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Development plan for digital communication practices to improve cognitive ergonomics in Tipotie Health Center

DEGREE PROGRAMME IN WELFARE TECHNOLOGY
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ABSTRACT

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Work in a Health Center is demanding brainwork and work in health care is often perceived cognitively strenuous. The objective of this thesis was to create a development plan for digital communication practices in Tipotie Health Center for the internal communication of the employees using service design as a method. The aim was that with this plan the cognitive ergonomics could be improved by cutting interruptions, distractions, and information overload. The aim was also to increase the employee's knowledge about their own role in mitigating cognitive load. The employees were included in the development process by hearing their thoughts and involving them in ideation in a workshop. The plan was conducted according to the ideas of the employees and feedback for improvement needs was collected with an online questionnaire form.

The plan included instructions for the use of Teams and Outlook in a way that it would cause less distractions, interruptions, and information overload for the employees. There was also a table about how the teams and channels in Teams could be arranged to make finding information easy and logical.

Only a little feedback was received but it showed that the need for changes in communication practices is real. Implementation of the plan was requested. Future interest could be implementation and studying if there is a change in perceived cognitive straining. The development plan could also be used s a model for other health centers or there could be a guide to internal digital communications for new employees.

Keywords: digital communication, communication strategies, development (active), cognitive ergonomics

CONTENTS

1 INTRODUCTION

Growing demands of knowledge work and cognitive skills have changed the nature of health care work into brainwork. There are a lot of interruptions and several simultaneous tasks in care work. Cognitive ergonomics can be improved by designing the work processes to be in keeping with the cognitive capacity and limitations of employees. (Kalakoski et al., 2018, p. 2) In a web manual "Brainwork" of Finnish Institute of Occupational Health interruptions, distractions and information overload are listed as load factors for brain work (TTL n.d.). Employees in Tipotie Health Center have brought up in meetings and everyday life that it is often hard to concentrate and finish tasks due to constant interruptions, and that it is difficult to find information on the changed instruction after a few days because of information overload. Work has been described strenuous. The current busyness, fragmentation of work, interruptions and keeping several things in mind at the same time appear as a burden and problems of well-being at work (Kalakoski et al., 2018, p. 5). In SujuKE- research study most participants described straining working daily in speech noise, with constant interruptions or with unclear or insufficient instructions or with information being difficult to find. It was considered essential to decrease the straining factors and to implement good practices. (Kalakoski et al., 2020, pp. 3–4, 56–57). Studies show that changes in practices can reduce cognitively straining conditions and cognitive failures, and this may lead to improved well-being and even productivity. (Kalakoski et al., 2020, p. 55; Weigl et al., 2012, p. 614).

In this thesis a development plan for digital communication practices in Tipotie Health Center aiming to reduce cognitive stress was created using a service design process. The plan includes instructions of which software to use for different purposes and how to avoid unnecessary cognitive load in information sharing. This thesis does not consider the use of patient health record systems,

only other computer-mediated communication in the unit. The scope was in the creation of the plan, and implementation was left out due to the social and health care reform that was taking place during the making of this thesis. The social and health care reform caused lack of precise information about the software, available functions and information security instructions that were going to be in use in the wellbeing services county making it uncertain to design a plan that would be usable in the future organization as it is. The information provided with this thesis would however help the personnel to consider their possibilities to work in a less straining way, and with modifications to suit the new organization instructions the plan is possible to implement later.

2 AIM, PURPOSE, AND ORGANIZATION

2.1 Aim and purpose

The purpose of this thesis was to create a table and written instructions of how digital communication practices in Tipotie Health Center can be modified to enhance cognitive ergonomics in work. This thesis provides information about the perceived causes of stress in digital communication and information sharing, and about the ideas the employees have, to improve the practices for developing a better working environment. Based on the results and suggestions provided in this thesis improvements in digital communication practices can be conducted. These improvements aim for decreasing employees perceived cognitive load by cutting interruptions, distractions, and information overload. The aim was also to increase the knowledge of the employees of their own role in managing the cognitive straining by including the employees to the development process.

2.2 Tipotie Health Center

Tipotie Health Center is a municipal primary health care clinic in the city of Tampere. The staff consist of 2 practical nurses, 20 registered nurses and public health nurses and 15 doctors. In this thesis nurses refers to all the nursing professionals including registered nurses, public health nurses and practical nurses. The operating model used in Tipotie health center is a multi-professional teamwork model, in which depending on the need of the patient, two or more professional from different fields can participate in the care of a patient in early stage, even during first contact. Work consists of several different kinds of duties during the workday. Most of the employees work in an open office at least half a day several times a week and the working point often changes in the middle of the day. There might be several unfinished tasks waiting for comments or actions from a co-worker or a too tight schedule to finish the tasks when started or planned. Email and instant messages in Teams are in frequent use, which cause interruptions and distraction. New instructions and changes to details in practices, contact information or services in the organization, unit or collaboration partners are announced usually by email or in meetings only, which makes finding the right peace of information challenging when needed afterwards and therefore many things need to be remembered or asked.

2.3 Organizational instructions for cloud services

Organization instruction for flowing work (Sujuva työ -ohje) is a short guide for city of Tampere personnel to use Microsoft (Office) 365 cloud service tools smoothly and effectively. It encourages to consider new ways in work to benefit from the opportunities the cloud services offer. (Sujuva työ, n.d.)

A concrete change already made in the whole organization of the city of Tampere is the relocation of files from Z: -drive to cloud, which enables sharing and editing documents with others in real time without sending many versions

via email. Older versions or even the original can be retrieved from the version history if needed. (Sujuva työ, n.d.)

Meetings via Teams save time from travelling between places. It is suggested in the instruction that rules are set for meetings to increase efficiency and to develop information management in the organization by informing everyone where the decisions and new important information can be found. Conversations can be moved from email to Teams and important emails can be sent to the team in Teams, and a message of an email appears in Teams channel. (Sujuva työ, n.d.)

City of Tampere has instructions for data management in cloud services to ensure the data safety in knowledge work. It is important that the instructions are followed and that all the users get enough guidance to the applications in use when working with cloud services. There is a risk that information and files intended for a restricted group of employees, end up for larger groups to see and edit. It is not allowed to handle confidential data or personal information in public cloud services, such as social media services, public email services or public file transmission services. Most significant risk is network errors between Finland and other countries because most cloud services come from abroad. Data is not available during fault situations. (Tietojenkäsittely pilvipalveluissa, n.d.) These instructions for flowing work and data management set guidelines for the plan for digital communication in Tipotie Health center.

3 COGNITIVE ERGONOMICS IN DIGITAL COMMUNICATION

3.1 Cognitive ergonomics

In the definition of International Ergonomics Association (IEA, n.d.) ergonomics as a scientific discipline concerns interaction among people and other

elements of a system. In work, the aim of ergonomics is to optimize the well-being and performance of humans and the overall system applying theory, data, and methods to the design. The term human factors (HF) can be used interchangeably or as a unit with ergonomics EHF/HFE. (IEA, n.d.) Cognitive ergonomics can be described as the application of ergonomics theory and principles to the design of tasks where processing of information, sensation, and recognition is required. (ILO & IEA, 2021, p. 48; Bowie & Jeffcott, 2016, p. 87) Cognitive ergonomics deals with memory, reasoning, perception, and other mental processes affecting interactions between people and other elements, such as computers. Mental workload, work stress, skilled performance, decision making, and human reliability are topics relevant to cognitive ergonomics. (IEA n.d.; Bowie & Jeffcott, 2016, p. 87)

Using cognitive ergonomics in system design, the strengths of information processing capabilities that people have can be taken advantage of and the weaknesses compensated. People are good at simplifying decision making with 'rules of thumb' and predicting what is going to happen by creating models. Recognizing patterns is a strength too, but human capacity to process information is limited. Poor design in work systems can cause experiences of cognitive overload and stress. (ILO & IEA, 2021, pp. 48–49)

Working life has been changing and the greater part of work is brainwork and interaction. The role of individual employee and self-management are increasing. (Kauppinen et al., 2013, p. 25) Stress factors at work, such as information overload, distractions and interruptions have become more frequent (Kalakoski et al., 2018, p. 5).

According to Kalakoski et al. (2018, p. 5) work in health care is demanding expert work. Work consists of numerous situations and tasks, which are causing cognitive stress and requiring brain work, such as focusing, reading, and writing, problem solving, and working in noisy situations with interruptions and contradictory instructions while remembering and keeping an eye on things. These demands can be even more frequent in health care work than other special demands of nursing, such as taking care of health and welfare of

others and working in demanding situations and dealing with emotional load and security issues. Many simultaneous tasks, interruptions, and fragmentariness of tasks can expose an employee to cognitive stress and problems in well-being at work. (Kalakoski et al., 2018, pp. 5, 29)

3.1.1 Causes of disturbance and interruptions

Our sense of sight and hearing are monitoring the environment continuously, but this process can be going on outside our consciousness and it is enough that we are alarmed if something important happens. The hearing system being constantly alert can cause trouble in open or noisy working spaces or if there are unpredictable sounds like notification sounds. Understandable speech is the most disturbing when reading or writing because it is processed in the same part of the brain and there is too much data to handle at the same time. We can't control being alert even if we realize there's nothing we need to act on. There's a significant range in tolerance of and reactivity to working in background noises between people and it's affected by genetics, characteristics of work and adaptability. Disturbances cause more distraction in tasks that require long periods of concentration than in tasks that are short and don't need as much remembering. It's the same when there is something happening in our visual field, like colored notifications in the computer screen or someone walking by our desk, our sight gets focused to movement or other change in the visual field. (Huotilainen & Saarikivi, 2018, pp. 25–27)

Accepted or unfinished tasks that are not currently actively worked on, cause stress to cognitive resources. Nearly finished or important unfinished tasks cause more stress than just started or less important tasks. Minimizing the number of on-going tasks is a part of good planning of work. Cognitive stress of many accepted or on-going tasks can be reduced with a system of writing down the tasks for example in calendar or to-do-list. This releases cognitive resources to other duties and enables to aim the focus better to the task that is being proceeded at the moment when it's not necessary to remember everything. (Huotilainen & Saarikivi, 2018, pp. 118–119)

For some people switching between tasks often feels easy and normal and for a person it can be a way of controlling alertness to switch tasks, but it doesn't mean that it is an effective way of working even for them (Huotilainen & Saarikivi, 2018, pp. 120–121). Switching from one task to another requires storing the state of the one task and recovering the state of the other. Hence avoiding switching tasks reduces the number of interruptions. Switching a task can be as little as moving between programs and it can be disruptive because it requires more cognitive effort than if the two tasks were possible to be accomplished in the same software. (Kirsh, 2000, pp. 32–33) It might be difficult for an individual to reduce task switching, background noise, number of unfinished tasks and disturbances, that cause cognitive stress in the work. The culture of interruptions needs to be discussed in the working organization, because there is a significant effect in working culture on how fragmented and strenuous the workday gets. Finding ways to make work less stressful is the responsibility of the whole unit personnel and management. (Huotilainen & Saarikivi, 2018, pp. 120–121)

Interruptions might have a progress enhancing effect if the work includes plenty of teamwork with conversational interaction among colleagues, a lot of activity heading to a common goal, and only a little independent work. This co-operation prevents the interruptions from causing harm. When the work requires focusing on independent work and there is little teamwork, interruptions should be avoided as it disturbs carrying on the current task. (Kalliomäki-Levanto et al., 2016, p. 36)

3.1.2 Information overload

Excessive information supply and demand for information are listed as some of the primary causes of cognitive overload. Information overload can include decisions knowledge workers make, time management and sometimes even interruptions. (Kirsh, 2000, pp. 19–20) E-mail and social media can distract an employee from their work even though ICT is usually thought to help a person to concentrate on their work (Aaltonen et al., 2012, p. 50). Kirsh (2000, pp. 24–

26) presents different types of information overload. Overload can be related to supply when the information is pushed information that arrives to a workspace tangibly or digitally or in real life. Pulled information means retrievable information that can be found when needed. Discussions are also pulled information. There is little control we have over pushed information, hence the overload comes from getting too much information to take in or getting interrupted too often. Oversupply of retrievable information stems from the effort needed for search and stress about the time spent in that. Another problem is the uncertainty about the relevance and quality of gathered information. (Kirsh, 2000, pp. 24–26)

According to Kirsh (2000, pp. 27–29) cognitive overload can also be caused by complexity of our desire for demand side information. It is difficult to know when and what kind of information will be needed in the future, therefore control of knowledge inventory is complex and often not solved optimally with careful planning but with coping methods. Sometimes a little information is quite enough but sometimes inadequate, and predicting the value and utility of information is hard. (Kirsh, 2000, pp. 27–29) When there is no suitable way of storing and retrieving the knowledge and information effectively when needed, the time and effort put into learning, organizing, and retrieving the information is a stress factor.

3.2 Digital communication

Digital communication in this thesis refers to transferring information and sending discrete messages to one or more persons using different computer applications such as email, Teams, and possible other internet-based services. Information sharing is also included. Another concept referring to communication and information sharing via digital devices and computer software often used in literature is computer-mediated communication (Kirchhoff et al., 2021; Russel et al., 2021; Stich et al., 2017).

Use of digital communication channels in work can cause stress for at least some of the employees (Stich et al., 2017, pp. 96–97) but not all interruptions are negative (Sasangohar et al., 2012). Sometimes interruptions can have positive effects such as providing important information, warning about errors, or changing task to more urgent one for patient safety (Sasangohar et al., 2012, Section Sources of interruptions). In work it is also often possible to regulate some interruptions in a way they don't cause as much distraction (Russel et al., 2021, Section 5). Use of information and communication technology in health care needs to be suitable for the work processes and support the clinical work (Kirchhoff et al., 2021, Section Discussion).

4 METHODS AND THE PROCESS

4.1 Service design process

This thesis used service design framework as a process method. Service design as a thesis is development that combines research, project activity and user participation in iterative working. Service design can focus on the development process of a product, a service or a part of it or an operational practice. A subject of a service design thesis can be for example working environment, digital service model or designing communication practices as in this thesis. The opinions of the users are significant sources of information and a basis in the service design process, but the ideas of the user will not automatically end up as the new practice. Empathy is needed in the process because feelings have an essential role in the user expectations, habits and values that are points of interest in the process. (Vilkka, 2021, pp. 36–38)

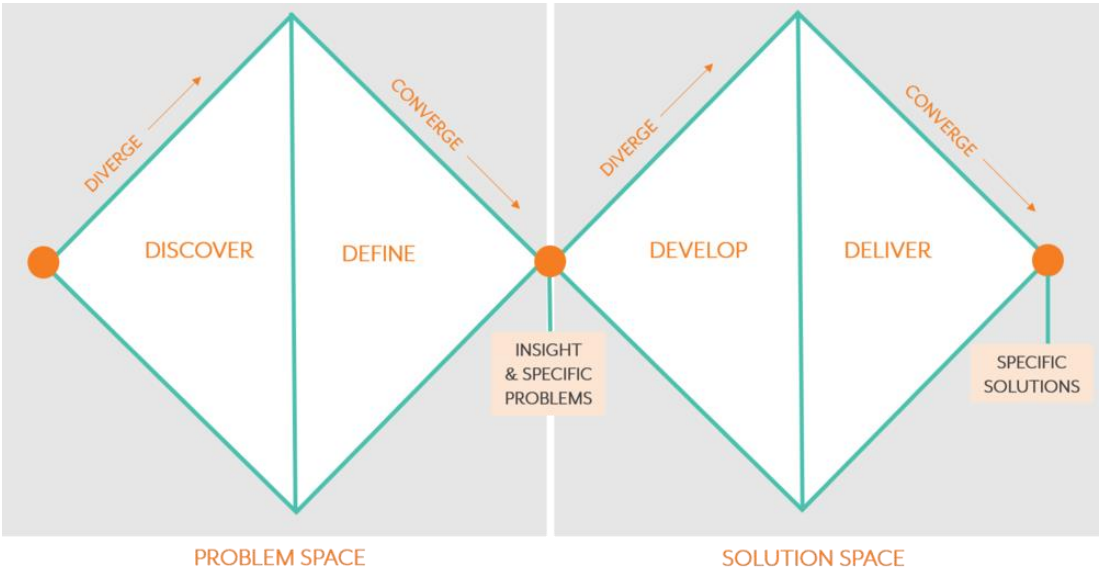

Figure 1. Service design Double Diamond Model (Innanen, 2008).

The Double Diamond model is a well-known process model introduced by the British Design Council. The process consists of four steps as presented in Figure 1: 1. Discover, 2. Define, 3. Develop, and 4. Deliver. There are two stages or spaces in the model. The first two steps represent the problem space, and the last two steps represent the solution space. Service design process is an iterative process which means that the process can move back and forward between steps to gain new knowledge to develop the result further. The Double Diamond model has been criticized that it doesn't show this iterative feature about service design, but the steps are presented clearly and for that reason the Double Diamond Model is used to present the steps of the service design process. (Elmansy, 2021; Innanen, 2018) The steps of this thesis are presented also in Figure 2.

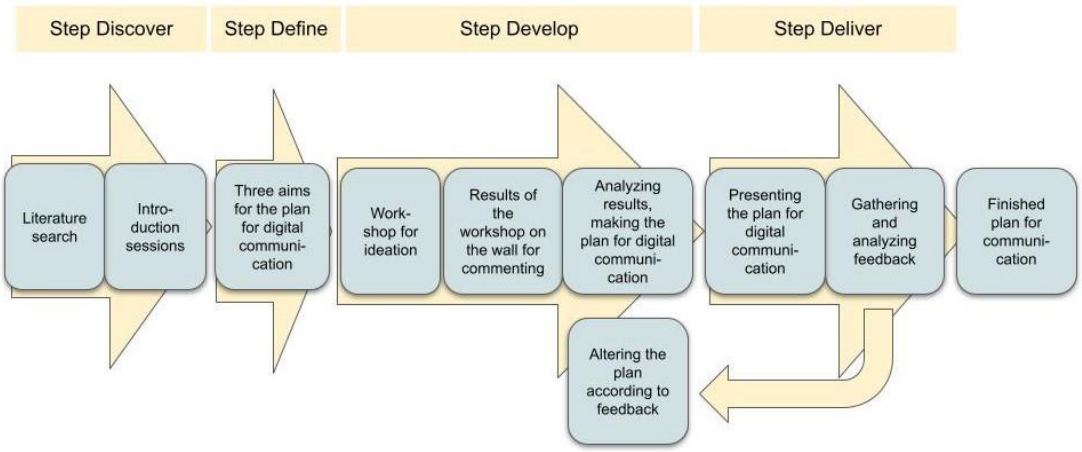

Figure 2. The process of the creating the plan for digital communication practices.

Choosing the topic for the thesis from the experiences of the employees and finding literature about the topic formed the step 1 Discovery. The meaning of the first step is to gather information about the problem, find causes and understand the target of the challenge. Desk research can be used as a tool in the first step. (Elmansy, 2021) Literature was searched from international databases offered by Samk library and Google Scholar to form a comprehension of knowledge work cognitive stressors and cognitive ergonomics.

Short introduction sessions to the topic of the relation of cognitive ergonomics to digital communication were organized for the different occupational groups – doctors and nurses. This was also part of step 1. The first meeting was with nurses and the second one with doctors. Both took place in weekly meetings of each group where everyone who were present those days participated. There was a short introduction to cognitive stress factors in digital communication. The purpose of the introductions was to make the employees more familiar with the topic and ask them to pay attention to the current state of cognitive ergonomics and digital communication before the ideation workshop organized later. This saved time in the workshop and had the employees ready for ideating. If they wanted, they were able to make notes if they had ideas before the workshop. In the introduction sessions they had the

chance to discuss their experiences on the matter and some problems with the digital communication were brought up by the participants.

The issues described by the employees provided good information for defining the problem to be solved. The employees brought up that information is shared through channels that are not optimal for the information type and the same piece of information, or a question can be shared in more than one message increasing the number of messages in Teams and email. Too many notifications feel irritating and cause unnecessary interruptions. Summaries are wanted from conversations that not everyone has time to follow.

The step 2 Define is about narrowing down the data to define the problem and the causes (Elmansy, 2021). The similarities found in literature and in what was known about the perceived problems of the employees were used to converge the topic into three aims for the development plan for digital communication practices: to cut interruptions, distractions, and information overload. This was originally done in the planning phase of the thesis and the problems mentioned by the employees in the introduction sessions were similar with the problems described in the literature and attested validity of the defined problem. Therefore, the aims remained the same after returning to steps 1 and 2.

The step 3 Develop is the ideation and prototyping phase (Elmansy, 2021). Involving the personnel to create common instructions of use, can give valuable viewpoints, and it also enhances commitment to the new practices. Representatives from different groups need to be heard. (Miettinen, 2020; Tahtogroup, n.d.) To have the personnel of Tipotie Health Center participate in the planning of new practices, an ideation workshop was organized for the whole working community. Workshop is a suitable method for ideation step in the service design process (Innanen, 2018). The content of the workshop is presented in chapter 4.2.

In the step 4 Delivery the design is delivered and evaluated, and the feedback is used to finalize the product (Elmansy, 2021). The ideas gained in the

workshop were the guidelines on which the plan for digital communication instructions was made out by the author. Instructions of the organization for the use of digital communication services were considered. Only communication services that were already in use in the organization were used in the plan. The plan for digital communication and information sharing was written out in a slide show and a table that formed a clear and simplified entity. A model team in Teams was also created and access granted to the personnel. Visual form helps people to gain a shared understanding of the idea (Design Council, 2019). The plan was presented to the employees of Tipotie Health Center in a weekly online meeting and the plan was also downloaded to Teams for reading.

Comments of the plan were requested from the Tipotie Health Center personnel with a short digital questionnaire form with open-ended questions. There were two questions in the questionnaire: What was good or useful in the plan and what needs to be developed further. There was also a field for giving other feedback. The questionnaire form offered a possibility to respond anonymously to lower the step of giving honest feedback. The questions were kept simple, because the aim of the plan for digital communication was presented in the plan and the plan was included in the feedback request. Improvements were intended to be made in the plan according to comments, but there were no comments that lead to changes. The wishes in the feedback concerned implementation of the plan, which was not part of the thesis but could be understood as pleased comments of the outcome. The feedback is presented more closely in part 5.3.

Feedback of the plan for digital communication practices was asked from the middle management and designing team in charge of health centers in Tampere by email. The middle management and designing teams consist of the chief physician, the substitute of chief physician normally working as deputy chief physician, the nursing manager, the substitute of nursing manager and two designers. This team had previously given some instructions for the use of Teams concerning for example consultations and team members to be included in the teams of health centers. Feedback was also asked from

the secretary of nursing manager who is also appointed as a M365-tutor for the health centers of Tampere. No answers were received from this group.

A correction to the development plan was made after collecting feedback due to a mistake. One tab in a Teams channel had accidentally been left unmentioned. There was no new presentation arranged after the correction, but it was added to the file that was available to the employees to see.

4.2 The workshop

All the personnel of Tipotie Health Center was invited to the workshop, but part of the personnel had to keep working, because like all the meetings in health centers of Tampere, the workshop was arranged during operating hours. Two registered nurses, one public health nurse, one practical nurse and four doctors participated in the workshop. In the workshop, the topic was again shortly introduced before the activities to make sure everyone knew what the focus and aim of the workshop was. The introduction was followed by a Thirty circles exercise as a warm-up (Kelley, 2018) and it was done solo. In the exercise the participants received a paper with 30 circles, and they were instructed to draw and turn the circles into recognizable objects. They had three minutes of time and they had to try finishing as many as possible. This gave the participants a lesson on ideation and how they need to balance between fluency and flexibility, the two goals of ideation that generate the best ideas when combined. (Kelley, 2018)

After the warm-up exercise the participants were divided into groups. Each group had the same tasks. The first group activity was 10 for 10 Brainstorming. It is a version of the traditional brainstorming activity, but according to AJ&Smart (n.d.) it is lightweight and less affected by hierarchies and personalities and there will be no pointless discussion and yelling. The exercise is done in groups, but everyone will work alone (AJ&Smart, n.d.). The result of this exercise was a group of ideas that the participants had ideated and voted for as good and suitable. This exercise was chosen because it gives

everyone the same opportunity to present their ideas and the ideas are written down anonymously and not discussed at all, only voted, so the ideas of the more quiet or shy employees are not left in the background. This exercise is supposed to produce a lot of ideas, because it focuses on quantity and there is room for bold ideas too (AJ&Smart, n.d.).

With the ideas gained in the previous exercise a design criteria canvas was used to evaluate the ideas and their necessity. The design criteria canvas formed principles for the design plan created after the ideation workshop. With the design criteria canvas steps, the criteria are also clarified and defined to form a guideline through the design process (DBB, n.d.). This business design tool is suitable for ideation because it helps to form an agreement, of which ideas are more important than others to the employees and which are the ones that are definitely-not wanted.

Because there were two groups working with the same activities and topic, there were two different outcomes of the activities. After the workshop the ideas from the brainstorming exercise and the design criteria canvases were placed on a visible place in the team room for two weeks and there was a chance for the employees to comment and fill in the outcomes of other groups by leaving their comments with sticky notes. This also gave absent employees a chance to participate. The slide show of the workshop with the instructions for the exercises is included in Appendix 1.

4.3 Analyzing methods

Ideas in the workshop were written mainly in a few words or single sentences on sticky notes or in the canvas. The ideas were analyzed by using a typification method. Typification is a suitable method for simplifying data and creating generalized types of the data (University of Jyväskylä, 2010). The aim of analyzing the data is to increase the informational value of the data, narrow down and understand the wide entity of the data, and transform the data into usable form (Günther, Hasanen & Juhila, n.d.; Vilkka, 2021, p. 129) The

analysis steps are presented in Figure 3. The ideas on sticky notes were simplified to bring out the meaning. Then the ideas were divided into types according to the matter that the idea wished to change in communication practices and on what issue according to theory and the aim of the thesis the idea was an answer to.

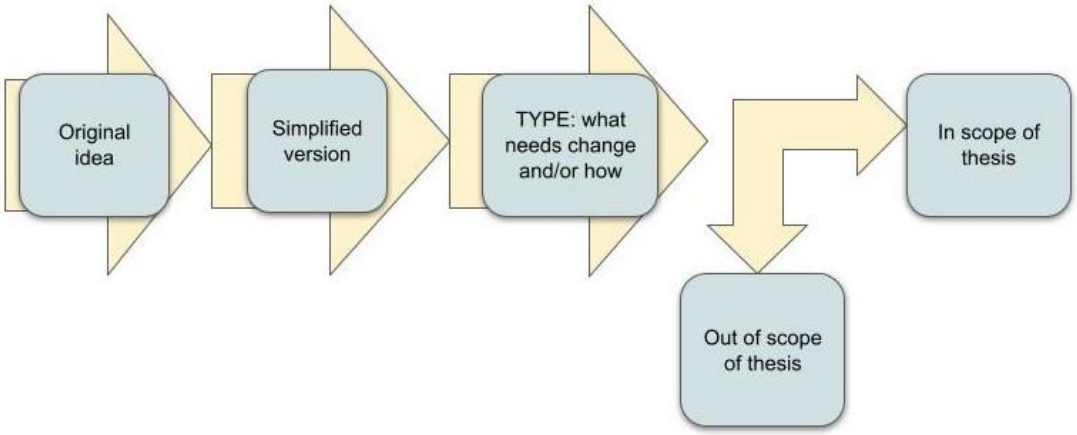

Figure 3. Steps of analyzing the results of the workshop.

According to Eskola (2018, p. 213) research is always a conversation with previous writers, not just presenting new results. The ideas that answered well to the aim of the thesis, got support from the theoretical knowledge and were possible to put into practice were chosen to the development plan of communication practices. Some ideas were not in the scope of this thesis: they either involved suggestions changes to the patient health record system or practices that are advised to be followed in the organization or at least in all the health centers of the organization. These ideas were left out of the development plan for digital communication practices.

Answers to the feedback questionnaire from the development plan for communication practices were analyzed the same way, by typification. The comments were first simplified to bring out the meaning and then categorized into types. The comments concerning the implementation of the digital communication practices were marked as their own type since the implementation could not be included in this thesis.

5 RESULTS

5.1 The results of the workshop

5.1.1 The best ideas chosen by the personnel

The results of the workshop were divided into nine types presented in the Table 1. Seven types of ideas were used in the Design criteria canvas made by the employees. One more type appeared in the sticky notes that were written in the 10 by 10 Brainstorming exercise but were not chosen as the best ones by the employees. These were also typified since it helped to analyze the perceptions of the employees and could be used in the design process of the plan for digital communication.

Table 1. Examples of typification of the workshop results

Type	Example	Design Criteria Canvas group
Clarity of communication, information location	One channel for discussion concerning a specific day, another channel for general matters to be noted also later.	Must have
Informing about work arrangements	Task schedules available for all profession groups	Must have
Cutting of unnecessary notifications	No notification emails about received messages and actions of others in Teams channels	Must have
Data security	Instructions about data security when sharing confidential information	Must have
Smooth running of patient work	Consultation directed to the professional that has treated the patient before	Should have
Time management	More time to use in communication	Should have
Development ideas for patient health record systems	Use of Omaolo-service	Must not have
Staff reachability	Everyone should open teams when at work.	Not included in Design Criteria Canvas

The personnel of Tipotie Health Center expressed the need to make changes in the clarity of communication and in location of new information. A clear agreement was suggested for different channels for daily information concerning only that specific day and for important matters that need to be known later. Clarity was also wished for presentation of the new information, abbreviations were wished to be avoided and the information was asked to be presented in a short way that is easy to understand. A memo of weekly meetings was suggested to be made. It was also wished that information concerning only a small group of employees would be sent directly to the employees in question and not the whole personnel. It was also suggested that every employee would put effort into using the right channels when writing or sharing something in Teams.

Informing about work arrangement was wished to be enhanced by sharing more precise information for example about task distribution and room changes. Unnecessary notifications and information or same information via multiple channels were not wanted. Instructions on data security in digital communication concerning confidential information was requested. There were also development suggestions for the patient health record systems and wishes for not to be using all of them. Any changes in patient record systems cannot be included in this thesis.

There were requests for more time to be used in communication to decrease strain. More time for communication is meant to be organized by decreasing the number of interruptions and distractions, which helps to keep the focus on the task going on and also by making information easier to find which saves time from searching for the needed piece of information.

There were some suggestions that concerned the smooth running of patient work when there is a need to communicate with another professional. It was suggested that if there is paper mail concerning a patient, a reservation should be booked on the professional’s work schedule in the patient record system for reading and working on it. Consultations were wished to be appointed to a professional that has previously been treating the patient. A Teams channel

for consulting a physiotherapist was a feature that was already in use and the use was requested to be continued. These suggestions were all in use already and were also included in the plan for suitable parts considering the scope and limitations of the thesis.

5.1.2 The ideas left outside the Design Criteria Canvas

Some of the sticky notes that were not chosen in the Design Criteria Canvas were not ideas but problems that needed a solution. This information was taken into consideration with the development plan for digital communication because the service design process is an iterative process and new information is welcome during all the steps of the process. There were several wishes for better reachability of the personnel but none of them were included in the ones that were used in the Design Criteria Canvas exercise. It was suggested that everyone would have Teams open on their computer and be available to reach when working. The speed of instant messaging was found a good feature in Teams.

There was a wish for improvement in work arrangement informing that reminders about monthly meetings were marked in bolder letters in the task schedule list used by nurses. As clarity of communication and information location, clear categories were wished in Teams to store information about different matters. Files were suggested to be labeled logically. There was also a wish that only important matter would be informed via Teams and others via email. The task scheduled of doctors were also wished to be continued to send via email to everyone. It was suggested that more features of Teams would be put into use and that there should be less messages sent in general. It was suggested that there would be no notifications on the conversations going on in Teams meeting that the user is not participating. These unnecessary notifications can be removed in settings.

Many of the ideas concerned the smooth running of patient work. More time to use for digital patient contacts was asked for and it was thought that this would

decrease work strain. Unlike in the Design Criteria Canvas, there was a sticky note that included a wish that there would be another way to consult a physiotherapist than a conversation channel in Teams. It seemed that these consultations were perceived straining since they're not usually pointed to anyone specific and therefore it is not certain that the request is answered soon.

Data security was also brought up. It was wished that the software in use for consultation would be secured that the users didn't have to worry about data safety when dealing with confidential patient data. There was also a wish for better notification of internal messages of the patient health record system. Searching for specific information was perceived difficult since there was not enough time to clean up the inbox in email. This was related to time management.

5.2 The development plan for digital communication practices

Since Teams and Outlook were already in frequent use in Tipotie Health Center it was natural to use the same software in the development plan for digital communication. Teams offers a diversity of features for messaging, sharing, and storing files and working together on documents. It can also be used to organize meetings and make notes of the meetings in real time. Email is an agreed official channel for sharing information in the organization, therefore Outlook would also have to be included in the plan. Organizational agreements set limitations for choosing between Teams and Outlook in some cases. For example, Outlook is needed to communicate digitally outside the organization and with some units in patient and employment matters. Also, information is in most cases shared from management to units via email. Reservations of meeting rooms are agreed to be done in Outlook calendar as well. There are organizational instructions that every health center has their own team in Teams, and it is advised that which professionals from other units should have access there for consulting, for example physiotherapists and primary care psychiatric nurses and psychologists.

Teams was chosen as a foundation of the communication plan. Outlook would supplement. Teams offers many functions in one software avoiding the need to switch between programs. Teams is a good platform for online teamwork and keeping files up to date without sending new versions. This reduces the number of interruptions and helps with storing information. The plan includes tips on how to use Teams and Outlook in a way that it is not as straining for the user or others. Teams is made a secure platform in the organization for sharing confidential information in instant messaging between two individuals. Confidential information can also be shared in channel conversation area if all the members of the channel are working in the organization, but the confidential material needs to be removed from the conversation as soon as it is no longer needed to prevent future members from getting access to information that is not meant for them. Emails in Outlook are also secured inside the organization, but not to other email addresses, so it is not recommended to use email at all to contacting patients.

Other tips for using Teams are that it is beneficial to adjust sound and pop-up notifications in settings of every channel according to what feels suitable for the user. Some people get more distracted than others and the number of received messages and notifications varies depending on the number of teams the user is included in. Email notifications about received Teams messages and activities can be switched off in settings too. It is possible to transmit files in Teams conversations, this can be faster and easier to notice than if sent in Outlook.

Outlook is not a good way to have a conversation between two or more participants, because there is a new email for every post and the conversation can be difficult to follow and it causes the inbox to fill up unnecessarily. Better way is to start a group conversation in Teams. It can be beneficial to create folders in Outlook to store emails that need to be saved for later. That way they are easier to find when needed. Always move the opened emails to the right folder after reading. Remove the email if it's not needed later. Instead of sending documents via email, it is good to consider if the document could be

saved in Teams or if it could be published in a conversation area in a post. Notifications can also be adjusted in Outlook settings.

The first step in the plan was to introduce when to use Teams and when to use Outlook. Teams is used for instant messaging between two employees and rapid information sharing with the personnel. It is also used for sharing, storing, and editing documents, such as work instructions, forms, and contact information lists. Online meetings and consultations related to the operating model take place in Teams as instructed by the management.

Outlook is used to send invitations to online meetings because it’s the way to make reservations of meeting rooms and auditorium in the organization. Outlook is a primary contact channel to many associate services, such as interpreter booking service, logistics, wages office and technical support. Outlook is the way to contact professionals and partners outside the organization, since it is not possible via Teams due to organization set limitations. Outlook is a good way to share information between employees when it concerns, for example a certain event or there is a document that one or a few persons need to keep saved for later.

Universal instructions for Teams to ease cognitive ergonomics are listed separately. Before writing the following things should be considered: Who the post is meant to – privately for one person or for everyone. If for everyone, the right channel should be chosen carefully. Is the chosen way the best way to take care of the matter or is there an alternative solution, for example face to face with the other employee or should the matter be discussed in a meeting. The language used should be understandable and used abbreviations shouldn't inconvenience the readability and understanding. There's always the possibility of interrupting someone else's important task, therefore it is best to write the whole matter into one message before sending to avoid many notifications in a row. It is good to use search function if the same matter has been addressed before, the answer might be found without asking a question and interrupting others. Double answers to questions should be avoided when not necessary. Like instructed in the unit, it is good to use ISBAR-model in

consultations also in Teams to make it easier to follow the patient matter. All these instructions aim to decrease distraction and interruptions caused by notifications of new messages.

When quiet working time is needed, it's possible to change status into "busy" or "do not disturb" and add a status message if needed. With the status "busy", others can see you are busy and understand that you might not have a chance to answer but notifications will still appear of new activity. This status appears automatically when a meeting is joined or scheduled. With status "do not disturb" the notifications won't appear if this setting is not changed.

Since there were wishes in the workshop that everyone would have Teams open on their computer, it is mentioned in the communication plan instructions that Teams can be added to the list of applications that start when logging in the computer, but due to organizational settings this must be done by every user themselves separately in every computer they use.

The rest of the development plan for digital communication is presented in a table where used teams, channels included in them, and exceptions in visibility to different employees are listed (Appendix 2). It is also explained what kind of tabs are used in the channels and for what purpose. There are also instructions of use for every tab. The purpose is to decrease information overload by making needed information easier to find and also easier to think where something should be posted to be seen by the right people at the right time.

The main team is named Tipotien terveysasema (Tipotie Health Center) and it includes channels: general, news, planning of work, physiotherapy consultations, mental health consultations, nurses, doctors, and chat corner. General channel includes tabs files and calendar. A tab posts was first accidentally left out of the plan, but it was later added because the posts tab exists automatically in every channel and there is a use for the conversation area in this channel. Posts is for conversation and informing about the current day or urgent matters and for questions for advice. It is meant for conversations that do not need to be read the next day or later. Files can be used for storing

and sharing contact information lists, work instructions and other files that need to be available and kept up to date. There is also a folder for memos of staff meetings. Weekly meetings and other events of the unit that are good to know can be marked in the channel calendar. Examples of these can be monthly staff meetings, alarm system testing moments, days of well-being at work or potluck parties in the break room.

For new instructions, changes, or other matters that everyone needs to know there is an own channel called news. It means that after holidays or other absence from work this is where the new information is easily found in one place. Only the posts tab is used and if there is a document that needs to be stored, it is stored in the general channel files.

Planning of work is a channel for sharing task schedules and other information about work arrangements for everyone to see. In the files there is a folder for planning turns for holidays and documents about turns for different tasks such as procedure days or skin check-up clinics. Information about medical student practice days can be stored here. Any announcement related to these plans can be made in the posts on this channel. Third tab is a wiki where nurses can make autonomous shift planning by booking evening shifts.

There are two channels meant only for consultations. One between physiotherapist and health center staff and the other between the psychiatric nurses and psychologist and the health center staff. The consultations take place in the posts as instructed by the management.

There are their own channels for nurses and doctors respectively. These are for instructions, documents and other matters that concern only the certain professional group. These are separated from the general channel to prevent unnecessary notifications to employees about matters that don't concern them. Files and posts can be used according to need.

The last channel on this team is a chat corner. This channel is meant for other types of conversations, announcement, and questions that are not directly

related to work duties. This can be used to plan, for example Christmas parties or days of well-being at work. Notifications can be turned off and these posts can be read when there is a suitable moment.

The development plan for digital communication also includes two other teams. One is a shared team for nurses of Tipotie Health Center and another health center in Western Tampere. The team has mainly one task and it is to plan the work shifts in emergency reception that are the responsibility of the two health centers together. There is a wiki tab with dates and nurses can book shifts according to their own wish.

There are time periods for example in the summer, when smaller health centers in Tampere are closed and the employees working are moved to bigger health centers during that time. It is common that Lielahti Health Center is closed at summer for a few weeks and the care is centered in Tipotie Health Center. The third team in this plan is for situations like that for the two health center employees to have a common communication platform. Employees of both health centers are members of the team. There is a possibility for daily conversations in the posts area. Memos of weekly meetings are written in meeting notes. Task schedules, holiday lists and lists of rooms and contact information of the employees can be shared in files. It’s good to have a separate team for this since the work activity is very different from normal and the information about these weeks is easier to find and keep updated when it is separated from the normal folders of the two work units.

5.3 Employee feedback of the development plan for digital communication practices

As mentioned earlier, no feedback was received from the middle management and designer team. Two answers were received from the personnel of Tipotie Health Center when asked for feedback on the communication plan. The results were divided into four types: feedback related to the made solutions in the plan, usability of the plan, coverage of the plan and feedback related to

implementation. The usability of the plan was said to be clear, simple, and easy to understand. The coverage was satisfactory.

There were a few comments about the made solutions. Teams in main part was liked because of the real-time communication. However, the plan wasn't perceived to be able to cut information overload enough, it was though that there was a lot of messages in Teams and a lot of emails. The amount of new information is not dependent on the ways that it is forwarded to others, yet when following the instructions of the plan the information could feel less straining since it’s up to individuals that what kind of notifications they receive and when they are in a good situation to read them. Also, when finding the right piece of information when needed, there is no stress about remembering everything when it is first read, the information doesn’t need to be forwarded through many channels, and there is no need to ask others about it causing interruptions or distractions that way.

The rest of the feedback was about implementation. It was wished that the plan would be introduced to all the personnel, and it could be given to new employees first thing they start. There was also a wish to teach the personnel to use Teams better, since it seems that not everyone knows how to, for example adjust settings. Implementation wasn't a part of this thesis, but this feedback was a recognition that the thesis topic and the process in the unit was found important and useful.

6 DISCUSSION

The purpose of the thesis was to provide information about perceived causes of cognitive stress and to create a plan for improving digital communication practices to decrease cognitive load, which was achieved. The aim of the thesis was that these suggested changes would cut interruptions, distractions, and information overload if implemented. The given feedback for the plan for

digital communication reinsured that information overflow and the number of messages are perceived straining and mitigation is desired. Information overload would decrease by creating folders and channels where information can be found easier and in a simple way. Unnecessary information would be cut down by moving conversation about daily level matters into their own place when it's possible not to use time reading them when it's not necessary or not a good time to do so. Distractions could be decreased by adjusting the notification settings. Adjusting the settings and status can help to reduce visual disturbances, which according to Huotilainen & Saarikivi (2018, pp. 25–27) cause distraction especially when working in task that require long periods of concentration. This is useful also since according to Kirsh (2000, pp. 27–29) information overload can also derive from getting interrupted too often.

Another way to decrease distractions is for the employees to learn to find information efficiently and how to use search functionality in Teams and Outlook instead of asking everyone in hope for a quick answer. This can relieve cognitive straining that according to Kirsh (2000, pp. 27–29) can be caused by effort and stress about the time spent in searching for information. It takes time to return to the ongoing task after each interruption, therefore decreased number of interruptions and distractions would lead to more efficient use of working hours. Thus, there would be more time to use in the patient care duties which could decrease straining.

According to Kirsh (2000, pp. 27–29) control of knowledge inventory can be difficult and cause cognitive overload. When the information is stored in Teams instead of sending an email or sharing in a conversation, the decision about inventory is already made and there is no need for the other employees to put their effort into thinking where to store the information or whether storing is even necessary. They have access to the information when it is needed.

The aim of the thesis was also to increase the knowledge of the employees of their own role in managing the cognitive straining by including the employees to the development process. Huotilainen & Saarikivi (2018, pp. 120–121) state that it is beneficial to discuss the culture of interruptions and less stressful ways

to work within the organization, therefore including the personnel to the ideation of communication practices was a suitable way to try to reach a good result. A conclusion of the feedback could be made that at least someone in the working community had understood the role of the employees in managing cognitive straining and thought it was important for current and future employees to know and understand it as well. It was wanted that the instructions of the plan were gone through with the employees and be given to all new employees as well.

Service design as a method worked well. Including the personnel to the development brought understanding of the problem and good ideas to the product. (Elmansy, 2021; Innanen, 2018) The reliability of a service design thesis can be evaluated by discussing the planning and conducting of the process, negotiations and cooperation with the collaboration organization and the results of the process (Vilkka, 2021, pp. 188–189). The service design process was conducted according to the thesis plan that was approved by the organization. The schedule was delayed a few weeks because more time was given for the employees to comment and supplement the ideas of the workshop and for answering the feedback questionnaire than originally planned which delayed other steps. Cooperation with the organization went in a good spirit. The meetings with the employees required to proceed with the process were arranged at the workplace and participation was made possible for the employees by the organization.

The workshop was arranged during the operating hours of Tipotie Health Center, therefore only part of the employees could participate. The number of participants was enough to have ideas running and enough data was gathered for the designing of the development plan. Additional comments could be added to the wall after the workshop which gave the chance for participation for everyone that was willing to do so.

Some tool could have been used in the introduction sessions before the workshop to gain more structured information about the perceived causes of cognitive load. This could have required more time since now there was only

10-15 minutes to use. A questionnaire could have been an option as well. In the workshop, the goal setting according to the thesis aims could have been made clearer to the participants in the workshop. It was mentioned in the beginning that the purpose is to cut interruptions, distractions, and information overload but it was not reminded again when the instructions to the exercises were given, the participants were only instructed to think about how the straining could be decreased. By reminding about the three ways of decreasing the stress there could have been more ideas related to this, but it could have also ended up in cutting down the creativity and range of ideas if the participants would have started to think too much about their answers. It is a part of service design process that all the ideas are welcome and new viewpoints can emerge during the process (Vilkka, 2021, pp. 36–38) and every piece of information is valuable as it increases understanding of the customer and new important needs for development might occur.

More thought could have been given to the visualization of the plan. A table is a familiar way for presenting things which makes it easy to read and understand but there could also have been pictures, that could help understand and remember the content better. A flowchart was also considered as an option but after making sketches of it and since it is not a very common way of presenting actions and instructions in the organizations, a more familiar way was chosen.

There was few feedback received about the development plan for communication practices. It was presumed that it would be difficult to get feedback and ways of collecting feedback was therefore considered carefully. It can be contemplated if a paper questionnaire, for example, would have been a preferable way for the employees to use and lead to more answers. The answers could also have been different if the questions were set in different form, for example if they relied more on the aims of the communication development plan. The questions in the feedback questionnaire were easy to answer, but it might have been possible to get more detailed suggestions for development of the communication plan with more specific questions, like what in the plan do you find especially helpful to reduce interruptions, distractions,

and information overload or what in the plan should be developed further to reduce interruptions, distractions, and information overload. There is a possibility that this would have led to even fewer answers because it narrows the questions down. This would have also made the questions more difficult, since it requires more innovative thinking and possibly more knowledge about how the software works, what is possible, and how the suggested practices effect on the perceived disadvantage of interruptions, distractions, and information overload. Then again, analyzing the answers would have been more reliable with specific questions. It might have been possible to test which questions feel better for a test person, however the simple version was chosen without testing, because it was assumable, that the busy personnel would have little interest to answer if questions at first sight seem complicated or too long. Interviews could have been an informative way of collecting feedback as well, but it would have taken quite a lot of time from work duties, and answering wanted to be anonymous to ensure integrity in answers since the author also works in the unit.

Timing for asking feedback from the management, designer team and M365-tutor was poor since it took place in the end of the year when most of them were facing new duties due to changing roles when switching to the new organization of wellbeing services county. Then again later wouldn’t have been current anymore.

Ethical issues were considered while making of the thesis. For the thesis a contract was made with the Tipotie Health Center representative and a permission to conduct research was applied from the City of Tampere. Voluntariness was made clear to the participants of the workshop and anonymity was ensured by not collecting any names or any other personal details except the professions of the participants. The results were presented in the unit according to plan.

7 CONCLUSIONS

There is a demand for this kind of instructions and a need for a structure in storing information and a playbook in using Teams. Implementation though is not a simple and quick process, it needs guidance, repetition and the management and peers showing an example (Miettinen, 2020). It shouldn't be assumed that everyone who already uses a software really knows how to use it well.

Everyone experiences stress differently and therefore it is difficult to make universal instructions that suit everyone and every situation. Learning new ways or having too many rules for communication might be strenuous for someone too. This needs to be considered when implementing new practices if the aim is to decrease straining.

Many of the ideas in the development plan for digital communication practices ended up in use after the change of organization due to social and health care reform. A plan and resources would be needed for better implementation, as the implementation would require learning new skills and adaptation to new practices. Implementation is not a matter of just reading an instruction manual or having a single training lesson (Miettinen, 2020) but it would need teaching, practice, repetition, follow up and example from the management. There were some ideas in the workshop that were good and usable ideas but not in the scope of the thesis, like ideas concerning patient health records use or other than digital communication practices. Some of these have been taken into discussion in the staff meetings after the presentation of the development plan for digital communication.

Future interests could be editing the development plan to match the available software functions and the security instructions of the new wellbeing services county and organizing a proper implementation. It could be then studied if any effect on perceived cognitive straining is achieved. The development plan for communication practices could also be used as a model for other health

centers or there could be a guide to internal digital communications for new employees.

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APPENDIX 1: WORKSHOP INSTRUCTIONS

30 ympyrää

Muunna mahdollisimman monta ympyrää tunnistettaviksi esineiksi/asioiksi.

Aikaa 3min.

3

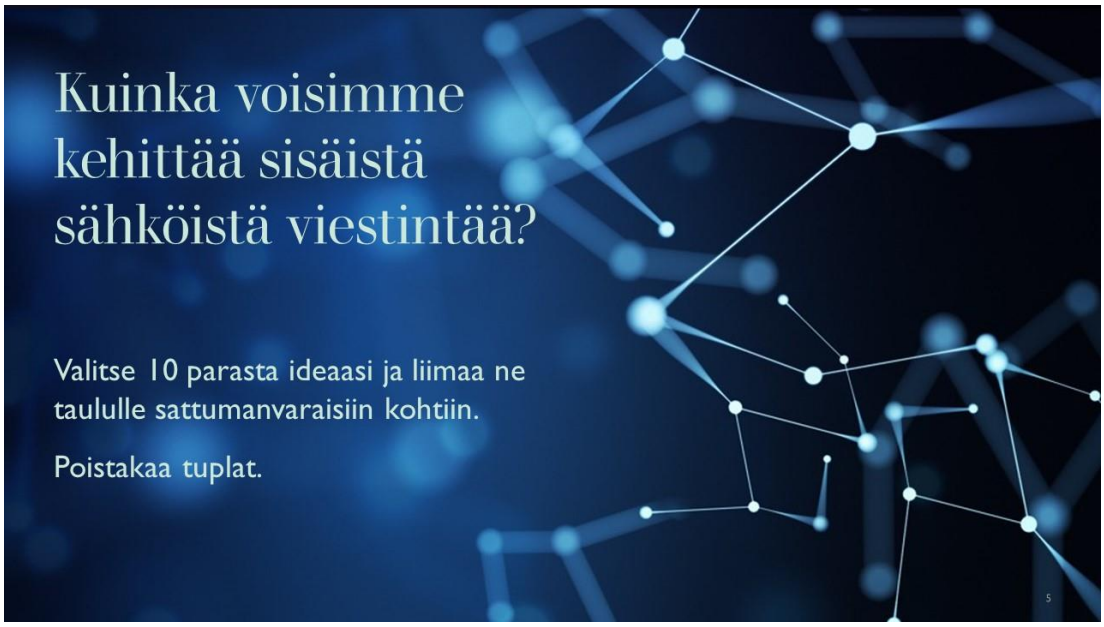
Kuinka voisimme kehittää sisäistä sähköistä viestintää?

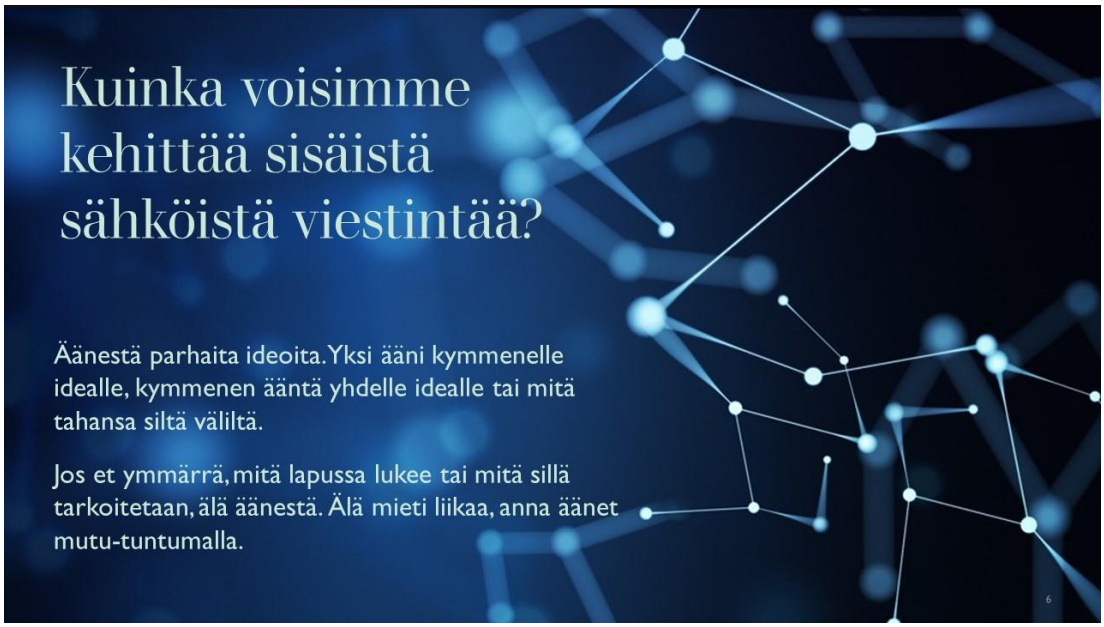
Kirjoita lapuille niin monta ideaa kuin ehdit, aikaa 5min.

Luettava käsiala, yksi idea/tarralappu. Määrä korvaa laadun! Lennokkaat, utopistiset ja hullutkin ideat käyvät. Pääasia on kirjoittaa.

Tavoite vähintään 15-20 ideaa jokaiselta. Ei keskustelua!

4


Kuinka voisimme kehittää sisäistä sähköistä viestintää?
Valitse 10 parasta ideaasi ja liimaa ne taululle sattumanvaraisiin kohtiin.
Poistakaa tuplat.
5


Kuinka voisimme kehittää sisäistä sähköistä viestintää?
Äänestä parhaita ideoita. Yksi ääni kymmenelle idealle, kymmenen ääntä yhdelle idealle tai mitä tahansa siltä väliltä.
Jos et ymmärrä, mitä lapussa lukee tai mitä sillä tarkoitetaan, älä äänestä. Älä mieti liikaa, anna äänet mutu-tuntumalla.
6

Kuinka voisimme kehittää sisäistä sähköistä viestintää?

Järjestäkää ideat äänimäärän mukaan.

7

Suunnittelukriteeritaulu

Sijoitelkaa ideat tauluun oikeaan lokeroon.

PITÄÄ OLLA

Pakko saada käyttöön, ehdottomasti tarvitaan!

OLISI HYVÄ OLLA

Näissä on ideaa, hyviä huomioita, kannatetaan!

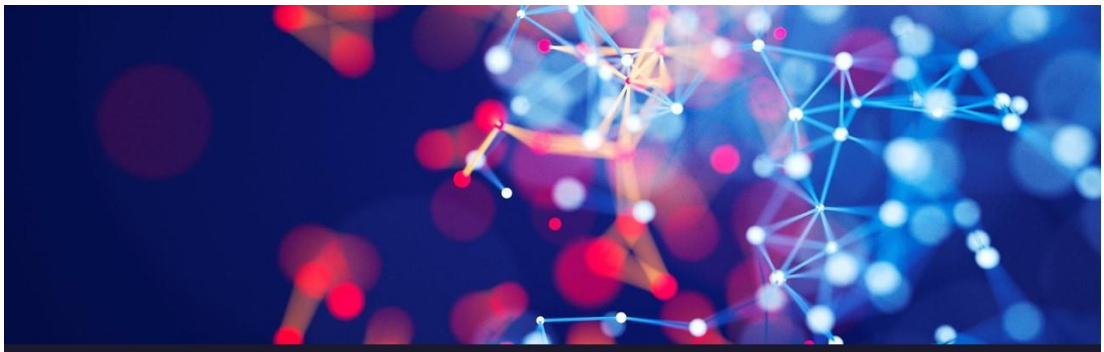
VOI OLLA

Voi näistä joku hyöty olla, ei ainakaan haittaa ole. Vähän viilaamalla tulee hyvä.

EI SAA OLLA

Ei varmasti, ei edes harkita!

8



Yhteenveto

Tuotokset tulevat tiimihuoneeseen noin viikoksi kommentointia varten. Kaikki saavat tehdä lisäehdotuksia ja kommentoida.

Näiden pohjalta tehdään jonkinlainen kaavio/taulukko/suunnitelmaluonnos syksyn aikana.

9

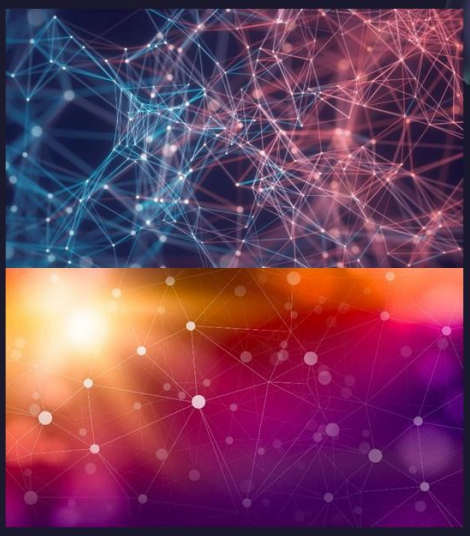
Kiitos aktiivisuudesta!

Aktiviteetit

Ideo.com (30 circles)

Workshopper.com (10 for 10 brainstorming)

Designabetterbusiness.tools (Design criteria canvas)



10

APPENDIX 2: DEVELOPMENT PLAN FOR DIGITAL COMMUNICATION PRACTICES

RAJAUS

- Tämä suunnitelma koskee aseman henkilökunnan välistä kommunikointia ja tiedonjakoa sähköisiä kanavia käyttäen, pois lukien potilastietojärjestelmät
- Tavoite on vähentää keskeytyksiä, hallita häiriöitä sekä vähentää tietotulvaa yhteisillä toimintatavoilla ja ohjeilla

TEAMS VIESTINNÄN POHJANA, OUTLOOK TÄYDENTÄÄ

Mihin käytetään Teamsiä	Mihin käytetään sähköpostia
Kahden henkilön väliseen pikaviestintään.	Organisaation ulkopuoliseen viestintään.
Tietojen ja tiedostojen jakamiseen, säilyttämiseen ja yhdessä työstämiseen.	Organisaatiotasoisen tiedon vastaanottaminen ja välittäminen.
Toimintamallin mukaiseen konsultoimiseen ja konsultoinnista sopimiseen.	Tiedon välittäminen yksilöille, kun viesti sisältää esim. tiettyyn tapahtumaan liittyvää tietoa, liitteen tai jotakin tallessa pidettävää.
Nopeaan tiedonvaihtoon ja tiedottamiseen henkilökunnan kesken.	Viestit yhteistyötahojen esim. tulkkivälitys, logistiikka, kommunikaatiopalvelut, tekniset tuet, palkanlaskenta yms suosivat sähköpostia yhteydenottotapana.
Etäkokoukset.	Kalenterikutsut, tilanvaraukset.

HYVÄ HUOMIOIDA TEAMSIN JA OUTLOOKIN KÄYTÖSSÄ

TEAMS

- Kahdenvälisessä keskustelussa tietoturvallinen myös henkilötiedoille. Kanavien keskustelualueen viesteistä salassa pidettävät tiedot tulee poistaa mahdollisimman pian. Nämä viestit näkyvät kaikille tulevillekin tiimin jäsenille ja vierailijoille.
- Herätteiden määrä voi olla suuri, mutta niiden määrää voi itse hallita tiimien ja kanavien ilmoitusasetuksia säätämällä itsellesi sopivaksi.
- Teams-keskusteluissa voi välittää myös tiedostoja.

OUTLOOK

- Ei käytetä asiakkaiden/potilaiden kanssa viestintään tietoturvasyistä.
- Tietoturvallinen viestintäkanava organisaation sisällä.
- Sähköpostikeskustelun sijaan voisi käyttää myös Teams-ryhmäkeskustelua sähköpostitulvan välttämiseksi.
- Hallitse omaa kuormitustasi avaamalla viesti vasta, kun sinulla on aikaa lukea sen sisältö. Jos lukeminen jää kesken, merkitse lukemattomaksi.
- Sähköpostitse tiedon välittämisen sijaan mieti voisiko tiedon tallentaa Teamsiin esim. tiedostona tai tehdä siitä uutisen.
- Luo kansioita ja siirrä säilytystä vaativat viestit niihin, jotta ne löytyvät myöhemmin helpommin.
- Ilmoitusasetuksia voi säätää esim. tuleeko uusista viesteistä työpöytäilmoitus, äänimerkki ja vilkkuuko tehtäväpalkissa.
- Teams-viestien sähköposti-ilmoitukset saa pois päältä.

YLEISIÄ OHJEITA TEAMS

- Mieti ennen kirjoittamista:
  - Kenelle tai mihin kirjoitan, yksityisviestillä vai kaikille. Jos kirjoitat kaikille, valitse oikea kanava.
  - Onko tämä paras tapa hoitaa asia.
  - Millaista kieltä käytän, tulenko ymmärretyksi. Esim lyhenteet saattavat haitata ymmärtämistä.
  - Kirjoita mahdollisuuksien mukaan asiat yhteen viestiin, ainakin ensimmäistä viestiä lähettäessä. Huomioi, että saatat keskeyttää vastaanoton ja jokaisesta enter-painalluksesta vastaanottajalle tulee ilmoitus.
  - Onko asiasta jo keskusteltu/kysytty aiemmin. Kokeile hakua. Löytyisikö vastaus kysymykseesi aiemmista viesteistä jopa nopeammin.
  - Konsultaatioissa hyödynnä ISBAR-mallia, niin konsultointia on helpompi seurata. Konsultoi mahdollisuuksien mukaan työntekijää, joka on jo aiemmin hoitanut asiakasta.
  - Vältetään keskusteluissa tuplavastauksia, ellei ole tarpeen.
- Käytä tila-tietoja:
  - Varattu = kokouksessa tai hiljaisen työn hetki
  - Älä häiritse tila = henkilö ei ota nyt vastaan viestejä (eivät hälytä).
- Teamsin voi omista asetuksista lisätä käynnistymisohjelmaksi, mutta tämä on käyttäjä- ja konekohtainen ominaisuus Tampereen kaupungilla, eli tämän joutuu jokainen tekemään jokaiselle käyttämälleen koneelle erikseen.

Tiimi	Kanavat: Olemassa/Uusi	Välilehti	Mihin tarkoitettu	Ohje
TIPOTIEN TERVEYSASEMA	Yleinen (O)	Viestit	Päiväkohtaiset, kiireiset asiat ja kysymykset	Tiedotukset, keskustelut ja kysymykset aiheista, jotka koskevat kuluvaa päivää tai ovat muutoin lyhytkestoisia, eikä niihin ole tarvetta perehtyä myöhemmin.
		Tiedostot	Yhteystietolista, kansioita ohjeille TAI muistikirja johon näitä koottu, kokousmuistiinpanot	Tänne tallennetaan tiedostot, joita tarvitaan useammin kuin kerran, jotta ne löytyvät helposti ja ovat myös tulevien työntekijöiden käytettävissä
		Kalenteri	Viikkovartti ja sen muistiinpanot, hälytysjärjestelmän testaukset, aseman kokoukset ja tiimimiitit, tyhy-päivät, yhteiset aamupalat	Yhteiset etäkokoukset ja live-kokoukset lisätään kanavan kalenteriin, josta kanavan kaikki jäsenet voivat liittyä kokoukseen tai näkevät live-kokouksen sijainnin. Aseman tapahtumat merkitään myös kanavan kalenteriin, josta ovat kaikkien helposti löydettävissä.
	Uutiset (U)	Viestit	Uudet tiedotettavat asiat, joihin saattaa liittyä halua keskustella tai tieto täydentyy	Tiedotusluontoiset asiat, kuten uudet työohjeet, tiedotetaan Uutisissa, josta on helppo poissaolon jälkeen tarkistaa mikä on muuttunut. Jos työohjeisiin tulee muutosta tai lisäystä, niin tiedostoissa mahdollisesti olevat ohjeet on myös hyvä samalla päivittää.
	Työn suunnittelu (U)	Tiedostot	Lääkäreiden ja hoitajien viikkosuunnitelmat huonesijoituksineen sekä lomat ja muut työjärjestelyasiat, kuten luomipolit, toimenpidepäivät, kandiopetuspäivät jne.	Kansio lomatoiveille ja vahvistetuille lomille. Myös muut työvuoroihin ja työjärjestelyihin liittyvät tiedostot tänne.
		Viestit	Tiedotus uusista viikkosuunnitelmista, huomautukset näihin liittyen	Lähinnä ilmoitusluontoiset asiat ja tarvittaessa keskustelu työn suunnitteluun liittyen.
		Wiki	Autonominen tiettyjen työvuorojen suunnittelulista esim. iltavuorot	Lista päivämääristä, johon tarvitaan työntekijä. Jokainen näkee vuorot ja voi varata vuoroja itselleen. Vahvistetut työvuorot lihavoidaan, jolloin niitä ei voi enää muuttaa keskustelematta esihenkilön kanssa. Esim. hoitajien iltavuorot, voisi hyödyntää myös esim lääkäreiden torstaiaamupäivystyksiin.
	Fysioterapian konsultaatiot (O)	Viestit	Konsultoinnit, jatkohoitojärjestelyt	Konsultaatiopyynnöt fysioterapeuteilta hoitajille ja lääkäreille tai toisinpäin. Keskustelussa voi kysyä neuvoa tai kysyä kuka paremmin asian hoitoon soveltuva ammattilainen voisi jatkaa asiakkaan asian hoitamista.
	MT-konsultaatiot (O)	Viestit	Konsultoinnit ja niistä sopiminen	Konsultaatiopyynnöt mielenterveystyöparilta hoitajille ja lääkäreille tai toisinpäin.
	Hoitajat (U) pääsy vain hoitajilla	Viestit	Vain hoitajia koskevat asiat, kysymykset ja tiedotukset.	Keskustelu ja kysymykset aiheista, jotka koskevat vain hoitajia ja herätteet keskusteluviesteistä lääkäreille eivät olisi tarkoituksenmukaisia.
		Tiedostot	Hoitajien kokouksista muistiot, vain hoitajan työtä koskevat tiedostot kuten ohjeet, asiakirjat ja lomakkeet. Opiskelijaohjauksen materiaalit.	Tänne tallennetaan tiedostot, joita tarvitaan useammin kuin kerran, jotta ne löytyvät helposti ja ovat myös tulevien työntekijöiden käytettävissä
	Lääkärit (U) pääsy vain lääkäreillä	Viestit	Vain lääkäreitä koskevat asiat, kysymykset ja tiedotukset.	Keskustelu ja kysymykset aiheista, jotka koskevat vain lääkäreitä ja herätteet keskusteluviesteistä hoitajille eivät olisi tarkoituksenmukaisia.
		Tiedostot	Vain lääkäreiden työtä koskevat tiedostot, kuten ohjeet, asiakirjat ja lomakkeet.	Tänne tallennetaan tiedostot, joita tarvitaan useammin kuin kerran, jotta ne löytyvät helposti ja ovat myös tulevien työntekijöiden käytettävissä
	Pulinakulma (U)	Viestit	Muualle kuulumaton kysely / ilmoittelu. Työyhteisön asiat, jotka eivät suoraan liity työtehtäviin. Tyhy-päivät, pikkujoulut jne.	Tähän sopisi myös pelkkä keskusteluryhmä tai sitten kanavalle rajataan vain terveysaseman lääkärit ja hoitajat.

Tiimi	Kanavat: Olemassa/Uusi	Välilehti	Mihin tarkoitettu	Ohje
TIPO/LIE kiirevo	Yleinen (O)	Wiki	Autonominen kiirevastaanottovuorojen suunnittelulista	Lista päivämääristä, johon tarvitaan työntekijä. Jokainen näkee vuorot ja voi varata vuoroja itselleen. Vahvistetut työvuorot lihavoidaan, jolloin niitä ei voi enää muuttaa keskustelematta esihenkilön kanssa.
		Viestit	Huomautukset tai muistutukset vuorojen suunnittelusta	
Sulkuajan toiminta (U)	Yleinen	Kalenteri	Viikkokokouset muistiinpanoineen	
		Viestit	Neuvojen kysyminen, äkilliset asiat	
		Tiedostot	Sulkuajan ohjeet, työnjakolistat	