,35215,1325,23552,2151,2351,12553,215251,125,125425,125,125,125,235,25,2351,132515

Ensimmäiset macroni kirjoitin muiden töideni ohessa opettelemalla koodaamista palan kerrallaan.

[WiseOwl opetusvideot](#) auttoivat minut todella monen ongelmatilanteen ohi kertaa.

[Leila Gharani](#) jakaa Youtubessa todella hyviä ja selkeitä Excel-tutoriaaleja. Näitä katsomalla opettelin yhdistelemään funktioita ja niiden avulla tuomaan tiedot sinne, missä niitä tarvittiin.

Väsymätön uuden oppija – haluaa vapauttaa aikaa merkitykselliseen työhön

Eräs haastateltavani kertoo matkastaa kansalaiskehittäjänä näin:

Aloittaessani työt asiakaspalvelutiimissä minulle annettiin pitkä lista ohjeita ja neuvoja siitä, miten työt pitäisi hoitaa. Minulle monotonisen työn tekeminen ei kuitenkaan ole mielekästä ja hyvin nopeasti kyllästyinkin toistuviin manuaalisiin tehtäviin ja aloin miettimään, että ”on pakko olla olemassa parempi tapa tehdä sama työ”.

Sinnikkään opetteluun jälkeen opin Excelin macroja hyväksikäyttämällä ja yhdistämällä ne SAP:n scripteihin automatisoimaan monia toistuvia tehtäviä ja vapauttamaan aikaani uuden oppimiseen. Kehitin vapautuneella ajallani myös automaatioita koko tiimin käyttöön ja autoin heitä tehostamaan työtään.

Kun työt asiakaspalvelutiimissä päättyi, siirryin uuteen rooliin. Siellä kehitystä oli lähinnä tehty Power Bl:n avulla ja niin opettelin minäkin tekemään. Tällä hetkellä teen vähemmän automaatioita, mutta luon ihmisten käyttöön raportteja. Haluan varmistaa, että tekemäni raportit ovat erittäin helppo ja nopea päivittää ja auttavat käyttäjiään tekemään oikeita päätöksiä. Toteutukseni antavat myös muille mahdollisuuden keskittyä työssään merkityksellisempiin tehtäviin.

Intohimo työhön ja sen kehittämiseen ovat olleet urani punainen lanka. Minulle on ollut selvää, että oppiakseni uusia taitoja on minun panostettava siihen. Olenkin usein tehnyt pitkiä työpäiviä ja monesti vielä jatkanut ongelmien selvittelyä vielä vapaa-ajallakin. Kehittäminen on minulle luontaista ja useasti olenkin priorisoikin kehittämistehtävät muiden edelle, koska näen niillä olevan pitkäkantoisempia vaikutuksia, kuin esimerkiksi raportin laatimisella, jota kukaan ei lopulta lue.

Pyrin aina rakentamaan työkaluja ja raportteja, joita on yksinkertaista ja nopeaa käyttää ja näin pystyn helpottamaan ihmisten työtä. Kaikki eivät välttämättä tunnista työkalujeni arvoa vaan haluavat tehdä työtä tavalla, johon olivat ajan mittaan tottuneet. Esihenkilöt kuitenkin ovat tunnustaneet kehitysohjeiden ja halun auttaa muita. Olenkin saanut vielä suht lyhyellä urallani runsaasti mielenkiintoisia haasteita kehityksen parissa.



Kuva: Mikael Blomkvist (Pexels)

”Kansalaiskehittäjät tarvitsevat sopivasti myös muutosjohtamisen taitoja, jotta eivät päädy kehittämään vain omaa työtään.”

”On myös tärkeää antaa hyvä ensivaikutelma. Työkalu ei saa kaatua heti ensimmäisellä käyttökerralla!”

Kehityksen ammattilainen luomassa lisäarvoa työnantajalleen kansalaiskehittäjänä

Toinen haastateltavani kertoi tiestään kansalaiskehittäjäksi näin:

Kun aloitin nykyisessä työpaikassani, minulla kävi hyvä tuuri. Minut otettiin heti osaksi tiimiä ja jo ensimmäisenä päivänä mielihiteistäni oltiin kiinnostuneita. Olin vielä opiskelija ja aloittelemassa uraani, mutta kollegani kunnioittivat osaamistani ja ideoitani ja teimme työtä yhteisten päämäärien eteen. Ensimmäisen kesän työskentelin planning tiimissä tuuraajana, mutta kun syksyllä minun oli aika palata kouluun diplomi-insinööri opintojeni pariin. Minulla ei ollut tuolloin mahdollisuutta tehdä täyttä työviikkoa ja ottaa vastuuta mistään päivittäistä panostusta vaativasta tehtävästä, siksi oli luonnollista, että minulla oli tiimissä kehittäjän rooliin.

Minulla oli osaamista ja ymmärrystä kehittämisestä jo opintojeni kautta ja opiskelukaverini työskentelivät myös kehittäjinä eri yrityksissä ja ovat myöhemminkin toimineet tukenani ongelmatilanteissa. Omaan kehitykseeni käytin työkaluina Exceliä ja Power Bl:tä. Aloittaessani minulla ei kuitenkaan ollut vahvaa osaamista kyseisistä järjestelmistä, vaan käytin runsaasti olen käyttänyt paljon aikaa niiden opettelemiseen.

Haluan ymmärtää miten eri asiat kokonaisuuksissa linkittyvät toisiinsa. Jos näen jossain mahdollisuuksia kehittää, mietin aina tarkkaan mihin kaikkeen se vaikuttaa. Mielestäni kehitystyötä tekevien on tärkeää ymmärtää myös mitä ja miten esimerkiksi eri tiimeissä työskennellään. Teknisiä ratkaisuja miettiessäni käytän usein googlea avun etsimiseen. Päämääräni on ratkaisullani vähentää päivittäisiin rutiineihin tarvittavaa työ määrää ja varmistaa, että tekemäni työ luo työnantajalleni lisäarvoa.

Olen rutiinityötä tehdessäni suurpiirteinen ja uskon, että automatisoimalla ne pystyn vähentämään virheiden riskiä. Kehitystyötä teen kuitenkin pieteetillä. Pyrin ymmärtämään toteutusteni käyttäjien todelliset tarpeet, varmistamaan että toteutukseni ovat viimeisteltynä, korkealaatuisia ja virheettömiä. Varmistan myös niiden jatkuvuuden lisäämällä esimerkiksi kirjoittamaani koodiin selkeät kommentoinnit, joita seuraamalla kuka tahansa, jolla on vähänkin ymmärrystä koodaamisesta pystyy ne tarpeen tullen korjaamaan. Haluan, että toteutukseni antavat käyttäjilleen positiivisen kokemuksen heti ensimmäisellä käyttökerralla ja ne jäävät heillä pitkäaikaiseen käyttöön.

Luovuus ja uskallus ovat tärkeitä kansalaiskehityksessä. Itse joskus huomaan lupaavani tekeväni jonkun toteutuksen jo ennen kuin minulla on riittäviä taitoja sen tekemiseen. Uskon kykyihini oppia ja löytää ratkaisuja ongelmiin, koska useasti menneisyydessä olen onnistunut siinä.



Kuva: Google Images

”Pyrin ymmärtämään toteutusteni käyttäjien todelliset tarpeet, varmistamaan että toteutukseni ovat viimeisteltynä, korkealaatuisia ja virheettömiä.”

Joskus kansalaiskehittäminen ei ole helppoa

Varsinkin, jos työskentelee yrityksessä, jossa johto ei sitä tue. Eräs haastateltavani on onnistunut tuomaan ohjelmistorobotiikan työpaikalleen äärettömän sinnikkäällä yrittämisellä. Hän on kuitenkin joutunut ottamaan erittäin suuria henkilökohtaisia riskejä ja kertoo matkastaan näin:

"Muutama vuosi sitten huomasi haluavani tehdä tulevaisuudessa toisenlaista työtä. Olin jo aikaisemmin käyttänyt Exceliä kehittämiseen, mutta halusin oppia uusia keinoja oman työni ja kollegoideni työn tehostamiseen. Olin törmännyt ohjelmistorobotiikkaan ja ajatus siitä, että tylsät työt voisi automatisoida sen avulla kiehtoi minua. Työelämässä olin läheltä seurannut, miten ihmiset uupuivat ja turhautuivat ainaiseen kiireeseen ja työn merkityksellisuuden puutteeseen.

Käytin paljon aikaa ja energiaa sen selvittämiseen, mikä teknologia olisi paras opetella ja missä sitä voisi työn ohessa opiskella. Opiskelupaikkaa ei ollut helppo löytää, varsinkaan sellaisia kursseja mitä voi käydä työn ohessa omaan tahtiin. Soittelin oppilaitoksiin ja viimein kuulin, että suunnitteilla olisi minulle sopiva kurssi. Pääsin mukaan ja aloin opiskella työn ohessa.

Päivät työskentelin talouden alan tehtävissä ja illat opiskelin RPA-toteutusten tekemistä. Nyt minulla on taito automatisoida ja syvä tuntemus taloushallinnon tehtävistä ja prosesseista. Olen kuitenkin huomannut, että osaamistani ei arvosteta enkä ole saanut kehitystyölle johdon tukea. Siitä huolimatta olen sinnikkäällä työllä onnistunut implementoimaan muutamia ohjelmistorobotiikan toteutuksia ja niiden avulla poistanut useita turhia työvaiheita. Kollegat ovat olleet tyytyväisiä, kun ovat päässeet eroon tylsistä tehtävistä ja pystyvät nyt keskittymään tärkeämpään työhön. Valitettavasti johto ei näe tekemäni työn tuomaa lisäarvoa yritykselle ja joudun jatkuvasti todistelemaan sen hyödyllisyyttä. Tämä on ollut turhauttavaa ja vie valtavasti energiaa. Mietin usein millaista olisi päästä tekemään tätä työtä, josta olen niin innoissani sellaisessa ympäristössä, missä tuntisi olevansa osa tiimiä, jossa on kaikilla sama päämäärä."

Ulkopuolelta katsottuna haastateltavani olisi mille tahansa yritykselle äärettömän arvokas työntekijä. Juuri talouden prosesseissahan on paljon samanlaisena toistuvia tehtäviä ja niiden automatisoimisella voidaan säästää paljon työaikaa. Varsinkin, jos yrityksen oma työntekijä pystyy luomaan tarvittavat toteutukset, maksavat robotit hintansa takaisin hyvin nopeasti.

Tie on ollut haastateltavalleni pitkä. Hän on intohimoinen työn kehittäjä, mutta jatkuva taistelu kehittämisen puolesta on ollut väsyttävää ja turhauttavaa. Haastateltavani joutuikin nyt miettimään seuraavaa askeltaan urallaan ja toivottavasti hän pian pääsee kokeilemaan siipiään RPA-kehityksen ja automaation parissa jossain muussa yrityksessä.



Kuva Anna Shvets (Pexels)

Lähteenä toimineet oppinäytetyöhön liittyen tehdyt haastattelut

Sivun taustaa

Työnsä kehittäjät -sivusto

Tämä sivusto sai alkunsa omista kansalaiskehittämisen kokemuksistani ja siitä, kun tunnistin, että organisaatiokulttuuri usein estää kansalaiskehityksen syntymistä. Päätin tehdä opinnäytetyön aiheesta, jonka avulla pyrin tuomaan kansalaiskehittäjien äänen kuuluviin. Halusin löytää keinoja, joilla organisaatioiden johtajat pystyvät varmistamaan, että henkilöstön kehittämishalukkuus kasvaisi ja sinne alkaisi kehittyään uuden polven kansalaiskehittäjiä.

Omat kokemukseni olivat alkusysäys opinnäytetyölleni, mutta olen haastattelujen avulla pyrkinyt tunnistamaan kansalaiskehittäjille tärkeitä asioita ja löytämään kirjallisuudesta keinoja vastata niihin. Kansalaiskehittäjien lisäksi olen haastatellut työntekijäkokemuksen ammattilaisia ja henkilöitä, jotka työskentelevät IT roolissa. Haastattelujen tarinat ovat luettavissa opinnäytetyöstäni:

Kiitos ammattitaitonne jakamisesta Laura Hannolalle ja Timo Paanaselle ja kansalaiskehittäjille, jotka jakoivat tarinansa kanssani. He onnistuivat antamaan minulle hyviä näkökulmia opinnäytetyöhöni ja tämän sivuston rakentamiseen.

Kuka minä olen

Minun nimeni on Hanna-Mari Itäkylä ja olen tosiaan taustaltani olen kansalaiskehittäjä. Työskennellessäni asiakaspalveluroolissa order to cash-prosessin parissa, päädyin automatisoimaan suuren osan työstäni, jonka jälkeen päätin lähteä etsimään uutta uraa teknologisen kehityksen parissa.

Se, miten päädyin kansalaiskehittäjäksi ja milloin tajusin olevani kansalaiskehittäjä on pitkä tarina. Tein vuosia pieniä Excel-toteutuksia, joilla helpotin omaa työtäni, koska kyllästyin nopeasti monotonisiin ja toistuviin tehtäviin. Minulle oli luontaista lähteä etsimään uudenlaisia toimintatapoja. Opettelin ensin Excelin kaavojen rakentamisen Googlen ja Youtuben videoiden avulla, etsin aina vain sitä oppia, jota sillä hetkellä tarvitsin. Nälkähän kasvaa syödessä ja lopulta olin lähinnä nettipohjaisia lähteitä hyväksikäyttämällä oppinut miten saan Excelin komentamaan SAP:ia ja säästin hurjan määrän turhia klikkauksia työssäni. Samalla myös toin kaikki tarvitsemani tiedot yhteen näkymään, jotta minulla ei olisi tarvetta tarkastaa asioita monesta paikasta, vaan kokonaiskuva tilanteesta oli erittäin nopeasti saatavilla.

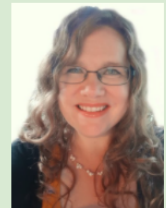
Jokaisen pienen automaation jälkeen minulta vapautui aina vähän lisää aikaa uuden oppeteluun ja uusien työkalujen kehittämiseen. En siinä vaiheessa itse, eikä työnantajani tajunnut, miten paljon aikaa todellisuudessa säästy. Vasta, kun aloin tekemään työkaluja myös kollegoilleni, ymmärsin niiden tuoman ajansäästön. Itsehän olin sitä aikaa käyttänyt uuden oppeteluun. Olin koko ajan ollut kansalaiskehittäjä, mutta en sitä, enkä toteutusteni arvoa ymmärtänyt, kuin vasta pitkän ajan päästä.

Lopulta tuli aika lähteä uutta kohti ja etsimään omaa paikkaani työelämässä. Lähdin opiskelemaan Master's tutkintoa Haaga-Heliaan ja pääsin tekemään tätä erittäin kiinnostavaa projektia kansalaiskehittämisen parissa.

Uskon vahvasti, että yrityksen kulttuurilla ja työntekijäkokemuksella on hyvin suuri vaikutus siihen, onko henkilöstö halukas käyttämään aikaa uuden oppeteluun ja kehittämiseen ja haluan omalta osaltani varmistaa, että näin tulee käymään.

Haluan auttaa yritysten johtoa ja HR henkilöitä tunnistamaan työntekijöissä piilevän potentiaalin!

Tärkeintä kuitenkin on, että missä tahansa tietotyön roolissa toimivat, löytävät potentiaalinsa itsestään ja lähtevät kokeilemaan. Uskokaa pois, mikään ei voita onnistumisen tunnetta pitkän yrittämisen jälkeen!



Jos haluat tutustua minuun lisää, niin ole ihmeessä yhteydessä sähköpostitse tai lisää minut [Linkkin](#) - kontaktiksi.

Organisaatio, jossa halutaan kehittää



Mitä kansalaiskehitys organisaatiolta vaatii?

Olen koennut sivulleni ohjeita yrityksen johdolle siitä, millaisessa organisaatiossa kansalaiskehitystä syntyy. Löydät linkkejä alta sinua kiinnostaviin aiheisiin. Tutustu myös sivun lopussa oleviin vinkeihin siitä, miten pystyt tunnistamaan organisaatiosi kulttuurin.

1. [Mitkä ovat kansalaiskehityksen hyödyt?](#)
2. [Kansalaiskehitys vaatii jatkuvaa ideointia ja kokeilua. Saako organisaatiossasi puhua suoraan vai tarvitseeko epäonnistumisia pelätä?](#)
3. [Onko työntekijöilläsi oikeus tehdä päätöksiä itsenäisesti? Paasevatko he käyttämään koko potentiaaliaan ja samalla oppimaan uutta? Ymmärtävätkö työntekijät, mikä on heidän roolinsa organisaatiossa, miksi he työtänsä tekevät ja keitä heidän työnsä hyödyntää?](#)
4. [Kansalaiskehitys tuo mukanaan jatkuvaa muutosta. Kuinka joustava organisaatiosi on ja miten muutoksiin suhtaudutaan?](#)
5. [Onko työntekijöillesi tarjolla samaistuttavia kansalaiskehittäjä esikuvina? Mistä löytäisit heille esikuvia?](#)
6. [Toimivatko kansalaiskehittäjät teidän yrityksessänne oman onnensa nojassa? Mitä jos auttaisit heitä luomaan verkoston, jossa eri liiketoiminta-alueiden kansalaiskehittäjät pääsevät jakamaan kokemuksiaan ja saavat vertaistukea?](#)
7. [Mitä taitoja kansalaiskehittäjät tarvitsevat?](#)
8. [Mistä kehitysideoita syntyvät?](#)
9. [Mitkä ovat kansalaiskehityksen mukanaan tuomat riskit ja miten ne taklataan?](#)

Millainen on sinun organisaatiosi?

Kun aletaan miettimään kansalaiskehittämisen laajempaa implementointia yrityksessä, on aluksi hyvä tunnistaa se, millaisena yrityksen henkilöstö kokee organisaation.

Kansalaiskehittäminen vaatii henkilöltä vahvan sisäisen motivaation korjata tehottomuuksia, etsiä uusia ratkaisuja, auttaa muita, oppia itsenäisesti ja ennen kaikkea kokeilla. Organisaatiokulttuuria on vaikea tunnistaa yrityksen sisällä. Ulkopuolinen henkilö pystyy kuitenkin etsimään vinkejä yrityksen kulttuurista esimerkiksi haastatteleamalla ihmisiä.

Alla vaihtoehtoja, millä voit saada organisaationne kulttuuria näkyvämmäksi:

- Pyydä ulkopuolista apua organisaatiokulttuurin evaluointiin.
- Pyydä kommentteja yrityksen organisaatiosta henkilöltä, joka on vasta aloittanut. Uusi henkilö pystyy vielä tunnistamaan organisaationne kulttuurin, ennen kuin tulevat osaksi sitä.
- Tee henkilöstökysely, jota analysoimalla pystyt tunnistamaan organisaatiosi kulttuurin.

Kun kulttuuri on tunnistettu ja uusi suunta päätetty, varmista, että ihmisille kerrottu sanoma muutoksesta näkyy heidän jokapäiväisessä elämässään tekoina!

Lähteet:

- *Haastattelu, Laura Hannola, 2021*
- *Yrityskulttuuri on kuningas - mikä miksi miten. Kirjoittanut Luukka, Panu, 2019*



Oppiva organisaatio - videoita

[Carol Dweck talking about growth mindset at organizations](#)

[Leaders and growth mindset](#)

[Näin Microsoft rakensi kasvun ajattelutavan](#)

Työntekijäkokemus

Mikä on työntekijäkokemus?

Työntekijäkokemus on sitä, miltä henkilöstä tuntuu tulla maanantai-aamuna, viikonlopun jälkeen töihin. Joutuvatko he sinne, vai saavatko he tulla. Yritys, jossa työntekijäkokemus on hyvä, työssä käyminen on henkilöstölle mielekästä ja he palaavat töihin mielellään joka päivä ja antavat täyden panostuksensa yrityksen tulokseen.

Työntekijäkokemus on yksittäisten työntekijöiden kokemus yrityksestä työyhteisönä. Se on odotusten ja lupauksen törmäystä todellisuuden kanssa (Luukka 2019). Työntekijäkokemus muodostuu pienistä kokemuksista, tapahtumista ja yksilöihin henkilökohtaisesti vaikuttavista asioista. Se syntyy tunteista, joita työpaikka saa aikaan ja mitä useammin henkilö kokee työpäivän hyvänä, sitä parempi työntekijäkokemus hänellä on.

Ihmisten kokemuksiin yrityksistä vaikuttavat eri asiat. On olemassa asioita, jotka luokitellaan hygienia- ja turvallisuusasioiksi. Ne ovat itsestään selvyyksiä, kuten palkka, edut ja työturvallisuus ja eivät erityisesti lisää työntekijäkokemusta. Jos yritys ei niiden kohdalla pysty vastaamaan työntekijöiden odotuksiin, ne heikentävät työntekijäkokemusta.

Motivaatiotekijät puolestaan lisäävät työntekijäkokemusta huomattavastikin. Ne ovat ihmisiin itseensä liittyviä kokemuksia, kuten itsenäisyys, haastava ja kannustava työ, vastuu, mahdollisuus kasvaa osaajana, vahvat ammattitaidot ja ymmärrys siitä, mikä henkilön rooli organisaatiossa on ja miten hänen työnsä vaikuttaa muihin. Näiden kokemusten tarjoaminen on hygieniä tekijöihin verrattuna huomattavasti haastavampaa ja vaatii mahdollisesti organisaatiolta korjausliikettä oikeaan suuntaan.

Työntekijäkokemus vaikuttaa myös ihmisten haluun sitoutua organisaatioon. Jacob Morgan käyttää kolmen pisteen sitoutumismallikehystä osoittaakseen eri sitoutumistasoja.

1. Aktiivisesti sitoutumaton. Nämä ovat ihmisiä, jotka eivät ole tyytyväisiä yritykseen ja heikentävät myös kollegoidensa sitoutumista.
2. Ihmiset, jotka eivät välitä, eivät ole sitoutuneita. He eivät tee mitään ylimääräistä, vaan vain sen, mikä on pakko tehdä.
3. Sitoutuneet työntekijät ottavat lisätehtäviä ja kehittävät työtään vain siksi, että he tuntevat olevansa osa yritystä ja ovat intohimoisia työntekijöitä. (Morgan, 2017)



Kuva: Google Images

Työntekijäkokemus koostuu kolmesta eri osa-alueesta, josta tässä keskityn kahteen ylimpään:

- **Kulttuurinen**
 - Tämä pitää sisällään kaiken sen organisaatiokulttuurissa, joka vaikuttaa ihmisten viihtyvyyteen ja esimerkiksi mahdollisuuksiin kehittyä.
- **Teknologinen**
 - Jos teknologia ei ole ajantasaista tai luotettavaa, ei työntekijä viihdy työssään. Mitä vähemmän teknisiä ongelmia ja enemmän mahdollisuuksia vaikuttaa työkalujen valintaan, sitä parempi työntekijäkokemus.
- **Fyysinen toimintaympäristö**
 - Tähän vaikuttaa esimerkiksi paikka, jossa työskennellään ja se, miten innostava se on. Esimerkkinä avokonttori ei välttämättä ole kaikille mieluisa toimintaympäristö.

Jotta työntekijöillä olisi positiivinen työntekijäkokemus, on yrityksen onnistuttava vastaamaan heidän tarpeisiinsa ja haluisiinsa kaikilla kolmella osa-alueella. Näin he pystyvät varmistamaan työntekijöiden sitoutuvuuden ja varmistamaan, että he antavat kaiken potentiaalinsa yrityksen käyttöön.

Työntekijäkokemus ja kansalaiskehittäminen

Äkkiseltään voisi ajatella, että työntekijäkokemuksella ei ole kovinkaan paljoa tekemistä kansalaiskehittämisen kanssa. On kuitenkin muistettava, että vain harvat ihmiset päätyvät kehittämään työtapoja, mikäli eivät viihdy työssään tai yrityksessä, jossa työskentelevät. Kansalaiskehittäjiä pitää olla sisäistä motivaatiota, jotta he alkavat kehittää työtään. Ideaalitilanteessa he ovat yllä olevan listauksen mukaan kolmosia, eli sitoutuneita työntekijöitä, jotka tuntevat intohimoa työtänsä kohtaan. He saattavat kuitenkin olla myös henkilöitä, jotka eivät ole täysin sitoutuneita organisaatioon ja suunnittelevat irtisanoutumista, mutta kehittävät työtään oppiakseen uusia taitoja.

Haastateltavistani useat olivat intohimoisia kehittäjiä, mutta eivät kokemustensa vuoksi olleet erityisen sitoutuneita organisaatioonsa. Nämä henkilöt kokivat, että heidän tekemänsä kehitystyö oli näkymätöntä, sitä ei arvostettu, he olivat yksinäisiä ja joutuivat tekemään kaiken itsenäisesti.

Toki mukana oli myös heitä, joiden kokemukset kansalaiskehittäjinä olivat positiivisia ja vaikuttivat positiivisesti heidän työntekijäkokemukseensa.

Miten työntekijäkokemus syntyy ja miten sitä voi muokata?

Työntekijäkokemus syntyy meille jokaiselle, kun työskentelemme jossakin organisaatiossa. Organisaatioilla on kuitenkin mahdollisuus muokata työntekijäkokemusta haluttuun suuntaan, jos he tekevät sen eteen jatkuvasti työtä ja työntekijäkokemus pidetään esimerkiksi johtoryhmän agendalla jatkuvasti.

Vaikka on hyvä osata erotella organisaatiokulttuuri ja työntekijäkokemus toisistaan, on niissä tässä suhteessa paljon samankaltaisuutta. Yritykseen saattaa ns. vahingossa syntyä niin hyvä organisaatiokulttuuri kuin työntekijäkokemuskin, mutta mikäli asiaan ei kiinnitetä huomiota ja niitä ei lähdetä aktiivisesti kehittämään muokkaantuvat ne nopeasti ihmisten oletusten ja uskomusten mukaisiksi.

Näiltä sivuilta löydät lisää tietoa työntekijäkokemuksesta kulttuurin näkökulmasta:

1. [Psykologinen turvallisuus](#)
2. [Motivaatiotekijät](#)
3. [Riittävä osaaminen](#)
4. [Muutos ja resilienssi](#)
5. [Esikuvat](#)
6. [Vertaistuki](#)

Teknologian näkökulmasta kansalaiskehittäjyyteen vaikuttavista asioista löytyy näiltä sivuilta:

1. [Työkalut ja niiden vaatima osaaminen](#)

Vinkkejä ja linkkejä



Kuva: Google Images

[Tässä videossa Jacob Morgan kertoo, mitä työntekijäkokemus on.](#)

[Kuinka työntekijäkokemukseen pystyy vaikuttamaan?](#)

Kirja: [The Employee Experience Advantage](#), Morgan Jacob, 2017.

[Emma Bridger antaa käytännön vinkkejä hyvän työntekijäkokemuksen saavuttamiseen.](#)

Kirja: [Employee Experience by Design: How to Create an Effective EX for Competitive Advantage](#), Bridger Emma, Belinda Gannaway, 2021

[Hyvä työntekijäkokemus rakentuu hetkistä, pienistä teoista. Yllä olevalla videolla Jacob Morgan avaa niiden merkittävyyttä.](#)

Kirja: [The Power of Moments: Why Certain Experiences Have Extraordinary Impact](#), Chip Heath, Dan Heath, 2017

[Appreciative Inquiry auttaa luomaan ongelmista mahdollisuuksia.](#)

Video: [Conversations Worth Having](#)

Kirja: [Conversations Worth Having](#), Jacqueline M. Stavros, David L. Cooperrider, Cheri Torres, 2018

- *Haastattelu, Laura Hannola, 2021*
- *Employee experience by design. How to create an effective EX for competitive advantage.* Kirjoittanut Bridger Emma, Gannaway Belinda Vuonna 2021
- *The Employee Experience Advantage: How to Win the War for Talent by Giving Employees the Workspaces they Want, the Tools they Need, and a Culture They Can Celebrate.* Kirjoittanut Morgan, Jacob Vuonna 2019
- *Yrityskulttuuri on kuningas – mikä miksi miten.* Kirjoittanut Luukka, Panu Vuonna 2019
- *Psykopodiaa. 63. Työn imu. Vieraana Jari Hakanen.* Spotify: Lyytinen Nina, Hakanen Jari Vuonna 2021. Kuunneltavissa: <https://open.spotify.com/episode/IqRsSMILxTkVzqJLgmm6Qy?si=YkrRUUHwS5mjaNECWRMw-w>

Motivoitunut työntekijä

Mikä tekee työntekijästä motivoituneen?

Yksinkertaistettuna voisi sanoa, että liukuhihnatyötä tekevät henkilöt yleisesti motivoituvat työstä saatavista palkkioista ja negatiivisen palautteen välttämisestä, mutta kuinka monella työpaikalla työ enää tänä päivänä on sitä?

Keppi ja porkkana eivät enää toimikaan tämän päivän työpaikassa yhtä hyvin, kun ne toimivat Taylorismin aikaan tehdasympäristössä. Työ on muuttunut monimutkaisemmaksi ja tehtävien rajat häilyviksi. Tänä päivänä työ vaatii usein tekijöiltään enemmän kongnitiivisia taitoja, kuten tiedon vastaanottamista, päättelyä, ongelman ratkaisua ja yksinkertaisesti ajattelua.

Keppi ja porkkana ei enää tänä päivänä toimi, kuin murto-osassa tilanteita, joissa niitä käytetään. Se, miten yritykset pyrkivät henkilöstöään vielä tämän päivän työelämässä motivoimaan, soti pahasti vastaan sitä, mitä tiede on osoittanut toimivaksi. Nyt onkin aika alkaa miettimään, miten henkilöstön sisäinen motivaatio herätetään ja vahvistetaan heidän sitoutumistaan omaan työhönsä.

Sisäinen motivaatio ja kansalaiskehittäjät

Haastattelin opinnäytetyötäni ja tätä sivustoa varten henkilöitä, jotka ovat oman työnsä ohella ovat panostaneet työnsä kehittämiseen ja tehostamiseen. Haastatteluisani korostui haastateltavieni sisäinen motivaatio kehittämiselle ja uuden oppimiselle. Kysyessäni palkitsemisesta, ei kertaakaan ensimmäisenä kommenttina tullut esille tarve rahallisille palkkioille, vaan se palkinto, jonka itse kehitysprojekti kehittäjilleen antoi.

Haastattelin myös henkilöitä, jotka näin potentiaalisina kansalaiskehittäjinä, koska he olivat kehitysohjelmoituneita, omaavat kattavan työkokemuksen alaltaan, ymmärtävät teknisiä työkaluja ja työskentelevät liiketoiminnan funktiossa. Näitä henkilöitä haastatellessani tuli selkeästi esille, että yksi syy siitä, miksi heistä ei ole kansalaiskehittäjiä tullut, on ollut juuri sisäisen motivaation puute, joka on syntynyt esimerkiksi liian matalasta luottamuksesta heihin työntekijöinä, liian hierarkisesta johtamisesta, koulutuksen puutteesta saatavilla oleviin työkaluihin. Lähes kukaan haastateltavistani ei kokenut olevansa esimerkiksi taitava Excelin käytössä, vaikkakin olivat erittäin kiinnostuneita oppimaan.

Daniel Pinkin mukaan sisäinen motivaatio syntyy kolmesta asiasta, joista tässä käytän niiden englanninkielisiä termejä; **Autonomy, Mastery ja Purpose.**

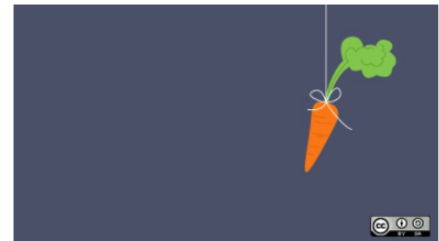
Motivaation elementit:

[Autonomy](#)

[Mastery](#)

[Purpose](#)

[Yhteenkuuluvuus](#)



Kuva: Nir Eyar

Miten teillä palkitaan työntekijöitä?

Miettikää hetki, mikä on yrityksenne palkitsemiskäytäntö. Usein työelämässä törmää erilaisiin bonusjärjestelmiin ja luvataan palkintoja hyvistä ideoista. Olisiko kuitenkin parempi, jos ihmisille maksettaisiin kuukausittain parempaa palkkiota työstään ja luodaan ympäristö, jossa henkilöstö on sitoutunut ja heidän sisäinen motivaationsa kasvaa?

Tiesittekö, että ihmiset, jotka odottavat saavansa esimerkiksi etukäteen sovitun palkkion suorittavat kongnitiivisiä taitoja vaativat tehtävät hitaammin ja heikommin, kuin he, keille palkkiota ei ole luvattu.

Daniel Pink kirjassaan *The Surprising Truth About What Motivates Us* kehoittaa varovaisuuteen palkitsemiskäytänteiden luomisessa. Hänen mukaansa **Jos-sitten**-palkitseminen saattaa vaikuttaa hyvinkin negatiivisesti ihmisten suoriutumiseen ja motivoitumiseen pitkällä aikavälillä. Jos-sitten -tyyppiset kannustinpalkkiot ovat ulkoisia motivaattoreita, jotka toimivat monotonisissa, toistuvissa työtehtävissä, joiden tekeminen tuo tekijälleen hyvin vähän mielihyvää, mutta muulloin eivät.

Autonomy

Autonomisessa työyhteisössä henkilöstölle annetaan valtaa tehdä päätöksiä esimerkiksi omaan työhönsä tai tiiminsä työhön liittyen.

Perinteisesti organisaatiot ovat olleet, ja ovat edelleenkin, hyvin ylhäältä johdettuja. Hierarkia ja hyväksynnän saaminen yrityksen johdolta pieniinkin uudistuksiin on edelleen arkipäivää hyvinkin useissa suomalaisissa yrityksissä.

Onnistuakseen rakentamaan innovatiivisen työympäristön, jossa ihmisillä on halua ideoita ja kehittää työtään yrityksen kulttuuri tulee muuttaa vähemmän hierarkiseksi. Ihmisille tulee antaa enemmän valtaa ja lisätä heidän itseohjautuvuuttaan. Vapauksia pitää antaa myös heille, jotka työskentelevät hierarkian alimmalla tasolla. Yrityksen johdon pitää luottaa henkilöstöönsä ja muuttaa rooliaan asiajohtajista ihmisjohtajiksi.

En tiedä, mitä se kertoo Suomalaisten yritysten organisaatiokulttuurista, että seuraavaa englanninkielistä lausetta on lähes mahdotonta suomentaa siten, että sen merkitys säilyy. Lause on: **"Manager will need to become leaders!"**. Käytännössä heidän siis pitää opetella olemaan vähemmän pomoja ja enemmän johtajia.

Jos ihmisillä on autonomiaa päättää omasta työstään, he pystyvät jossain määrin esimerkiksi päättämään itse omista työtehtävistään, tai vähintään tavasta työskennellä, työskentelevät he joustavammin ja saavuttavat parempia tuloksia.



Itsenäisyyden tunne vaikuttaa voimakkaasti yksilön suorituskykyyn ja asenteeseen. Autonomia lisää henkilöstön sisäistä motivaatiota ja sitouttaa heitä yritykseen.

Kansalaiskehityksen synty suuressa mittakaavassa vaatii organisaation, jossa henkilöillä on lupa päättää omista työtavoistaan ja jopa työkaluista, joilla hän työnsä tekee. Mikäli yritys on kovin ylhäältä johdettu ja henkilöstöllä ei ole autonomiaa, viedään kansalaiskehittäjiltä mahdollisuus kehittää.

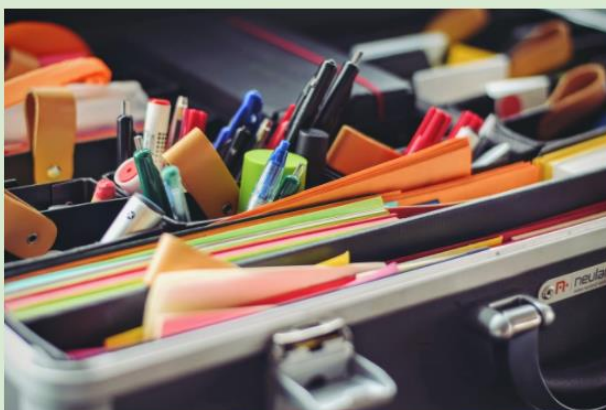
FUN FACT:

PostIt laput ovat saaneet alkunsa autonomisen organisaation ansiosta!

PostIt laput keksittiin M3-yrityksessä. Niiden keksijä oli Art Fry ja hän kehitti ne omiin projekteihin varatulla työajallaan. Tuohon aikaan se oli M3-yrityksissä 15% kokonaistyöajasta.

M3 on ollut selkeästi aikaansa edellä. PostIt laput ovat olleet markkinoilla jo vuodesta 1980.

PostIt lappujen tarina löytyy [täältä](#)



Kuva: Tim Gouw, Pexels

Gmail, Google Maps, Google Earth, Google News jne.

Google on jo pitkään ollut suunnannäyttäjä autonomisena organisaationa. Heidän työntekijöillään on mahdollista käyttää 20% työajastaan itse valitsemiinsa projekteihin.

Atlassian on sittemmin päätenyt vapauttamaan henkilöstöltään aikaa 20% heitä kiinnostavien projektien kehittämiseen. Projektien ei siis pidä olla henkilön omaan työhön liittyviä, vaan johonkin ihan muuhun.

[Tästä videosta pääset tutustumaan paremmin Googlen innovatiivisuutta lisäämään organisaatioon.](#)

Case Atlassian:

Atlassian, kuten monet muutkin yritykset ovat tänä päivänä päätyneet ratkaisuun, että yritys hyötyy henkilöstön autonomiasta. Antamalla työntekijöille aikaa keskittyä projekteihin, jotka heitä kiinnostavat lisäävät heidän motivaatiotaan työhön.

[Katso tästä video, jossa kerrotaan, miten Atlassian on yrityksenä antanut henkilöstölleen aikaa omien projektien kehittämiseen ja tekee kehityksestä yhteisöllistä lanseeraamistaan ShipIt-päivillä.](#)

Myös Atlassian on sittemmin ottanut käyttöön 20% projektit ja ne ovat tuoneet yritykselle esimerkiksi uusia tuotteita portfolioon tai parannuksia olemassa oleviin tuotteisiin ja sitä kautta lisää liikevaihtoa!



Kuva: Anthony Shkraba (Pexels)

Flow

Kun henkilö työskentelee mielenkiintoisen, riittävän haastavan tehtävän parissa saattaa aika kulua aivan huomaamatta.

Tehtävään keskittyminen on paljon parempaa, kuin tehtävissä, jotka ovat hänelle joko liian helppoja tai haastavia. Tuota työhön uppoutumista, joka henkilölle tapahtuu kutsutaan *Flow-tilaksi*. Termin takana on unkarilais-amerikkalainen psykologi Mihaly Csikszentmihalyi, joka on keskittynyt tutkimaan ihmisiä, jotka työskentelevät sinnikkäästi saavuttaakseen jotain, odottamatta työstä erityistä palkkiota. Hän tutki hyvin eri tyyppisiä henkilöitä, kuten esimerkiksi urheilijoita, shakin pelaajia ja säveltäjiä ymmärtääkseen, mikä heitä motivoi.

Csikszentmihalyi tunnisti yhdeksän asiaa, jotka mitä tapahtuu flow-tilassa

1. Tehtävällä on selkeä päämäärä ja henkilöllä ymmärrys, miten se voidaan saavuttaa
2. Jatkuvan palautteen saaminen (palautteen ei tarvitse olla suullista. Joskus palaute voi olla esimerkiksi pieni onnistuminen tai epäonnistuminen).
3. Tehtävän haasteen ja sitä tekevän henkilön osaamisen on oltava tasapainossa. (Liian helpot tehtävät johtavat tylsistymiseen ja liian vaikeat turhautumiseen).
4. Henkilö pystyy keskittymään käsillä olevaan tehtävään.
5. Häiriötekijät on poistettu ja henkilö on keskittynyt vain käsillä olevaan hetkeen.
6. Epäonnistuminen on luvalista ja turvallista

Mastery

Mastery, eli jonkin asian hallitsemisen ja hyvään tietopohjaan perustuvaa ymmärrystä.

Työntekijöiden motivaatiota tehtävään lisää se, että he tuntevat hallitsevansa sen ja toisaalta, jos henkilö tuntee epävarmuutta annettua tehtävää kohtaan ja kokee, että hän ei saa siihen lisää tukea, laskee se hänen motivaatiotaan.

Työntekijöiden motivoitumisella on myös selkeä vaikutus heidän sitoutumiseensa yritykseen ja sitä kautta työn kehittämiseen. Viereisessä kappaleessa käsitellään aihetta Flow, joka on lopputulos sille, kun henkilö tuntee hallitsevansa tehtävän ja sen tekemiselle on annettu optimaaliset mahdollisuudet. Csikszentmihalyi painottaa tehtävien haastavuuden merkitystä motivaatioon.

Sopivasti haastavat tehtävät ovat sellaisia, joista henkilö voi oppia uutta, mutta joita he eivät koe liian vaikeiksi tai jopa saavuttamattomiksi. On kuitenkin yksilöstä kiinni, miten he suhtautuvat haastaviin tehtäviin. Olen haastatteluissani usein törmännyt kansalaisehittäjiltä tulleihin kommentteihin siitä, miten heidän kollegoidensa tekniset taidot ovat liian alhaiset ja heillä ei ole edes halua yrittää parantaa niitä. Tämä paikallaan polkeminen ja henkilöstön haluttomuus oppia uutta on pahimmassa tapauksessa este kansalaisehittämisen kasvamiselle yrityksessä.

Lähes joka yrityksessä on henkilöitä, jotka motivoituvat kehittämisestä. He käyttävät aikaansa uuden oppimiseen ja jonkun ongelman selvittämiseen huomattavasti pidempään, kuin kollegansa. Kansalaisehittäjän ollessa kyseessä, he ovat tulevaisuusorientoituneita henkilöitä, jotka eivät nauti rutiinien tekemisestä, vaan pyrkivät keksimään keinoja niiden automatisoimiseksi.

Minäpystyyvyys (self-efficacy)

Minäpystyyvyys on sitä, miten ihminen uskoo pystyvänsä oppimaan uusia asioita ja kuinka halukas hän on kokeilemaan uusia asioita.

Ihmisellä, jolla on korkea minäpystyyvyys on usko siihen, että hänellä on kykyä menestyä tietyssä tehtävässä ja siksi hän on halukas ottamaan ottamaan haasteita vastaan. Henkilö, jonka itsepystyyvyyden tunne on heikko puolestaan ei ole edes halukas yrittämään tietyn tehtävän tekemistä, koska he eivät usko kykijensä riittävän siihen, tai he saattavat yrittää, mutta antavat pian periksi ja ottavat epäonnistumisen henkilökohtaisesti.

Hyvä uutinen kuitenkin on, että yrityksessä on mahdollista pyrkiä parantamaan henkilöstön minäpystyyvyyttä haluttuihin tehtäviin. Minäpystyyvyyden muotoutumiseen vaikuttaa vahvasti henkilön omat aikaisemmat kokemukset vastaavista tehtävistä, mutta myös toisten ihmisten kokemukset, joihin he pystyvät samaistumaan. Minäpystyyvyys ei ole pysyvä tila, vaan se elää jatkuvasti ja uudet kokemukset vaikuttavat siihen joko positiivisesti tai negatiivisesti.

Liiketoiminnan funktioissa työskentelevien henkilöiden minäpystyyvyys saattaa olla teknisiin työvälineisiin liittyen liian heikko, jotta heillä olisi halukkuutta käyttää niitä tavalla, mitä kansalaisehittäjyys vaatii. Näissä tapauksissa henkilö ei ole kiinnostunut oppimaan kansalaisehittäjyyden vaatimia taitoja ja jos tällaisia henkilöitä on organisaatiossa paljon, kansalaisehittäjyys ei lisääny yhtä helposti, kuin organisaatiossa, joissa ihmiset uskovat omiin kykyihinsä.

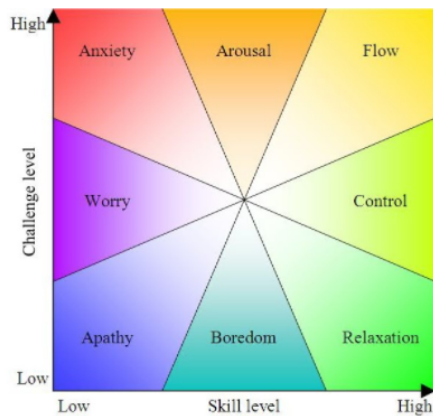
[Täältä löydät apua siihen, miten varmistat henkilöstösi valmiudet kansalaisehittämisen tuomiin haasteisiin.](#)

[What is self-efficacy?](#)

[Tarina minäpystyyvyyden parantamisesta.](#)

7. Itsetietoisuus vähenee
8. Henkilö menettää ajantajun
9. Tehtävästä tulee autotelinen (tehtävässä itsessään on merkitys)

(Csikszentmihalyi, 2009)



Yllä olevassa kuvassa visualisoidaan sitä, miten ihminen kokee eri tasoisia tehtäviä tehdessään. (Csikszentmihalyi)

Mindset, eli ihmisen ajattelutapa

Tässä kappaleessa käsittelen sitä, miten ihmisten ajattelutapa vaikuttaa heidän mahdollisuuksiinsa oppia uutta ja kehittää itseään. Jotta henkilö pystyy tuntemaan hallitsevansa jonkun tehtävän, on heidän uskottava mahdollisuuksiinsa oppia uutta. Carol Dweck on yhdysvaltalainen psykologi, joka on tunnistanut ihmisillä olevan kahden tyyppisiä ajattelutapoja. Muuttumaton tai kasvun ajattelutapa (fixed and growth mindset).

Henkilöt, joilla on muuttumaton ajattelutapa eivät usko pystyvänsä vaikuttamaan omaan osaamiseensa, älykkyyteensä ja lahjakkuuteensa. He uskovat, että jonkun määrätyn asian oppiminen on heille mahdotonta ja lamaantuvat sitä yrittäessään. Heille epäonnistuminen on henkilökohtaista ja ruokkii entisestään heidän muuttumattomuuden ajattelutapaansa.

Jos henkilöllä on kasvun ajattelutapa, he uskovat pystyvänsä vaikuttamaan omiin taitoihinsa harjoittelun avulla. He näkevät, että virheiden tekeminen on mahdollisuus oppia ja he pystyvät ottamaan paremmin myös kritiikkiä vastaan.

Kuten minäpystyvyyteen, pystytään esimerkiksi yrityksen henkilöstön ajattelutapaa muuttamaan. Muutos ei ole nopeaa ja vaatii alussa erityisesti yrityksen johdolta oikeanlaista kommunikaatiota. [Tästäkin lisää sivulla "Kehittävä organisaatio".](#)

Alla löytyvistä linkeistä pääset tarkemmin tutustumaan eri ajattelutapoihin ja suosittelen tutustumaan myös Dweck:n kirjaan aiheesta.

[Fixed vs. growth mindset](#)

[Power of YET](#)



Kuva: Ashley Williams (Pexels)

**Auta ihmisiä
ymmärtämään MIKSI
heidän työnsä on
tärkeää ja mitä se
merkitsee muille.**

Purpose

Motivaatio syntyy oman työn merkityksen ymmärtämisestä. Jos ihminen näkee oman työnsä merkityksen koko yritykselle, tai jopa yhteiskunnallisesti, motivoi se heitä. Panu Luukka kirjassaan "Yrityskulttuuri on kuningas" kertoi tarinan radiologeista, joiden diagnoosien oikeellisuus kasvoi lähes puolella, kun heille näytettiin röntgen-kuvien lisäksi valokuva potilaasta. Tuon kuvan avulla he ymmärsivät paremmin, että kyseessä on todellisesta ihmisistä ja heidän tehtävänsä on merkityksellinen juuri heille.

Auttakaa ihmisiä ymmärtämään miksi he tekevät työtään, ketä se hyödyttää ja miten he sen avulla pystyvät vaikuttamaan muihin ihmisiin.

Viktor Frankl, logoterapiapian kehittäjä ja keskitysleirien selviytyjä tunnisti vankina ollessaan, että niin kauan kuin ihmisillä oli tarkoitus elämälleen, he kestivät leirin kauheudet. Kun tuo tarkoitus poistui, he eivät jaksaneet enää elää. Työelämässä auttamalla ihmisiä ymmärtämään työnsä merkityksen, pystyt lisäämään heidän motivaatiotaan.

Yhteenkuuluvuus

Motivaatiota lisää myös yhteenkuuluvuuden tunne. Yhteenkuuluvuutta on se, kun tuntee olevansa osa porukkaa, jossa tehdään töitä yhteisen päämäärän eteen. Työelämän parhaat kokemukset usein linkittyvät yhdessä tekemiseen ja niiden päämäärien saavuttamiseen.

Yhteenkuuluvuutta lisää välittäminen, se, että kysytään ajoittain, mitä toiselle kuuluu. Kuulumisten kysely voi liittyä yksityisminään tai työminään ja sillä pystytään lisäämään henkilön arvostuksen ja yhteenkuuluvuuden tunnetta.

Jos yrityksen johto näyttää olevansa kiinnostunut henkilöstä ihmisenä, on sillä huomattava vaikutus myös työntekijäkokemuksen syntymisessä.

Kansalaiskehittäjiltä voi puuttua yhteenkuuluvuuden tunnetta. Siitä lisää [täällä](#).



Kuva: Jopwell (Pexels)

Motivaation lisäämiseksi kannattaa varmistaa, että kukaan organisaatiossa ei jää yksin ja kaikki tuntevat olevansa yhteisön arvokkaita jäseniä.

Lähteet:

- *Haastattelu, Laura Hannola, 2021*
- *Haastattelu, Timo Paananen, 2021*
- *Drive, The Surprising Truth About What Motivates Us*. Kirjoittanut Pink, D Vuonna 2010
- *On the Functional Properties of Perceived Self-Efficacy Revisited*. Kirjoittanut Bandura, Albert Vuonna 2011. Luettavissa: <https://journals.sagepub.com/doi/full/10.1177/0149206311410606>
- *Self-Efficacy and Future Goals in Education*. Kirjoittanut Greene, Barbara A. Vuonna 2018
- *Creativity*. Kirjoittanut Csikszentmihalyi, Mihaly Vuonna 2009
- *Mindset - Updated Edition Unabridged*. Kirjoittanut Dweck, Carol Vuonna 2019
- *Man's Search for Meaning: An Introduction to Logotherapy*. Kirjoittanut Frankl, Viktor E. Vuonna 2010
- *Conversations Worth Having: Using Appreciative Inquiry to Fuel Productive and Meaningful Engagement*. Kirjoittanut Stavros, Jackie. Torres, Cheri. Cooperrider, David L. Vuonna 2018
- *The Surprising Power of Simply Asking Coworkers How They're Doing*. Kirjoittanut Twaronite, Karyn Vuonna 2019. Luettavissa: <https://hbr.org/2019/02/the-surprising-power-of-simply-asking-coworkers-how-theyre-doing>

Lupa epäonnistua

Psykologisen turvallisuuden merkitys kansalaiskehittäjille

Kansalaiskehittäminen vaatii psykologisesti turvallista organisaatiota, jossa kannustetaan ihmisiä etsimään uusia tapoja tehdä työtä ja jakamaan ideoitaan muille. Kehittäminen vaatii runsaan määrän kokeiluja, ennen onnistuneen toteutuksen tekemistä, varsinkin jos halutaan löytää ne, ehkä odottamattomakin ratkaisut ongelmiin. Psykologisesti turvallisen ilmapiirin on todettu lisäävän ihmisten innovaatiokykyä ja halua jakaa ideoitaan.

Psykologisesti turvallinen ympäristö mahdollistaa totuttujen toimintatapojen kyseenalaistamisen ja uusien ideoiden rohkean jakamisen. Ilman psykologisesti turvallista ympäristöä kansalaiskehittämistä saattaa yrityksessä olla, mutta sen tuloksia ei uskalleta jakaa, ja siksi sen tuoma hyöty jää pieneksi.

Kansalaiskehittäjät ovat kehitystyössään usein oman mukavuusalueensa ulkopuolella. He eivät ole ammattilaisia kehittäjinä, vaan heidän vahvin osaamisensa on yleensä liiketoiminnan tehtävissä, jossa on myös heidän pääroolinsa. Kukaan ei odota heidän käyttävän teknisiä työvälineitä oman työnsä kehittämiseen ja usein heidän toteutustensa arvoa ei ymmärretä.

Useissa tekemisissä haastatteluissa kävi ilmi, että yrityksissä työskentelee ihmisiä, jotka lähinnä Exceliä käyttäen ovat onnistuneet kehittämään omaa työtään, mutta eivät tunne pystyvänsä jakamaan toteutuksiaan muille tiimiläisille tai edes kertovansa työskentelevänsä eri tavalla kuin muut. Näillä ihmisillä voi olla esimerkiksi pelko, että heidän työtapansa nähdään vääränä tai he tuntevat ottavansa liian suuren riskin henkilökohtaisella tasolla jos kyseenalaistavat totut toimintatavat.



Kuva: Andrea Piacquadio (Pexels)

Tämän hetken työelämässä tuntuu olevan haastattelujeni perusteella kansalaiskehittäjyyttä, mutta yrityksissä on yleensä vain yksittäisiä ihmisiä, jotka ovat ottaneet itselleen kehittäjän roolin.

He ovat ratkaisusuuntauneita tekijätyyppejä, jotka eivät käytä aikaa ongelmista valittamiseen, vaan pyrkivät korjaamaan ne.

Ratkaisujen löytäminen ongelmiin kuitenkin vaatii testailua ja kokeilua ja epäonnistumistumisista voin mennä takuuseen.

Virheiden tekeminen pitää olla hyväksyttävää!

Kaikkien organisaatioissa pitää tuntea psykologista turvallisuutta

Project Management Institute esittelee kirjassaan "[Citizen Development, The Handbook for Creators and Change Makers](#)" termin "Ideation 2.0". Sillä tarkoitetaan kansalaiskehittämistä tukevia ideointisessioita, joihin osallistuu toteutusten tekijöiden lisäksi ihmisiä eri taustoilla.

Yhdessä on tarkoitus miettiä kansalaiskehittäjille soveltuvia projekteja, miten ne voitaisiin toteuttaa, kokeilla ja kehittää jopa prototyyppinä. Näihin sessioihin osallistuvilla henkilöillä pitää kaikilla olla riittävä psykologisen turvallisuuden tunne antaa avointa palautetta ja kyseenalaistaa muiden ideoita, jotta lopputulos varmasti palvelee tarkoitustaan.

Varmista, että yrityksessä ihmisten erilaisuus nähdään voimavarana ja jokainen voi tulla toihin omana itsenään!



Kuva: Fox (Pexels)



Challengers Safety

Kohti korkeinta psykologisen turvallisuuden tasoa

Korkein psykologisen turvallisuuden taso on haastajan taso. Henkilö, joka tuntee olevansa korkeimmalla psykologisen turvallisuuden tasolla, uskaltaa haastaa olemassa olevan status quo:n. Hän uskaltaa ottaa riskejä, jotka kohdistuvat häneen henkilönä ja sanoa suoraan, mikäli jokin asiaa vaatii korjaamista, sekä sanoa tarvittaessa ei. Tämä psykologisen turvallisuuden taso mahdollistaa myös henkilön innovoimaan ja luomaan jotain uutta ja näin hyödyttää tiimiä huomattavasti. (Clark. 2020)

Näin luot psykologisesti turvallisen organisaation

Varmista että...

1. ihmisillä on selvästi määritellyt tehtävät
2. tiimeillä on selkeät tavoitteet
3. ihmisten osaaminen on riittävää
4. tiimissä on riittävästi resursseja työn tekemiseen
5. ihmiset näkevät myös johdon ymmärtävän oman tietämättömyytensä ja että heidän ajatuksiaan saa haastaa

Näytä esimerkkiä...

6. rakentavan palautteen antamisesta
7. tietämättömyytensä näyttämisestä ja tarkentavien kysymysten kysymisestä
8. epäonnistumisista ja siitä, että ne eivät johda vakaviin seurauksiin
9. hullujenkin ideoiden näyttämisestä

Psykologisesti turvallisen organisaation vahvuudet

1. Ihmiset hyväksyvät oman, erilaisena itsensä
2. Virheistä opitaan
3. Ideointi lisääntyy
4. Palautteenanto lisääntyy
5. Innovaatio lisääntyy
6. Luovuus lisääntyy
7. Halutaan työskennellä yhdessä ja ihmissuhteet vahvistuvat
8. Vältetään negatiivista ajattelua ja ahdistuksen kokemuksia



Kuva: Jess Bailey Designs (Pexels)

Lähteet:

- **Haastattelu, Laura Hannola, 2021**
- **Haastattelu, Timo Paananen, 2021**
- **The organizational climate for psychological safety: Associations with SMEs' innovation capabilities and innovation performance.** Kirjoittanut Andersson, Marius. Moenb, Oystein. Brett Per Olaf Vuonna 2020. Luettavissa: <https://www.sciencedirect.com/science/article/abs/pii/S0923474820300023>
- **The 4 Stages of Psychological Safety, Defining the Path to Inclusion and Innovation.** Kirjoittanut Clark, Timothy R Vuonna 2020
- **Managing the risk of learning: Psychological safety in work teams.** Kirjoittanut Edmondson, A Vuonna 2002. Luettavissa: https://www.hbs.edu/ris/Publication%20Files/02-062_0b5726a8-443d-4629-9e75-736679b870fc.pdf
- **Psychological safety and learning behavior in teams.** Kirjoittanut Edmondson, A Vuonna 1999. Luettavissa: https://www.researchgate.net/publication/313250589_Psychological_safety_and_learning_behavior_in_teams
- **The Fearless Organization.** Kirjoittanut Edmondson, A Vuonna 2018
- **Explaining Psychological Safety in Innovation Teams: Organizational Culture, Team Dynamics, or Personality?** Kirjoittanut Edmondson, A., Mogelof, P Vuonna 2004. Luettavissa: <https://www.taylorfrancis.com/chapters/edit/10.4324/9781410615732-16/explaining-psychological-safety-innovation-teams-organizational-culture-team-dynamics-personality-amy-edmondson-josephine-mogelof>

Kansalaiskehitys = jatkuva muutos

Ihmisten sisäänrakennettu selviytymisvaisto näkee muutokset uhkana.

Mitä sitten, kun kansalaiskehittäminen tuokin muutoksen jokaiseen työpäivään?

Tämä juontuu jo siitä, kun esi-isämme asuivat luolissa ja hengissä pysyminen vaati jatkuvaa valppautta ja hereillä oloa. Tämän päivän työelämässä tuo jääne menneisyydestä ei palvele ihmiskuntaa kovin hyvin. Enää harvoin on tarvetta nousta barrikadeille tai paeta paikalta. Se voi aiheuttaa turhaakin muutosvastarintaa ja pelkoa ja estää kehitystä.

Onneksi ihmisillä on myös toinen luontainen vaisto. Tuon vaiston avulla he pystyvät näkemään mahdollisuuksia uhkien sijasta. Jos muutostilanteessa onnistutaan herättämään tuo vaisto, pystytään herättämään ihmisten innostus ja intohimo. Muutos, joka nähdään innostavana antaa energiaa ja siihen liittyvät positiiviset tunteet lisäävät luovuutta ja innovatiivisuutta. Innostuneina yhteistyökkin on antoisampaa ja saavutetaan parempia lopputuloksia!

Parhaita tuloksia saavat aikaan ne johtajat, jotka luovat riittävästi uhkaavan tilanteen, jotta ihmiset näkevät muutoksen tarpeen, mutta keskittyvät kuitenkin mahdollisuuksiin.

Uhkaava tilanne tekee meistä hyviä ongelmanratkaisijoita ja siksi on tärkeää varmistaa, että muutostilanteessa stimuloidaan myös ihmisten selviytymisvaistoa. On kuitenkin tärkeää ymmärtää, missä kulkee raja, jota ei pidä ylittää. **Jo ympäröivä maailma jatkuvine uutisvirtoineen ja ihmisten aikaisemmat kokemukset stimuloivat ihmisten selviytymisvaistoa ja riski sen ylikuumentumiselle on suuri.**



Kuva: Google Images

Uhkaava tilanne saa aikaan energia-piikin ja saa aikaan sen, että pyritään vain selviytymään. Toisaalta se tekee meistä parempia ja nopeampia ongelmanratkaisussa.

Mahdollisuuksien näkeminen mahdollistaa onnistuneen ja innovatiivisen muutoksen.

Kansalaiskehittäminen ja muutos

Saadakseen hyödynnettyä kansalaiskehittäjien tekemien toteutusten potentiaali, tarvitaan uusien ratkaisujen tehokkaaseen lanseeraukseen muutoksenhallintataitoja.

Kansalaiskehitys edellyttää uusien teknologioiden käyttöönottoa sekä liiketoimintaprosessien ja vanhojen järjestelmien käyttötapojen muuttamista. Epäonnistunut muutoksenhallinta voi suistaa kansalaiskehityksen onnistuneen omaksumisen organisaatioissa.

Kansalaiskehitykseen intohimoisesti suhtautuvat henkilöt, joille on jo kertynyt kehittämisen taitoja ja kokemuksia sen tuomista hyödyistä ovat avainasemassa muutoksessa!

On erittäin tärkeää, että meillä on kansalaiskehityksen puolestapuhujia, lähettiläitä, jotka uskovat sen tuomiin mahdollisuuksiin ja haluavat organisaation menestyvän siinä. He voivat olla ihmisiä, jotka ovat kokeneet kansalaiskehityksen arvon omassa työssään tai vain heitä, jotka ovat kokeilunhaluisia ja kiinnostuneita uusista asioista.



Kuva: Google Images

Tunnistakaa henkilöt, jotka ovat kokeilunhaluisia ja herkästi innostuvia. Varmistakaa, että heistä tulee kansalaiskehittämisen lähettiläitä!

Näyttäkää ihmisille kansalaiskehityksen tuomat mahdollisuudet, ja varmistakaa, että annatte ihmisille mahdollisuuden päästä tasa-arvoisesti nauttimaan kansalaiskehityksen lopputuloksista.

Onnistuneessa muutoksessa teot vastaavat sanoja!

Jos sanotun ja tehdyn välillä on kuilu, muutos ei onnistu! Jos henkilöstö näkee, että yrityksen johto ei todellisuudessa olekaan muutoksen takana, he tulevat kyynisiksi ja lakkaavat uskomasta siihen.

Osoittakaa siis teoilla, että organisaatio suhtautuu kansalaiskehityksen mahdollistamiseen tosissaan ja pyrkii pitkän tähtäimen muutokseen. Olennaista on ymmärtää, että hyvä viestintä muutoksesta ei ole pelkkää tiedonsiirtoa, vaan ihmisten usko muutosvisioon täytyy herättää. Heidän ahdistuksensa ja vihansa muutokseen liittyen on hyväksyttävä ja käsiteltävä ja on johdon tehtävä varmistaa henkilöstön sitoutuvuus siihen.

1. **Olkaa avoimia tulevaisuuden suhteen.** Auttakaa ihmisiä ymmärtämään muutoksen tarpeen ja se, millainen merkitys sillä on henkilölle itselleen, mutta myös organisaatiolle.
2. **Viestikää muutoksesta ja sen syistä aktiivisesti**
3. **Osoita muutoksen tuomat hyödyt.**
4. **Kerro, miten yrityksessä tullaan tukemaan kansalaiskehitystä,** koulutetaanko ihmisiä ja miten varmistetaan riittävä tuki ja apu.
5. **Tunnista muutoslähtelijät ja mobilisoi heidät** aktivoimaan ihmisiä ja innostamaan muita kansalaiskehittämisen tuomista mahdollisuuksista.
6. **Toteuttakaa muutos yhdessä henkilöstön kanssa** ja auta heitä tunnistamaan ja käyttämään hyväkseen omia vahvuuksiaan.
7. **Varmista, että ihmisillä on riittävä psykologisen turvallisuuden tunne ja riittävästi autonomiaa.**

Lähteet:

Kotter, John P. . 2021. CHANGE; How Organizations Achieve Hard-to-imagine Results in Uncertain and Volatile Times. Harvard Business School.

Kotter, John P. Cohen, Dan S. 2008. e Heart of Change: Real-Life Stories of How People Change Their Organizations. Harvard Business Review Press.

Project Management Institute. 2021. Citizen Development, The Handbook for Creators and Change Makers. Project Management Institute.

Työnsä
kehittäjät

Työnsä kehittäjät

Kansalaiskehittäminen

Kehittävä organisaatio

Miten sinä voit kehittää?



Esikuvat tuovat uskallusta kokeilla

Luo kansalaiskehittämisen lähettäjiä

Kansalaiskehittäminen on monille vieras asia ja teknisten työkalujen käyttö työn tehostamiseen saattaa kuulostaa mahdottomalta ajatukselta. Jos joku hänen kaltaisensa henkilö onnistuu oman työnsä kehityksessä, saattaa mahdollinen alku tuntua mahdolliselta. Hyvät sosiaaliset taidot auttavat kansalaiskehittäjiä tekemään työstä näkyvämpää ja jakamaan kokemuksia muiden kanssa. Tämä saattaa jopa herättää muiden kiinnostuksen ja antaa heille rohkeutta ryhtyä kansalaiskehittäjäksi.

Project Management Institute kirjassaan "[Citizen Development: The Handbook for Creators and Change Makers](#)" ohjeistaa yrityksiä etsimään henkilöitä työntekijöidensä joukosta, jotka ovat intohimoisia kehittäjiä ja sosiaalisesti taitavia. He voisivat toimia kansalaiskehittämisen lähettäjinä ja herättää muiden innostuksen aiheeseen.

Kansalaiskehitys edellyttää uusien teknologioiden käyttöönottoa sekä liiketoimintaprosessien ja vanhojen järjestelmien käytötapojen muuttamista. On tärkeää, että organisaatioissa on kansalaiskehityksen puolestapuhujia ja luonnollisia lähettäjiä, jotka uskovat siihen ja haluavat auttaa organisaatiota menestymään kansalaiskehityksessä. He voivat olla ihmisiä, jotka ovat kokeneet kansalaiskehityksen arvon omassa työssään tai vain ihmisiä, jotka ovat halukkaita kokeilemaan uusia asioita. Nämä muutoslähtelijät voivat innostustaan hyödyntäen helpottaa kansalaiskehityksen toteuttamista.



Kuva: Prateek Katyal (Pixels)

Kollegoiden onnistuminen kehittäjänä lisää minäpystyvyyttä ja halukkuutta yrittää.

Englanninkielisiä videoita minäpystyvyydestä, joihin kannattaa tutustua:

[Going Beyond Growth Mindset with Self-Efficacy](#)

[Self Efficacy -Tarina minäpystyvyyden parantamisesta.](#)

Oikeanlaiset ajatusmallit ja minäpystyvyys

Minäpystyvyydellä tarkoitetaan sitä, miten ihminen kokee pystyvänsä selviämään jostain määrätystä tehtävästä tai haasteesta. Meillä kaikilla on oletuksia siitä, mitä esimerkiksi pystyisimme helposti oppimaan, ja mitä emme usko oppivamme ollenkaan.

Minäpystyvyys määräytyy siitä, miten on selvinnyt aikaisemmista, vastaavista tehtävistä tai haasteista, mutta myös se, miten toiset henkilöt, joissa näkee samankaltaisuuksia itsensä kanssa ovat niistä selvinneet.

Jos haluaa siis, että liiketoiminnan ammattilaiset, joilla ei ole mitään kehittämiskokemusta, uskovat pystyvänsä kehittämään, on heille pystyttävä luomaan roolimalleja.

Ihmisen ajattelutapa vaikuttaa myös hänen halukkuuteensa kokeilla jotain uutta. Kasvuajattelun omaava ihminen näkee, että yrittämällä voi saavuttaa korkeamman älykkyyden. Se vaatii, että on valmis ottamaan vastaan haasteita ja tehdä kovasti työtä ja on avoin kritiikille.

Kasvun ajattelutapa (Growth Mindset) on Carol Dweck:n mukaan menneisyyden kokemuksista syntynyt tapa nähdä oma lahjakkuutensa ja pystyvyytensä oppia. Kasvun ajattelutavan omaava henkilö ei näe lahjakkuutensa olevan ennalta määritelty, vaan hän näkee pystyvänsä jatkuvasti kehittämään sitä. Kasvun ajattelutapaa pystytään lisäämään organisaatiossa esimerkiksi systemaattisella työllä, jolla pyritään nostamaan esille ihmisten saavutuksia, sen sijaan, että nostettaisiin esille heitä henkilöinä. Kun yrityksessä olevien roolimallien saavutusten eteen tekemä työ tuodaan esille, autetaan muitakin ymmärtämään, että he pystyvät samaan, jos vain yrittävät ja tekevät kovasti työtä. On kuitenkin tärkeää luoda ihmisille mahdollisimman paljon onnistumisen kokemuksia, jotta he pysyvät motivoituneina. Tehtäviä ja oppimista kannattaa jakaa pienempiin osiin, eikä tavoitella heti alkuun kuuta taivaalta. Jokainen onnistumisen kokemus vahvistaa ihmisen kasvun ajattelutapaa ja samalla vähitellen muuttaa koko organisaation kulttuuria luomalla uusia roolimalleja.

Tuo esille saavutuksia, älä
nosta ketään henkilöä jalustalle
esimerkiksi älykkyytensä vuoksi.

[The Power of a Growth Mindset](#)

[Growth mindset organization](#)

[Mindset is more important than strategy](#)



Kuva: Gerd Altmann (Pexels)

Lähteet:

PMI, ["Citizen Development: The Handbook for Creators and Change Makers"](#), 2021

Dweck Carol, *Mindset*, Äänikirja 2019

[Bandura, Albert, On the Functional Properties of Perceived Self-Efficacy Revisited, 2011](#)

Greene, Barbara A., *Self-Efficacy and Future Goals in Education*, 2018

Verkostot ja vertaistuki

Yksinäinen kehittäjä

Kun tarkastellaan jossakin liiketoimintafunktiossa työskentelevää tiimiä. Uskaltaisin sanoa, että valtaosa tiimiläisistä ei kovin usein kyseenalaista sitä, miten työtä tehdään ja miten he voisivat sitä tapaa muuttaa. He saattavat nauttia siitä, että heillä on tuttu ja turvallinen työ ja muutos saattaa tuntua heistä uhalta. Monet myös nauttivat manuaalisen ja toistuvan työn tekemisestä, koska se tekee heidät tuntemaan itsensä tarpeellisiksi. Voi myös olla, että he eivät tiedä miten voisivat siitä päästä eroon.

Sitten on meitä kansalaiskehittäjiä, jotka kyseenalaistavat ja tarkastelevat jatkuvasti työtä tehdessään sitä, miten he sitä pystyisivät tehostamaan ja lähtevät kokeilemalla etsimään parasta ratkaisua, jolla tekevät työstä enemmän heidän itsensä näköistä. He kokeilevat ja kokeilevat, ja suurin osa kokeiluista päättyy epäonnistumiseen ja kerta kerran jälkeen epätoivo kasvaa. Silti on tunne, että se ratkaisu kyllä vielä löytyy, vielä muutama kokeilu, niin maali on saavutettu. Ja usein ne maalit saavutetaan ja se tuntuu sillä hetkellä maailman tärkeimmältä asialta ja haluaisi jakaa sen ilon muiden kanssa. **Mutta kenen kanssa kansalaiskehittäjät voivat jakaa ilot ja keneltä he tarvitessaan pystyvät pyytämään apua?**

Koska muut tiimissä työskentelevät käytännössä tekevät eri työtä kansalaiskehittäjien kanssa, he eivät ymmärrä, miten suuri motivaattori kansalaiskehittäjälle voi olla **se tunne, kun vihdoinkin onnistuu.**

Opinnäytetyöprosessissani keskustelin useiden kansalaiskehittäjien kanssa ja toistuvasti haastattelussa tuli esille se, miten yksin he tuntevat olevansa. Heidän kollegansa eivät jaa heidän innostustaan kehittämiseen tai eivät välttämättä edes tunnista sen arvoa.



Photo by Canva Studio from Pexels

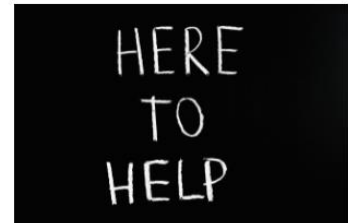


Photo by Anna Tarazevich from Pexels

Kansalaiskehittäjät kaipaavat jotakuta, jonka kanssa pystyisivät jakamaan erityisesti niitä pieniä onnistumisia, joita kehityksessä kokee.

Siiloutuneet organisaatiot ovat osasy s siihen, että kansalaiskehittäjät ympäri organisaatiota eivät tee yhteistyötä, eivätkä välttämättä edes tiedä toistaan.

Auta siis kansalaiskehittäjiä löytämään samanhenkisiä ihmisiä:

1. Auta organisaatiota näkemään kansalaiskehittäjien tekemän kehitystyön arvo
2. Anna mahdollisuuksia tutustua toisiinsa
3. Anna heille mahdollisuus yhteistyöhön, perusta heille esimerkiksi oma yhteisö tai esimerkiksi keskustelualusta, jossa he voivat pyytää tarvitessaan apua ja jakamaan onnistumiset jonkun kanssa
4. Tuo kansalaiskehittäjien kollegat osaksi kehittämistä. Heillä on potentiaalisesti kullannarvoisia ideoita kansalaiskehittäjille ja heidän kuuntelemisella varmistat onnistuneen lopputuloksen. Kun koko tiimi on jollain tavalla mukana kansalaiskehityksessä, on kaikilla sama päämäärä ja he pystyvät tukemaan kansalaiskehittäjiä paljon paremmin.

Lähteenä toimineet opinnäytetyöhön liittyen tehdyt kansalaiskehittäjien haastattelut

- **Haastattelu, Laura Hannola, 2021**
- **Haastattelu, Timo Paananen, 2021**

Mitä kansalaiskehittäjän pitää osata?

Osa kansalaiskehittäjien potentiaalista piilee heidän luonteessaan. Haastattelemani henkilöt kertoivat olevansa esimerkiksi: kokeilunhaluisia, oppimishaluisia, sinnikkäitä, uteliaita, kyseenalaistavia, tarkkoja, sosiaalisia, mutta pystyvät työskentelemään myös yksin, proaktiivisia ja laiskoja. Toki on myös muita luonteenpiirteitä, jotka tekevät sinusta hyvän kehittäjän. Kuulisin niistä mielelläni, jotta voisin lisätä ne tänne sivustolleni.

Voit lukea siitä, miten nämä luonteenpiirteet tekevät sinusta potentiaalisen kansalaiskehittäjän sivun seuraavasta osiosta.

Jos mietit voisiko sinusta tulla kansalaiskehittäjä. Jos sinulla on into kehittää, mutta olet epävarma omista vahvuuksistasi, käy tekemässä kansalaiskehittäjille tekemäni testi ja tutustumassa sivuun "[Usko itseesi](#)" ja saat vinkkejä siitä, mikä sinun roolisi kansalaiskehityksessä voisi olla.



Kuva: fauxels (Pexels)

Kansalaiskehitystä tukevat luonteenpiirteet

Luonteenpiirteisiisi et voi vaikuttaa, mutta kansalaiskehittämiseen voimme osallistua me kaikki. **Kaikista ei varmasti tule kansalaiskehittäjiä, mutta kansalaiskehittäjät saavat aikaan parempia tuloksia, kun heillä on käytettävissä mahdollisimman monen kollegan ammattitaito ja osaaminen.**

Kokeile ja ole sinnikäs

Kansalaiskehittäminen, kuten kaikki muukin kehittäminen vaatii lehmän hermoja. Jos sinulla ei ole vielä teknistä osaamista, mutta haluat kansalaiskehittäjäksi, onnistuu se vain kokeilemalla!

Älä pelkää epäonnistumisia! Niitä voi tulla satoja päivässä.

Oman työnsä kehittämistä oppii parhaiten alussa sillä, että lähtee opettelemaan juuri sitä, mitä sillä hetkellä tarvitsee. Itse esimerkiksi alussa etsin Googlasta esimerkkejä ja videoita ja niitä apinoimalla tai hieman muokkaamalla pyrin saamaan aikaan haluamani lopputuloksen. Ensimmäiset toteutukset, jotka kansalaiskehittäjänä tein, olivat hyvin simppeleitä ja vähitellen pitkän ajan kuluessa sinnikään googlettamisen jälkeen olin automatisoinut suuren osan työtehtävistäni.

Opetteli vielä paljon aikaa ja sinun pitää olla kärsivällinen, vaikka et ensimmäisellä kerralla onnistukaan jonkun ongelman ratkaisussa, se ratkaisu löytyy kyllä aivan varmasti. Apua kannattaa aina kysyä, jos esimerkiksi kollegalla on jotain osaamista, jota itselläsi ei ole. Jollei kollegoista ole auttajiksi, kannattaa etsiä tukea esimerkiksi erilaisilta keskustelupalstoilta.

Ja kun se ratkaisu lopulta löytyy ja toteutuksesi toimii, niin se on tuuletuksen paikka!

Uteliaisuus

Uteliaisuus on vahvuus, jonka avulla jaksat etsiä uusia ratkaisuja. Utelias ihminen oppii siitä, miten muut tekevät töitä ja koska he sen tietävät, saattavat he pystyä jakamaan kehityksensä hedelmiä myös kollegoille.

Kyseenalaistaminen

Kansalaiskehittäjien pitää osata kyseenalaistaa vanhoja toimintatapoja, jotta pystyy niitä uudistamaan. Kansalaiskehittäjien pitää myös uskaltaa avata suunsa ja perustella ideoitaan, jos haluaa toteutuksillaan tehostaa myös kollegojen työtä.

Tarkkuus

Kehittäminen vaatii tarkkuutta. Toteutuksia tehdessä kannattaa pyrkiä virheettömyyteen ja niitä kannattaa testata monelta eri kantilta ennen käyttöönottoa.

Sosiaalisuus

Sosiaalisena ihmisenä sinun on helpompi jakaa tekemiäsi toteutuksia muille. Jotta kansalaiskehittäminen ei jää vain oman työn kehittämiseksi, niin siinä vaaditaan taitoa myydä toteutuksia niiden potentiaalisille käyttäjille.

Sosiaaliset ihmiset usein saavat helpommin avuttua keskustelua kollegoiden kanssa heidän työstään ja miten kansalaiskehittäjän roolissa pystyisi heitä ehkä auttamaan.

Proaktiivisuus

Suurimmassa osassa yrityksiä kansalaiskehittäjiä ei kouluteta. Onneksi koulutuksen tarve on ymmärretty yhä useammassa yrityksissä, mutta ei tosiaan kaikkialla. Kansalaiskehittäjien pitää itsenäisesti pystyä opettelemaan tarvittavia taitoja. Google, youtube ja erilaiset keskustelukanavat ovat hyviä tiedonlähteitä kansalaiskehittäjille. Kun kansalaiskehittäjä saa hieman lisää oppia, on heidän myös helpompi etsiä tarvitsemaansa tietoa.

Laiskuus

Kansalaiskehittäjille hyvä motivaattori saattaa olla laiskuus. ... jos et vaan jaksa tehdä manuaalista työtä enää... automatisoi se!

Kansalaiskehittäjille hyödyllisiä taitoja

Kansalaiskehittäjiksi tullaan vähitellen, joka päivä opitaan jotain uutta ja kokeillaan erilaisia ratkaisuja. **On kuitenkin hyvä, että perustaidot ovat kunossa ja jollei vielä ole, kannattaa miettiä, miten niitä voi kehittää.**

Teknisiä taitoja, prosessien kehitystä, palvelumuotoilua jne. voi aina oppia. Olenkin kerännyt "[Koulutuksia](#)" -sivulle verkosta löytyviä kursseja, joista teille voisi olla hyötyä. Olen pyrkinyt löytämään ilmaisia kursseja, mutta mukana on myös jonkin verran maksullisia, mutta erittäin edullisia kursseja. Yrityksille suunnattuja kursseja on toki markkinoilla vaikka minkälaisia ja niihin osallistumisesta kannattaakin puhua esihenkilöiden kanssa.

Kansalaiskehittäjän ei tarvitse olla matematiikka-nero

Kehittäminen ja edes koodaaminen ei vaadi vahvaa matemaattista osaamista. Saatavilla olevilla no-code/low-code alustoilla kehittäminen usein tapahtuu graafisen työkalun avulla, drag & drop-metodilla ja täyttämällä tarvittavat tiedot lisättyyn palikkaan.

Liiketoiminnan tarpeiden ymmärtäminen

Jotta kansalaiskehittäjä löytää kehitettävää, tulee heillä olla hyvä ymmärrys prosesseista ja siitä mitä kannattaa alkaa kehittämään.

Aluksi kannattaa aloittaa pienistä toteutuksista ja siirtyä vähitellen vaativampiin.

Kokonaisuudet ja muutosten vaikutusten ymmärtäminen

Kokonaisuuksien ymmärtäminen on tärkeää toteutuksien suunnittelussa. On tärkeää ymmärtää, miten toteutus tulee vaikuttamaan esimerkiksi muiden työhön tai prosesseihin kokonaisuudessaan. Kansalaiskehittäjien olisi hyvä ymmärtää prosessikokonaisuuksia ja sitä, mitä kollegat samassa tiimissä tai tiimin ulkopuolella tekevät.

Jos kansalaiskehittäjällä on vahva ymmärrys siitä, minkälaisia tehtäviä muut tekevät, pystyy hän kehityksessään ottamaan huomioon myös asioita, jotka mahdollisesti auttaisi useampaa henkilöä.

Kiinnostunut teknologioiden tuomista mahdollisuuksista

Joka työpaikalla on tarjolla työkaluja, joilla pystyy tekemään ainakin simppeleitä työtä tehostavia toteutuksia. Siinä onnistuminen kuitenkin vaatii, että ymmärtää niiden tuomat mahdollisuudet. Jos sinulla ei vielä ole vahvoja taitoja työssäsi käytettäviin perus-työkaluihin, suosittelisin etsimään esimerkiksi verkosta kursseja, joilla parannat niitä. Tämän jälkeen sinulle saattaakin tulla jo ideoita siitä, miten käytät niitä työsi tehostamiseen.

[Excel ja Google Sheets-koulutuksia lisään myös tänne.](#)

Jos sinun on helppoa omaksua uusia järjestelmiä ja löydät niistä toiminnot helposti, opit varmasti riittävät teknologia-taidot kansalaiskehittämiselle helposti

Ohjelmistokehityksen peruseriaatteiden ymmärrys

On tärkeää ymmärtää ohjelmistokehityksen peruseriaatteita sen verran, että ei aiheuta haittaa. Muista, että kehitys tulee tehdä testikannassa, jos suinkin mahdollista. Jollei testikantaa ole, on oltava äärettömän varovainen. Toteutusten käyttöönoton pitää olla myös hallittua ja jos sillä on vaikutusta muiden työhön siihen kannattaa ottaa IT-mukaan.

Pitää osata ajatella loogisesti

Järjestelmäkehitys vaatii taitoa ajatella loogisesti. Vaikka kansalaiskehittäjien ei tarvitse osata koodata, varsinkin automatisointeja toteuttaessaan heidän pitää pystyä luomaan työnkuluja ja ymmärtää eri toimintojen syy- ja seuraussuhteita.

Mitä tapahtuu seuraavaksi, jos...

Miten saan automatisaationi tekemään saman jutun, mutta eri tiedoilla uudestaan ja uudestaan?

Muita kansalaiskehittämistä tukevia taitoja:

Kansalaiskehittäjien pitää joskus myös todistaa omaa osaamistaan. Heillä ei yleensä ole teknistä koulutusta, vaan he ovat itsenäisesti opetelleet kehittämisen oman työnsä ohessa.

- Kansalaiskehittäminen vaatii myös jatkuvaa oppimista ja kriittistä ja palautteesta oppimisen taitoa.
- Kansalaiskehittäminen on lähinnä itsenäistä työskentelyä.
- Kun kansalaiskehittäjä suhtautuu työhönsä intohimoisesti, hän luultavasti saa aikaan parempia toteutuksia ja toiset innostumaan niistä.

Lähteenä toimineet opinnäytetyöhön liittyen tehdyt haastattelut

PMI, "Citizen Development: The Handbook for Creators and Change Makers," 2021

Mistä ideoita?

Kysykää itseltänne kysymys: Mitä en halua enää tehdä jatkossa?

Kehittäminen kannattaa aloittaa pienestä

Jos yrittää heti aluksi haukata liian suuren palan, saattaa epätoivo iskeä yllättävän nopeasti. Jos kansalaiskehittäjillä ei ole aikaisempaa kokemusta esimerkiksi käyttämästään työkalusta, on pyrittävä etsimään tehtäviä juurin sopivan tasoisia tehtäviä. Tämä kannattaa muistaa myös, jos olet itse vastuussa siitä, mitä lähdet kehittämään. Liian vaikeat tehtävät alussa voi aiheuttaa turhautumista, varsinkin, jos ei ole apua tarjolla. Liian helpot tehtävät puolestaan käyvät nopeasti tylsiksi.

Alla muutamia ideoita siitä, mistä kehittämisen voi aloittaa.

No-code/Low-code työkalut

Monet No-code/Low-code alustat tarjoavat hyvin laajan valikoiman erilaisia malleja, **joita muokkaamalla voi luoda esimerkiksi erilaisia automaatioita henkilökohtaiseen käyttöön minuuteissa**. Paljon muita sapluunoja löytyy alla olevien linkkien takaa: [Power Automate](#) ja [Zapier](#)

Sieltä löytyy valmiita sapluunoja esimerkiksi:

- Liitetiedostojen tallentaminen sähköpostista valitsemaasi pilvipalvelussa sijaitsevaan kansioon
- Ilmoitus valitsemaasi metodilla, jos joku
 - lisää valitsemaasi kansioon tiedoston
 - muokkaa määrättyä tiedostoa
- Automaattisen sähköpostin luominen, kun dokumentti lisätään pilvipalvelun määrättyyn kansioon.

Erilaisten sovellusten luominen on myös melko yksinkertaista sapluunoiden avulla. Niihin ideoita löytyy [Power Apps tuotesivulta](#), jos sinulta kyseinen työkalu löytyy. Sovelluksia pystyy luomaan myös esimerkiksi [Betty Blocks](#) tai [AppSheets](#) -työkalulla

Voit luoda esimerkiksi:

- Yksinkertaisen varastonhallinta applikaation
- Haastattelutyökalun
- Help Desk-järjestelmän

Applikaatiot usein yhdistetään taustalla toimiviin järjestelmiin automaatioiden avulla. Esimerkiksi Power Apps:n taustalla on usein Power Automate, joka voi esimerkiksi tallentaa applikaatioon lisättävät tiedot haluttuun paikkaan tai vaihtoehtoisesti koota tietoja eri järjestelmästä yhteen näkymään.

Excel-toteutukset

Kansalaiskehittäjiä on ollut organisaatioissa pitkään. He ovat usein olleet tiimien Excel-guruja, jotka ovat rakentaneet työkaluja työn tehostamiseksi. Excel on erittäin monipuolinen työväline, jolla pystyy vielä tänä päivänäkin työntekoa helpottamaan. Excel-toteutukset vaativat enemmän koodaustaitoja ja kuin no-code -alustat.

Excel toimii monen Power Automate:lla toteutetun automaation tai Power Apps:lla luodun applikaation perustana. Siitäkin syystä kansalaiskehittäjälle hyvät Excel taidot ovat eduksi. Hyvä Excel-toteutus voi toimia myös osana ohjelmistorobotiikan toteutusta tai sillä voi rakentaa toteutuksen prototyyppijä.

Sivulta "[Koulutuksia](#)" löytyy myös muutama esimerkki Excel koulutuksista. Parhaiten apua kuitenkin löydät Googlen avulla tai esimerkiksi videoita katsomalla. Parhaiten opit sinnikkäällä kokeilulla!

Esimerkki:

Ensimmäiset Excel toteutukset voivat olla esimerkiksi simppeleitä laskureita. Jos työskentelette esimerkiksi logistiikan parissa ja teillä on toistuvat tarve laskea esimerkiksi tilauksen tuotteiden painot kuljetusyhtiötä varten.

Mitä jos toteutuksessanne

1. Excelin ensimmäiselle välilehdelle voisi lisätä kaikki tilauksella olevat tuotteet ja niiden määrät.
2. Toisella välilehdellä olisi kaikkien tuotteiden perustiedot
3. Kolmannelta välilehdellä olisi kaavojen avulla luotu halutunlainen näkymä, jossa ensimmäiselle sivulle lisättyjen tuotteiden painot on laskettu toisella välilehdellä olevien tietojen perusteella.

Olisiko sinulle hyötyä luoda esimerkiksi automaatio, joka napinpainalluksella piilottaa tai tuo esille määrättyjä Excel:n välilehtiä?

Yllä olevan esimerkin kohdalla nuo kaksi ensimmäistä välilehteä saa piilotettua erittäin yksinkertaisen koodin avulla:

```
Sub HideSheets()
```

```
On Error Resume Next
```

```
Sheets("Sheet1").Visible = False
```

```
Sheets("Sheet2").Visible = False
```

```
Sheets("Sheet3").Visible = True
```

```
End Sub
```

Taklaa kansalaiskehittämisen tuomat riskit

Saattaa kuulostaa pelottavalta ajatus, että annetaan IT:n ulkopuolella työskenteleville ihmisille lupa tehdä teknisiä toteutuksia. Heillähän ei ole yleensä koulutusta aiheesta ja he saattavat epäonnistua. Jos yrityksessä kuitenkin on päätetty lähteä edistämään kansalaiskehitystä, on tästä pelosta päästävä yli. On osittain luotettava ihmisiin ja osittain rakennettava kansalaiskehittäjille riittävät tukitoiminnot, jotta he pystyvät tekemään kehitystä turvallisesti ja kestävästi.

On totta, että jos kansalaiskehitystä ei yrityksessä tunnisteta, mutta sitä kuitenkin tapahtuu kulissien takana, se voi olla suuri riskitekijä. Joku henkilö saattaa esimerkiksi luoda itsenäisesti toteutuksen johonkin liiketoiminnan prosessiin ja siitä tulee ihmisille tärkeä työkalu päivittäisessä tekemisessä. Samainen työkalu saattaa olla syy siihen, että kyseiseen tehtävään lasketaan tarvittavaksi vain vähän resursseja, vaikka ilman työkalua sen hoitamiseen meneekin niitä paljon enemmän. Jos tämän työkalun luoja lähtee yrityksestä ja kenelläkään ei ole osaamista sitä korjata tai tukea käyttäjiä, saattaa vaikutus työhön olla erittäin suuri.

Miten kansalaiskehityksessä onnistutaan

1. Tiedosta riskit
2. Riko silot funktioiden väleiltä
3. Panosta riittävään osaamiseen
4. Tee kansalaiskehittämisestä näkyvää
5. Anna kansalaiskehittäjille turvallinen paikka kehittää
6. Luo kehittämiselle kehikko ja prosessit
7. Ymmärrä, että kehitys ei lähde teknologioista vaan ihmisistä
8. Auta kansalaiskehittäjiä ymmärtämään riskit ja välttämään niitä
9. Tarjoa tarvittavat rajapinnat ja konektorit
10. Anna kansalaiskehittäjille mahdollisuus tehdä yhteistyötä
11. Anna kehittäjille riittävästi aikaa kokeilla ja oppia
12. Varmista IT-funktion riittävät resurssit tukea kansalaiskehitystä
13. Mittaroi, seuraa toteutusten tuomaa hyötyä ja riskejä



Miten tehdä kansalaiskehittämistä näkyvämmäksi

1. Tarjoamalla IT:n hallinnoima alusta kansalaiskehittäjille
2. Luo kansalaiskehittäjille oma yhteisö, jossa pystyy jakamaan osaamista ja saamaan tukea
3. Markkinoi kansalaiskehittämistä ja anna esimerkkejä
4. Auta kansalaiskehittäjiä etenemään urallaan, mutta muista, että kaikki eivät halua olla esihenkilöitä
5. Luo positiivisia roolimalleja

Lähteet:

- Haastattelu, Timo Paananen, 2021
- PMI, "Citizen Development: The Handbook for Creators and Change Makers", 2021

Sinustako kansalaiskehittäjä?

Miten päästä alkuun

Periaatteessa kenestä tahansa voi tulla kansalaiskehittäjä, mutta käytännössä se ei välttämättä ole kaikille sopivaa. Jos kuitenkin sinulla on halu löytää uusia tapoja tehdä työtä ja kiinnostus oppia, niin ei kun opettelemaan.

Jos tiedät, että yrityksessäsi on jo kansalaiskehittäjä, kannattaa istua heidän kanssaan alas ja pyytää ideoita. Heiltä saat arvokasta tietoa siitä, minkä tyyppisiä toteutuksia yrityksessä on esimerkiksi jo tehty. Joskus ei tarvitse lähteä itse tekemään alusta asti, vaan voi kierrättää jo olemassa olevia toteutuksia. Toisten tekemistä toteutuksista oppii paljon. Itsekin aloitin tieni kansalaiskehittäjänä apinoimalla muiden työtä ja vähitellen kokeilemalla ihan omien ideoiden toteutusta.

Jos yrityksessäsi ei ole kansalaiskehittäjiä, kannattaa aloittaa matka keskustelemalla IT-osaston kanssa. He pystyvät kertomaan minkälaisia työkaluja kansalaiskehittäjille on yrityksessä tarjolla. Heidän kanssaan on hyvä keskustella yrityksessä olevista pelisäännöistä. Jotta kansalaiskehittäminen on yrityksessä kestäväällä pohjalla, IT:n on hyvä olla tietoinen siitä ja tehdyistä toteutuksista.

Joka yrityksessä ei ole käytettävissä, tai ei ole lupaa käyttää mitään no-code/low-code -työkaluja kehittämiseen. Kannattaa kuitenkin muistaa, että jo Excelillä tai Google Sheets:illä pystyy tekemään paljon. Niillä kehittäminen vaatii vahvaa osaamista ja ymmärrystä siitä, mihin ne pystyvät. Molemmissa ohjelmistoissa esimerkiksi automatisointia pystyy tekemään macroja nauhoittamalla, mutta koodauksen perustaidot auttavat monimutkaisempien automaatioiden tekemisessä. Jo funktioiden kirjoittamisellakin pystyy yksittäisiä tehtäviä tehostamaan yllättävän paljon. Olenkin lisännyt "Koulutuksia" -sivulle linkkejä myös kursseihin, joilla kehität itsestäsi vahvan Excel tai Google Sheets -ammattilaisen.

1. Kun olet löytänyt kansalaiskehittämisesi työkalun, **KOKEILE!** Jos epäonnistut, kokeile uudelleen!
2. Jos mahdollista, ota esimerkkiä muiden tekemistä toteutuksista.
3. **Aloita pienistä, yksinkertaisista toteutuksista** ja siirry haastavampiin vähitellen.
4. Kerro muille onnistumisistasi ja siitä, miten olet onnistunut säästämään työaikaasi tai tuomaan jotain uutta omaan työhösi. **Kun kerrot tekemästäsi kehityksestä avoimesti, saatat olla muille kullanarvoinen roolimalli.**
5. **Kysy muilta voitko auttaa.** Omien tehtävien kehittäminen auttamattomasti loppuu joskus. Jos siis nautit kehittämisestä, pitää kehityskohteita lähteä etsimään oman hiekkalaatikon ulkopuolelta.
6. **Osallista tiimisi ideointiin ja ratkaisujen miettimiseen.** Vaikka tiimissäsi ei ole muita teknisiä henkilöitä, joilla olisi taitoja luoda toteutuksia itse, luultavasti ihmisillä on ideoita mitä ja miten työtä kannattaisi kehittää. Jos otat tiimikaverit mukaan kehitysprojektiin, pystytte yhdessä työskentelemään samaa päämäärää kohden ja juhlimaan onnistumisia.
7. Pyri tutustumaan muihin kansalaiskehittäjiin. Kysymään heiltä apua ja jaa ideoita heidän kanssaan. Joka yrityksessä tämä ei onnistu, mutta silloin kannattaa verkostoitua esimerkiksi LinkedIn:in kautta samanhenkisten ihmisten kanssa.

Mitä voisoin kehittää?

Oma työsi on sinulle tutuinta ja siksi omien tehtävien kehittäminen on aina hyvä paikka aloittaa. Jos huomaat tekeväsi toistuvasti jotain samaa asiaa manuaalisesti, saattaisi olla kannattavaa lähteä etsimään tapoja automatisoida tuo tehtävä. Riippuen siitä, mitä työkaluja sinulla on käytettävissäsi ja mikä on taitotasosi vaikuttavat mahdollisuuksiisi luoda toteutuksia.

Sivulle "[Ideoita](#)" olen kerännyt esimerkkejä siitä, minkälaisia toteutuksia kansalaiskehittäjät voisivat tehdä.

Kuva: Vlada Karpovich (Pexels)

Kierrättämällä säästät paljon aikaa!

Aina ei kannata aloittaa alusta, vaan miettiä, olisiko ongelmaan edes osittain valmis ratkaisu jo olemassa.

Mitä jos tekisit Excelillä laskurit, jotka hoitaisivat usein toistuvat laskutoimitukset?

Jos työssäsi on selkeät säännöt, pystyy ne luultavasti automatisoimaan.

Tarvittavat taidot

Kehittäminen voi alkaa hyvinkin pienestä ja vaatii usein kokeiluja kokeilujen perään ennen kuin onnistuu. Taidot siis hankitaan hyvin pitkälti kehityksen kautta, tekemällä toteutuksia eri tarkoituksiin ja opettelemalla sitä, mitä sillä hetkellä sattuu tarvitsemaan.

Kansalaiskehittäjille tarpeellisia taitoja löytyy sivulta "[Tarvittava osaaminen](#)". En ole tuolle sivustolle kuitenkaan kerännyt pelkästään taitoja, vaan myös luonteenpiirteitä, jotka haastateltavani ovat tunnistaneeet itselleen tärkeimmiksi kansalaiskehittäjinä.

Kannattaa kertoa työnantajallesi kiinnostuksestasi kehittää ja pyytää mahdollisuutta kouluttautua.



Kuva: Google Images

Mistä oppia

Ennen no-code/low-code alustojen aikaa kansalaiskehittäjät olivat yrityksessä työskenteleviä Excel guruja. Jos tunnistat siis olevasi tiimisi Excel-tietäjä, olet jo hyvin pitkällä kansalaiskehittäjyydessä. Jos kuitenkin kiinnostaa tutustua tarjolla oleviin no-code/low-code -työkaluihin, kannattaa tutustua "[Koulutuksia](#)" -alasiivuun.

Google haulla on aina nopeinta tehdä täsmähakuja, joiden avulla selvität ongelmat nopeasti. **Ennen kehityksen aloittamista kannattaa kuitenkin tutustua käyttämiisi työkaluihin mahdollisimman hyvin ja käyttää muutama tunti siihen, että ymmärrät, mitä mahdollisuuksia ne tarjoavat.**

Usko itseesi ja tunnista vahvuutesi!!

Älä huoli, ei moni muukaan osaa tunnistaa niitä

Me suomalaiset hyvin harvoin puhutaan vahvuksistamme ja siitä syystä ehkä emme niitä välttämättä osaa edes tunnistaa. Kehuihin spontaani reaktiomme on vähätty tai epäkohtien etsiminen saavutuksistamme.

On erittäin voimaannuttavaa huomata olevansa jossakin hyvä, jopa parempi, kuin muut!

Opinnäytetyötäni varten haastattelin useita henkilöitä, jotka ovat käyttäneet jotain teknologiaa oman, tai muiden työn kehittämiseen. Monilla heistä oli vaikeuksia tunnistaa vahvuuksiaan. Osa luuli, että kaikki muutkin ajattelevat samalla tavalla ja ovat taitavia kehittämisessä ja pystyisivät luomaan samanlaisia toteutuksia, kuin he itse.

Syy, miksi alun perin lähdin tätä sivustoa luomaan oli se, että minun itsenikin oli vaikeaa tunnistaa arvoani kansalaiskehittäjänä. Se kuitenkin johtui hyvin vahvasti siitä, että organisaatio, jossa työskentelin ei sitä tunnistanut. Halusin auttaa yrityksiä luomaan organisaation, joissa ihmiset pystyisivät helpommin tunnistamaan vahvuuksiaan ja joissa he voivat niin hyvin, että haluavat kehittää.

Tiedätkö mitä on "Minäpystyvyys"?

Minäpystyvyydellä tarkoitetaan sitä tunnetta, joka sinulle tulee, kun sinulle annetaan jokin tehtävä. Toisten tehtävien kohdalla tunnet, että sen tekeminen on läpihuutojuttu, mutta joskus tehtävä tuntuu aivan liian vaativalta. Ensimmäisen tehtävän kohdalla sinulla on vahva minäpystyvyyden tunne, kun taas toisen kohdalla se on paljon matalampi.

Minäpystyvyys syntyy menneistä kokemuksista. Jos joskus olet kokenut hankalaksi jonkun tehtävän tekemisen tai olet jopa siinä epäonnistunut ja nyt sinulle annetaan saman tyyppinen tehtävä. Pieni ääni päässäsi sanoo, että et pysty sitä tekemään. Jos kuitenkin tehtävä muistuttaa jostain, jossa olet aikaisemmin onnistunut, tai missä olet nähnyt esimerkiksi kollegan onnistuvan, uskot itseesi paljon vahvemmin.

Minäpystyvyyteen tosiaan vaikuttaa myös muiden kokemukset.

Kannattaa siis muistaa, että sinä voit olla jollekulle roolimalli ja lisätä hänen uskoa itseensä esimerkiksi kansalaiskehittäjän omassa LinkedIn-ryhmässä.

Nämä videot minäpystyvyydestä (self-efficacy) ja kasvun ajattelutavasta (growth mindset) kannattaa katsoa ajatuksella.

[Going Beyond Growth Mindset with Self-Efficacy.](#)

[Self Efficacy -Tarina minäpystyvyyden parantamisesta.](#)

[The Power of a Growth Mindset](#)

[Growth mindset organization](#)

[Mindset is more important than strategy.](#)



[Tunnista vahvuutesi. Tee kansalaiskehittämisen testi täältä!](#)

Jos kansalaiskehittäminen kiinnostaa sinua ja haluat tietää, mitä vahvuuksia sinulla saattaisi olla kansalaiskehittäjänä tai kansalaiskehityksen mahdollistajana, kokeile tätä tekemääni kyselyä.

Kysely on tehty Google Forms- toiminnolla ja sen tekeminen vaatii Google tunnuksilla kirjautuminen. Kysely ei kuitenkaan tallenna sähköpostiosoitettasi, vaan on täysin luottamuksellinen.

Testiin ei ole oikeita tai väärä vastauksia, koska se kuitenkin on tehty kansalaiskehityksen näkökulmalla on tuloksissa vihreällä eroteltu kansalaiskehittäjille tärkeät vahvuudet. Jos tuloksesi on punainen, olen antanut vinkkejä, mikä voisi olla sinun roolisi kansalaiskehittämisessä.

Kuva: Google Images

Omia vahvuuksiaan pystyy tunnistamaan myös persoonallisuus testien avulla!

Muista olla testiä tehdessäsi rehellinen!

Tässä kaksi ilmaiseksi saatavilla olevaa testiä, joiden tulokset ainakin omalla kohdallani oli pelottavan tarkkoja.

[16 Personalities -testi](#) (suomeksi)

[VIA Institute on Character -testi](#) (englanniksi)

Mikä roolisi voisi kansalaiskehittämisessä olla?

Tämän kyselyn tarkoitus on auttaa sinua ymmärtämään mikä rooli sinulla voisi kansalaiskehittämisessä olla? Kaikkien ei tarvitse olla teknisiä kehittäjiä, koska loppukädessä onnistunut kansalaiskehittäminen on tiimityötä.

Kun olet tehnyt kyselyn, paina "VIEW SCORE"-painiketta ja lue ehdotukseni siitä, mikä sinun roolisi voisi olla. Punaisella näkyvät vastaukset ovat aivan yhtä hyviä, kuin mustallakin näkyvät. Se vaan tarkoittaa, että roolisi ei välttämättä sen kysymyksen kohdalla ole tekninen.

Kysely ei kerää teistä mitään henkilötietoa. Ainoastaan vastauksenne tallentuu.

 itakyla@gmail.com (not shared) [Switch accounts](#) 

Laitatko ruokaa ilman reseptejä tai pidätkö työstä, johon ei ole tarkkoja ohjeita?

- Kyllä
- En ole kokeillut, mutta voisin ajatella kokeilevani
- Ei

Pidätkö palapeleistä tai muusta ongelmanratkaisua vaativista vapaa-ajan harrastuksista?

- Kyllä
-



Kuva: Pixbay

Koulutuksia

Kansalaiskehittäjiä hyödyttää se, että heillä on teknisiä taitoja, mutta ainoastaan järjestelmien osaaminen ei riitä. Kehittäminen pitää usein sisällään esimerkiksi automatisoitavien prosessien virtaviivaistamista tai jopa uusien toimintatapojen ja työkalujen innovointia. On erittäin tärkeää, että kansalaiskehittäjienkin luomat toteutukset tuottavat lisäarvoa käyttäjilleen ja siksi sivustolta löytyy kouluttautumis-ideoita esimerkiksi Lean:sta ja palvelumuotoilusta.

Olen kerännyt tälle sivulle koulutuksia eri työkaluista, mutta myös aiheista, joiden perusymmärryksen näen hyödylliseksi kansalaiskehittäjille.

Kansalaiskehittäminen

Kansalaiskehittämisestä on vain hyvin vähän koulutuksia tarjolla. Kannattaa kuitenkin ehdottaa työnantajallesi, että pääsisit tekemään [Project Management Institute:n](#) aiheeseen liittyviä koulutuksia.

PMI Citizen Developer Foundation on tarkoitettu kaikille, keitä kansalaiskehittäminen kiinnostaa.

PMI Citizen Developer Practitioner on tarkoitettu henkilöille, jotka haluavat olla kansalaiskehittäjiä ja luoda itse toteutuksia.

Sama taho on kirjoittanut myös aiheesta kirjan [The Handbook for Creators and Change Makers](#).



Kuva: Google Images

Tänä päivänä netti on pullollaan erilaisia ja eri tasoisia koulutuksia. Google ja youtube ovat erittäin hyviä tiedonlähteitä, kun törmäät kehitystyössäsi ongelmaan.

Apua saa erilaisista tutoriaaleista, dokumenteista ja keskustelupalstoilta. Jos kuitenkin olet aloitteleva kansalaiskehittäjä ja kaipaat koulutusta jotain määrätystä aiheesta tai työkalusta, kannattaa etsiä verkko-kursseja.

No-code/Low code-alustat

No-code/Low-code alustoja on markkinoilla runsaasti erilaisia. Kannattaa kuitenkin varmistaa IT-osastolta, mitkä niistä on yrityksellä käytössä. On tärkeää muistaa, että ilman IT:n hyväksyntää ei pidä alkaa käyttää mitään järjestelmää.

Huomatkaa, että saatatte tarvita alussa IT:n apua erilaisten konektorien ja rajapintojen luomisessa.

Microsoft Power Automate

MS Power Platform on saatavilla lähes kaikissa yrityksissä, koska se on suppeana versiona osa laajempaa Microsoft 365 pakettia.

Microsoft Docs

[Get started with Power Automate](#)

Udemy (Maksullinen, mutta hyvin edullinen)

[Complete Guide to Microsoft Power Automate \(Flow\)](#)

UiPath Studio ja StudioX

UiPath:lla on kattava ja monipuolinen koulutustarjonta. Koulutukset ovat englannin kielisiä, mutta helposti seurattavia. Niitä tehdessä pääsee myös kokeilemaan ensimmäisten robottien tekemistä.

[UiPath Academy](#)

Esimerkkejä muista saatavilla olevista alustoista:

Appsheets

[AppSheet Automation](#)

[Automated Document Generation in AppSheet \(Concepts Compatible w/ Bots\)](#)

Betty Blocks:

[Betty Blocks Academy](#)

Zapier

Zapier

[Zapier University](#)

Udemy (Maksullinen, mutta hyvin edullinen)

[Zapier – How to Automate your Business and Gain Efficiency](#)

Jotkut kansalaiskehittäjillekin suunnatut työkalut, kuten UiPath, sisältävät tekoälyyn perustuvia toiminnallisuksia. Kaikille avoin ja ilmainen [Elements of AI](#), on hyvä tapa päästä tutustumaan tekoälyn perusteisiin.

Katso myös lyhyt esittely ohjelmistorobotiikasta: [What is RPA?](#)

Monet haastattelemistani kansalaiskehittäjistä edelleen käyttivät MS Exceliä kehitystyössään. Taulukkolaskennan työkalut ovat nykyaikana monipuolisia ja niiden tarjoamat automaatiomahdollisuudet voivat tuoda huomattavia ajansäästöjä työhön. Saatat siis hyötyä Excelin tai Google Sheets:n koulutuksista.

Kehitä Excel ja Google Sheets taitojasi Udemy:n kursseilla. Nämä kurssit ovat maksullisia, mutta edullisia:

[Excel Essentials for the Real World \(Complete Excel Course\)](#)

Excel Macros:

[Unlock Excel VBA and Excel Macros](#)

Excel Power Query:

[Master Excel Power Query Beginner to Advanced \(including M\)](#)

Basic Google Sheets skills:

[Google Sheets – The Comprehensive Masterclass](#)

Google App Scripts

[Google Apps Script Complete Course Beginner to Advanced](#)

Muotoilun kursseja

eOppiva

[Palvelumuotoilun perusteet](#)

Efficio

[Palvelumuotoilun ja asiakaskokemuksen elementit](#)

Lean

Leanvalmennus.fi (maksullinen)

[Yellow Belt –koulutus](#)

Mistä löytää apua ja oppia


Mielenkiintoisia koulutuksia voi löytää esimerkiksi seuraavilta alustoilta maksuttomasti: [Coursera](#), [Alison](#) ja pientä maksua vastaan on tarjolla laaja valikoima kursseja Udemy -alustalla. Linkin-koulutuksiin pääsee käsiksi aktivoimalla Premium-paketin. Sen saa yleensä ilmaiseksi käyttöön kuukaudeksi, mutta sen jälkeen se on kuukausimaksullinen.

Kannattaa kuitenkin varmistaa, mitä koulutuksia yritys tarjoaa, joskus yrityksillä on sopimus jonkun koulutuskumppanin kanssa ja he tarjoavat hyvinkin monipuolisia kouluttautumismahdollisuuksia.

Appendix 7. LinkedIn Group Print Screen

The screenshot shows the LinkedIn interface for a group named "Työnsä Kehittäjät". At the top, the navigation bar includes the LinkedIn logo, search, home, my network, jobs, messaging, notifications (with a red badge showing 6), and a profile icon. The group header features a banner image with the text "Työnsä Kehittäjät" and a list of keywords: "PRAGMATIC", "INNOVATION", "POWER", "ILLUMINATION", "CREATIVITY", "ENGINEERING", and "TALK". The group is owned by Hanna-Mari Itäkylä, who created it in November 2021. The group's description is in Finnish: "Kansalaiskehittäminen ja innovaatio. Vertaistukea ja ideoita kansalaiskehittäjille." (Citizen development and innovation. Peer support and ideas for citizen developers). The group is listed and has 0 pending posts and 0 requests to join. A sidebar on the left provides navigation options: "Manage group", "Edit group", "Recent" (listing related groups like "Kansalaiskehittäminen ja i...", "DuuniT - ilmoita, hae, verk...", "After Work Helsinki", and "citizendevelopment"), "Groups", "Events", and "Followed Hashtags" (including #citizendevelopment, #citizendevelopers, and #leanstartups). The main content area shows a "Start a post in this group" prompt with options for Photo, Video, and Poll. Below this is a "Recommended" section featuring a post by Hanna-Mari Itäkylä. The post is titled "Writing Masters Thesis on Enabling Citizen Development in Organiz..." and is 5 days old. The text of the post begins with "Moi," and "Loin tämän ryhmän kansalaiskehittäjille, koska osana opinnäyte ...see more". The post includes a photograph of a LEGO minifigure sitting at a desk with a computer monitor. Interaction buttons for "Like" and "Comment" are visible below the post. At the bottom, there is a "Highlight great posts" section with a "Learn more" button and a profile picture of a woman.

Appendix 8. Quiz Print Screens





Mikä roolisi voisi kansalaiskehittämisessä olla?

Tämän kyselyn tarkoitus on auttaa sinua ymmärtämään mikä rooli sinulla voisi kansalaiskehittämisessä olla? Kaikkien ei tarvitse olla teknisiä kehittäjiä, koska loppukädessä onnistunut kansalaiskehittäminen on tiimityötä.

Kun olet tehnyt kyselyn, paina "VIEW SCORE"-painiketta ja lue ehdotukseni siitä, mikä sinun roolisi voisi olla. Punaisella näkyvät vastaukset ovat aivan yhtä hyviä, kuin mustallakin näkyvät. Se vaan tarkoittaa, että roolisi ei välttämättä sen kysymyksen kohdalla ole tekninen.

Kysely ei kerää teistä mitään henkilötietoa. Ainoastaan vastauksenne tallentuu.

 itakyla@gmail.com (not shared) [Switch accounts](#) 

Kyllästyttääkö työskentely toistuvien, manuaalisten tehtävien kanssa?

Kyllä
 Ei

Onko sinulla teknistä osaamista tai kiinnostaako sinua teknologiat?

Kyllä
 Ei ole osaamista, mutta haluaisin oppia
 Ei

Laitatko ruokaa ilman reseptejä tai pidätkö työstä, johon ei ole tarkkoja ohjeita?

Kyllä
 En ole kokeillut, mutta voisin ajatella kokeilevani
 Ei

Onko sinulla osaamista jostain liiketoiminnan prosessista?

Kyllä
 Ei, mutta haluaisin oppia
 Ei

Pidätkö palapeleistä tai muusta ongelmanratkaisua vaativista vapaa-ajan harrastuksista?

Kyllä
 En ole kokeillut, mutta voisin ajatella kokeilevani



Mikä roolisi voisi kansalaiskehittämisessä olla?

Tämän kyselyn tarkoitus on auttaa sinua ymmärtämään mikä rooli sinulla voisi kansalaiskehittämisessä olla? Kaikkien ei tarvitse olla teknisiä kehittäjiä, koska loppukädessä onnistunut kansalaiskehittäminen on tiimityötä.

Kun olet tehnyt kyselyn, paina "VIEW SCORE"-painiketta ja lue ehdotukseni siitä, mikä sinun roolisi voisi olla. Punaisella näkyvät vastaukset ovat aivan yhtä hyviä, kuin mustallakin näkyvät. Se vaan tarkoittaa, että roolisi ei välttämättä sen kysymyksen kohdalla ole tekninen.

Kysely ei kerää teistä mitään henkilötietoa. Ainoastaan vastauksenne tallentuu.

✓ Kyllästyttääkö työskentely toistuvien, manuaalisten tehtävien kanssa?

Kyllä ✓

Ei

Feedback

*Se, että ei pidä manuaalisten ja jatkuvasti samanlaisina toistuvien tehtävien tekemisestä on ehkä kansalaiskehittäjän tärkein voimavara. Oikeanlainen laiskuus saa sinut etsimään ratkaisuja, joilla pääset eroon epämiellyttävistä työtehtävistä.
Mikä onkaan parempi tapa välttää tylsien tehtävien tekemistä, kuin niiden automatisointi!*

✓ Onko sinulla teknistä osaamista tai kiinnostaako sinua teknologiat?

Kyllä ✓

Ei ole osaamista, mutta haluaisin oppia

Ei

Feedback

Teknologiat ja prosessien kehittäminen ovat kansalaiskehittämisen ydin. Hyvä teknologinen osaaminen ja looginen ajattelukyky ovat kansalaiskehittäjille elintärkeitä vahvuuksia.

Kannattaa uteliaasti kokeilla ja opetella erilaisten teknologioiden käyttöä kehityksessä.

*Muista kuitenkin seurata yrityksessä sovittuja pelisääntöjä kansalaiskehittämisen suhteen ja että kaikki uudet teknologiat pitää hyväksyttää IT:llä.
Vain näin pystytään tekemään kehityksestä näkyvää ja kestävää.*

✓ Laitatko ruokaa ilman reseptejä tai pidätkö työstä, johon ei ole tarkkoja ohjeita?

- Kyllä ✓
- En ole kokeillut, mutta voisin ajatella kokeilevani
- Ei

Feedback

Joskus prosessin muuttaminen kokonaan uudelleenlaiseksi saattaakin olla aikaisempaa parempi ratkaisu. Jos sinulla on taito "ajatella laatikon ulkopuolelta", pystyt luultavasti löytämään täysin uudennlaisia ratkaisuja ongelmiin ja saamaan aikaan todellista muutosta.

✓ Onko sinulla osaamista jostain liiketoiminnan prosessista?

- Kyllä ✓
- Ei, mutta haluaisin oppia
- Ei

Feedback

Liiketoimintaprosessien tunteminen on ehdoton vahvuus kansalaiskehittäjille!

Kannattaa kuitenkin varmistaa, että ymmärrät myös mitä kollegat jossain muussa tiimissä tekee osana samaa prosessia. Pyri ymmärtämään kehittämiäsi toteutusten vaikutukset muualla yrityksessä.

Keskustele siis avoimesti suunnitelmistasi ja pyydä erilaisia näkökulmia ideaasi eri tiimeistä ja varmista, että ymmärrät sen kokonaisvaikutukset.

Keskustelemalla saatat saada kollegoilta hyviä ideoita!

✓ Pidätkö palapeleistä tai muusta ongelmanratkaisua vaativista vapaa-ajan harrastuksista?

- Kyllä ✓
- En ole kokeillut, mutta voisin ajatella kokeilevani
- Ei

Feedback

Kansalaiskehittäminen vaatii ongelmanratkaisutaitoa ja se, että olet jo kiinnostunut, tai koet voitavasi olla kiinnostunut tämän tyyppisestä tekemisestä tulee olemaan vahvuutesi kansalaiskehittäjänä.

✓ Haluatko kehittää työtäsi?

Kyllä ✓

Ei

Feedback

Intohimo kehittämiseen auttaa sinua jaksamaan kansalaiskehittäjänä huonossakin organisaatiossa. Parasta on kehittäminen yrityksessä, jossa pääset kehittämään ja jossa kehitykselle on organisaation tuki.

Jollei näin ole, tulee kansalaiskehittäjänä tekemäsi toteutukset olemaan tärkeä vahvuus sinulle itsellesi työmarkkinoilla. Kansalaiskehittäjänä opit todella paljon uusia taitoja ja niistä kannattaa kertoa seuraavassa työhaastattelussa!

Intohimosi kehitykseen voi kuitenkin olla avainasemassa kansalaiskehityksen lisäämiseen, myös yrityksessä, jossa työtä ei perinteisesti ole kehitetty.

Tee kehityksestäsi näkyvää ja itsestäsi roolimalli potentiaalisista kansalaiskehittäjille.

✓ Kokeiletko uusia asioita ja uusia tapoja tehdä työtäsi?

Kyllä ✓

En ole kokeillut, mutta voisin ajatella kokeilevani

Ei

Feedback

Uusien ratkaisujen kokeilu on kansalaiskehittämisen avainasia. Tämä tulee olemaan vahvuutesi kansalaiskehittäjänä.

Uteliaisuus ja kokeilunhalu tulee varmistamaan, että löydät jatkuvasti uusia tapoja kehittää.

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Google Forms



Mikä roolisi voisi kansalaiskehittämisessä olla?

Tämän kyselyn tarkoitus on auttaa sinua ymmärtämään mikä rooli sinulla voisi kansalaiskehittämisessä olla? Kaikkien ei tarvitse olla teknisiä kehittäjiä, koska loppukädessä onnistunut kansalaiskehittäminen on tiimityötä.

Kun olet tehnyt kyselyn, paina "VIEW SCORE"-painiketta ja lue ehdotukseni siitä, mikä sinun roolisi voisi olla. Punaisella näkyvät vastaukset ovat aivan yhtä hyviä, kuin mustallakin näkyvät. Se vaan tarkoittaa, että roolisi ei välttämättä sen kysymyksen kohdalla ole tekninen.

Kysely ei kerää teistä mitään henkilötietoa. Ainoastaan vastauksenne tallentuu.

✘ Kokeiletko uusia asioita ja uusia tapoja tehdä työtäsi?

- Kyllä
- En ole kokeillut, mutta voisin ajatella kokeilevani
- Ei ✘

Correct answers

- Kyllä
- En ole kokeillut, mutta voisin ajatella kokeilevani

Feedback

Kehittäminen on jatkuvaa uusien ratkaisujen etsimistä ja vaatii todella paljon kokeiluja. Jos sinua kehittäminen kiinnostaa, kannattaa lähteä opettelemaan siihen liittyviä taitoja ja kerätä rohkeutta kokeilla uudenlaisia lähestymistapoja ongelmiin.

Pyydä apua tiimiläisiltä, heistä ehkä joku on myös halukas kehittämään tiiminne työtä ja ehkä jo kokeillutkin. Voisitteko kehittää ja kokeilla yhdessä?

Jos kokeileminen ei ole sinulle mielekästä, kannattaa miettiä, miksi näin on? Jos kyse on siitä, että et uskalla kokeilla uusia ratkaisuja työpaikalla, koska tunnet sen olevan liian suuri riski, kannattaa ottaa asia puheeksi esimerkiksi HR:n kanssa, koska ongelma saattaa olla yrityksessä laajempikin ja estää muitakin kertomasta kehitysideoitaan.

✘ Pidätkö palapeleistä tai muusta ongelmanratkaisua vaativista vapaa-ajan harrastuksista?

- Kyllä
- En ole kokeillut, mutta voisin ajatella kokeilevani
- Ei ✘

Correct answers

- Kyllä
- En ole kokeillut, mutta voisin ajatella kokeilevani

Feedback

Ongelmanratkaisu on osa kansalaiskehittäjän osaamispankkia. Joskus ongelmanratkaisu voi olla mukavampaa ryhmässä.

Voisitko olla mukana ideoimassa kehityskohteita?

Ammattitaidostasi olisi varmasti kansalaiskehittäjille paljon hyötyä, voisitko auttaa heitä tuomaan hiljaisen tietosi näkyväksi ja auttamaan heitä löytämään hyviä ratkaisuja?

✘ Laitatko ruokaa ilman reseptejä tai pidätkö työstä, johon ei ole tarkkoja ohjeita?

- Kyllä
- En ole kokeillut, mutta voisin ajatella kokeilevani
- Ei ✘

Correct answers

- Kyllä
- En ole kokeillut, mutta voisin ajatella kokeilevani

Feedback

Aina ei ole esimerkiksi järkevää lähteä luomaan automaatioita sillä hetkellä käytettävään prosessiin, vaan ensin prosessia kannattaa tarkastella kriittisesti ja mahdollisesti muuttaa sitä radikaalistikin.

Joskus prosessin muuttaminen kokonaan uudenaiseksi saattaa olla aikaisempaa parempi ratkaisu.

Vaikka sinulla ei ole osaamista tai kiinnostusta prosessien kehittämisestä voit kehitystyössäsi päästä hyvin lopputuloksiin muiden avulla.

Mitä jos etsisit avuksesi, jonkun, joka pystyisi tukemaan sinua prosessien ja ratkaisujen ideoinnissa.

✘ Onko sinulla osaamista jostain liiketoiminnan prosessista?

- Kyllä
- Ei, mutta haluaisin oppia
- Ei



Correct answers

- Kyllä
- Ei, mutta haluaisin oppia

Feedback

Liiketoimintaprosessien tunteminen on ehdoton vahvuus kansalaiskehittäjille, mutta ilman kokemustakin pystyy kehittämään. Tulet tarvitsemaan apua ihmisiltä, jotka tuntevat prosessit ja kokonaisuudet riittävän hyvin.

On myös tärkeää muistaa, että tekemäsi toteutukset saattavat vaikuttaa myös toisissa tiimeissä työskentelevien ihmisten töihin. Kannattaa avoimesti osoittaa epävarmuuksiaan ja avata keskustelua kehityssuunnitelmistasi.

✘ Haluatko kehittää työtäsi?

- Kyllä
- Ei



Correct answer

- Kyllä

Feedback

Jos sinulla ei ole halua kehittää, kansalaiskehittäminen ei välttämättä ole sinua varten. Saatat kuitenkin pystyä auttamaan kansalaiskehittäjiä ja päästä nauttimaan heidän työnsä hedelmistä.

✘ Onko sinulla teknistä osaamista tai kiinnostaako sinua teknologiat?

- Kyllä
- Ei ole osaamista, mutta haluaisin oppia
- Ei ✘

Correct answers

- Kyllä
- Ei ole osaamista, mutta haluaisin oppia

Feedback

Teknologiat ja prosessien kehittäminen ovat kansalaiskehittämisen ydin. Mikäli sinulla ei ole kiinnostusta teknologioihin, et välttämättä tule nauttimaan toteutusten luomisesta. Voit kyllä taustastasi riippuen olla tärkeä apu kansalaiskehittäjille esimerkiksi osallistamalla ideointiin tai prosessien kehittämiseen.

✘ Kyllästyttääkö työskentely toistuvien, manuaalisten tehtävien kanssa?

- Kyllä
- Ei ✘

Correct answer

- Kyllä

Feedback

Jos et koe epämiellyttäväksi manuaalista työskentelyä tai samanlaisina toistuvia työtehtäviä, kannattaa pyytää kehittämisideoita vaikka tiimikavereilta, koska sopivien kehityskohteiden tunnistaminen saattaa sinulle olla haastavaa.