



# Effective and secure communication and management during the pandemic

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2021 Laurea



**Laurea University of Applied Sciences**

**Effective and secure communication and management during  
the pandemic**

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Degree Programme in Safety,  
Security and Risk Management  
November, 2021

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Year	2021	Number of pages	61
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The global pandemic caused a shift to move to working remotely and it caused a change in communication by making it happen via online tools. This inspired the main objective of the thesis, which was finding out if Webhelp Finland Oy was using their communication tools as effectively as they could and also if the security of these methods had any room for improvement. Based on the results, the idea was to create recommendations for the company. Another objective was personal professional growth and learning.

Webhelp Finland is an information technology company that offers solutions in that fields for other companies and their clients and customers. I work in the capacity of a senior technical support advisor. My daily work experiences and observations were utilized in the thesis.

Theoretical background in the form of both written and online sources was used to establish a basis to what makes for effective communication using tools like email and video calling. The theory was also utilized in finding out potential security considerations and risks regarding the different communication tools. The method that was used for this thesis is diary. This entailed the daily and weekly information and data gathering, analysis and conclusions.

The key results and findings were that the security was already on a great level and the communication tools were utilized mostly very effectively. However, there were some potential shortcomings, especially regarding email, that resulted in some recommendations on how the company could potentially utilize them more effectively. Furthermore, even though security was already at a high level, it did help fulfill the objective for personal and professional growth by giving new insights on what to take into account for security when utilizing the different online communication tools.

Keywords: Communication, pandemic, security, effectivity

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## 1 Introduction

In March 2020 the COVID-19 pandemic had reached a stage where in order to control it, extensive restrictions were put in place to help control the spread of the virus. This forced a sudden and considerable effort to change how many people work. For many, this meant moving their workstation to home and working remotely. For some jobs and workplaces this may have not been possible at all and in some cases, it was not possible for all individuals, creating a sort of a hybrid situation where some work remotely while some still stayed in the office. (World Health Organization 2021.)

This shift to remote working has meant that the traditional, face to face meetings are either extremely limited or non-existent and instead, many have to rely on different ways of communicating using electronic channels. These channels include email, video and audio teleconferencing and online chatting, most being done via dedicated applications. These methods have existed for a considerable time now, but the reliance on them may never have been this extensive. (Vasel 2021.)

That raised some questions, like are these communication methods being utilized in our workplace as effectively as they could be? How can you manage and train people remotely so that it is effective? What security threats and considerations are there related to these methods? These are the main questions that this thesis aims to study via a diary format.

The groundwork for the thesis began on April 14, 2021, with the topic analysis and establishing agreement with the client. The thesis plan was completed in the first half of May. The diary phase of the thesis started on May 31 and continued until July 11. From July 12 to July 30, I had a summer vacation, therefore there was a break in the diary during that period. I resumed work on the diary portion of the thesis from August 2 to August 29, completing the 10-week period. The plan was to finalize and finish the thesis during September.

### 1.1 The client - Webhelp Finland Oy

Webhelp is a global business process outsourcing and information technology consultancy company headquartered in Paris. It provides client companies and organizations with technical support solutions for their customers, sales solutions and consultation services, among others. It was founded in 2000 in Paris, France and has grown at a fast pace since, especially by buying smaller companies that have operated within the same field and

integrating the existing clients and services into their own company. With over 60 000 employees, more than 150 locations in over 49 countries Webhelp is a large company with a global presence.

I work for Webhelp Finland, the Finnish branch of the company, which is in turn a part of Webhelp Nordic which encompasses the Nordic countries and the Baltic region. Due to the global nature of the company and its clients, the working language is English, though in Finland the main spoken communication is in Finnish both internally and with the customers of the client companies. (Webhelp 2021.)

## 1.2 Analysis of the current personal level of expertise and the workplace

In this subchapter I cover what my daily work entails and what my current level of expertise is. This is in order to set a basis from where I start to have something to compare my potential future progress and professional growth to. Also, it is worth covering the stakeholders so that my role and the role of the team to which I belong to is clearer and how it affects the rest of the company.

### 1.2.1 Job description and current level of expertise

My main job is to work as a senior technical support advisor. In a word, that means helping the customers of our client company with issues and problems that they may have with their computers, smart devices and related accessories. We help them remotely via a call center so it is not done in person but via electronic channels, mostly over a phone call. For example, we may help with issues like connectivity; internet connection is not working as expected or a Bluetooth device keeps losing connection. First, we identify the issue, then isolate it to a specific compartment, like software or hardware and then try and provide solutions. Some cases may be more obscure and require further research, which we will do and then implement the solutions that the research provided.

The seniority comes in the form of having generally more experience and further training to handle more difficult issues that the junior technical support advisors may not yet have. The seniority also means taking over the case if a customer needs to talk to a supervisor. The seniority also entails more responsibilities but also more freedom on how to handle the cases, like using options and solutions that the junior staff is not allowed to use and for example the power to make final decisions.

I am also currently receiving management training and occasionally given management, leadership and training opportunities. These are usually temporary assignments, lasting usually a few hours at a time. For example, I may help get new coworkers get adjusted to the tools or hold team meetings, going over the current topics that need addressing for the week.

In order to survive daily duties as a senior advisor, I need a substantial amount of knowledge. I need to understand how the software of our supported devices work, we need to know how the hardware works - even though we cannot fix hardware remotely, we at least have to be aware of issues that could be caused by a problem in the hardware and help isolate the issue to the hardware components. We also need to know about connectivity and how different devices, hardware and software interact with each other. We need to know what settings do and how to adjust them. We need to have up to date information as new updates to software or hardware can change how things work rather drastically. We also need know how to handle sensitive information in accordance to our own rules and regulations, the wishes and rules of the client and most importantly, local laws, like the General Data Protection Regulation (GDPR) of the European Union.

We also need to understand the human aspect. After all, human errors cause a large portion of information technology issues that me and my colleagues have to deal with. For example, we should be aware of the most common misconceptions and misunderstandings that the customers may have and how to correct them.

When it comes to my management duties, the aforementioned information is again needed, as that duty is often about delivering that information to others for the first time, or helping them understand it deeper. But in that role, I do need knowledge regarding how exactly to convey the information and I need to know what information is relevant for the given situation and what can be covered later.

Regarding skill requirements, one of the first things that comes to mind are Information Technology skills or computer skills. That refers to the skill of using information technologies such as computers, smartphones, other smart devices, network devices and peripherals. It also entails the knowledge associated with the use of those devices; how they function, how they interact with each other, how they connect to each other and what is expected function and what is not. It can be actually a rather broad definition that encompasses both the hardware and software and there are many kinds of hardware and software, depending on the device in question.

One of the key skills is communication. I need to communicate with the customers. In order to identify the problem, I do need to listen to them and ask the right questions. Also communicating and explaining why and what we need to do are important to get the desired solution. Communication is also needed when interacting with my colleagues and also when

managing. Radovic Markovic and Salamzadeh (2018) argue that communication is vital to being an effective manager.

Customer service is also another very important skill that we need every day. After all, we interact with customers who are different individuals with different backgrounds, characters, experiences and the situations and problems also vary. Relating and understanding the issues that the customers are facing are crucial. Also adjusting to the customer's skill level is important, as a customer who is very knowledgeable may not have the time or patience to hear any explanations but just want a straightforward answer to their predicament whereas a very inexperienced customer may need some explanation as to what is going on and why we need to do the things that need doing.

Language skills are also needed in our daily work. We service the customers using Finnish and English so a firm grasp on both languages in written and spoken form is crucial for success. Furthermore, our company language is English, so internal communication often happens in English, even though most of the day-to-day communication in the Finnish section of Webhelp is in Finnish.

During my almost two years of working at Webhelp, I have acquired a lot of knowledge about computers and smart devices and how they work together. I think I have also learned a lot about problem solving and especially about isolating the problems and I think those can be helpful in other situations besides the daily work I do. I believe I have also learned something about customer service, but it is something that is a continuous learning process, even though I have extensive previous experience in customer service.

### 1.2.2 Personal expertise at the moment

When it comes to my general duties as a senior advisor, I feel that I am experienced and an expert. I know how to do my job and meet the expectations and teach and guide others for this role. I feel like I can take on complex and difficult cases and solve them.

On the other hand, when it comes to management and leadership skills, that is something I do not have much experience in and those things are something I need to develop the most at the moment. Especially organization and time management so that I can make the best out of meetings that I hold and that when I guide and teach junior coworkers, I guide them efficiently. I think I am doing an okay job at the moment, but my tendency to overexplain things may cause it harder to learn the things that are most relevant or important to learn at the given moment. I also feel like I need to pay more attention to plan my time more efficiently so that the entire time is used but for relevant things.



### 1.2.3 Stakeholders

In this subchapter, I will introduce the key stakeholders and explain some of the relationships between them. I will mostly focus on my department, the senior advisor team, because I do not necessarily have enough information about the exact interactions between other departments like the upper management and our client company. Furthermore, I feel that focusing on the department where I work is more relevant for the topic of the thesis.

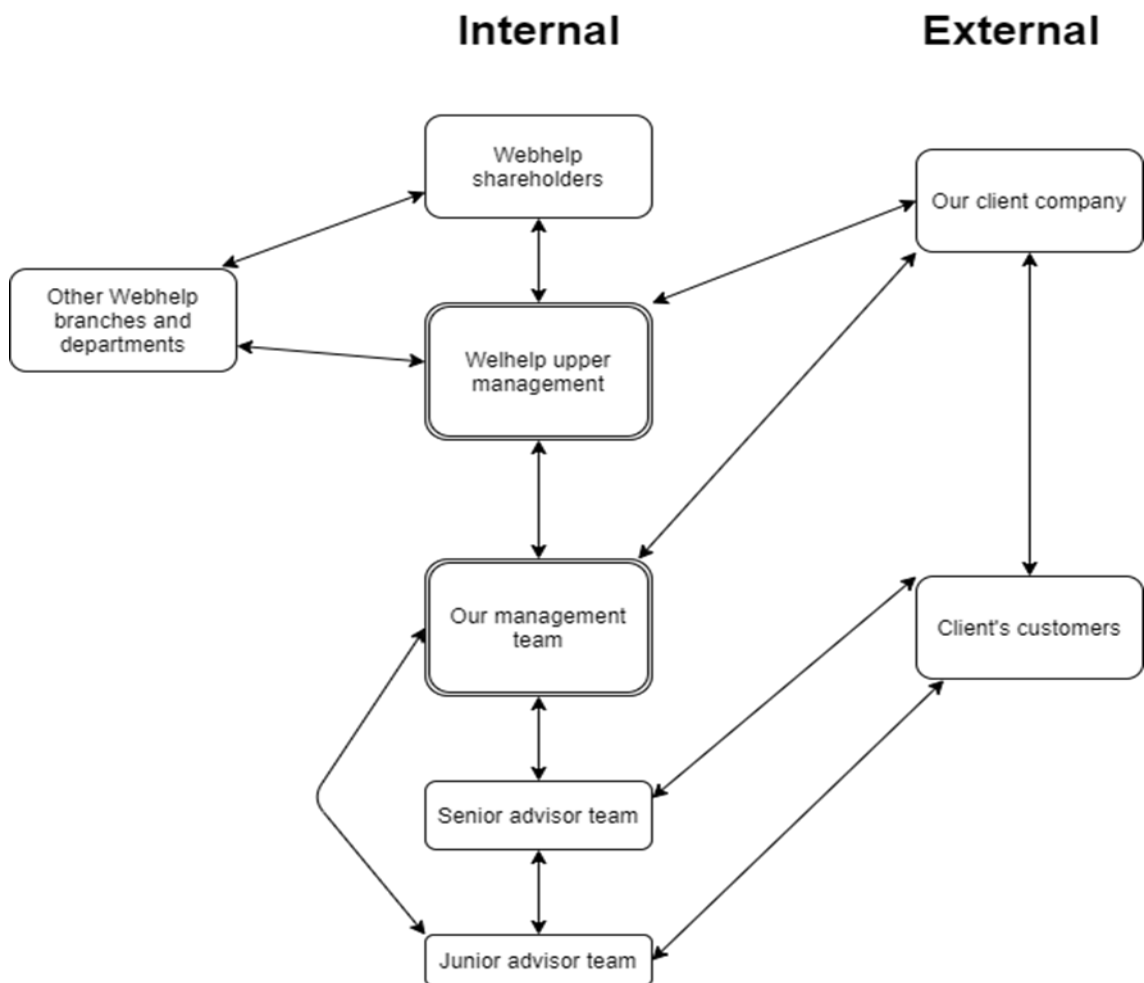


Figure 1: Stakeholder chart

As the above chart hopefully demonstrates, the key external stakeholders are our client company and their customers. That is because they are the groups that our work affects the most, outside of our own company.

Internally, I will focus on our senior advisor team. We interact directly with our client's customers and also directly provide support for the junior advisor team, making them the key

direct stakeholders to our work. Also, we have to report to our own management, whom will be affected based on our performance. Those three groups are the stakeholders that we interact directly with.

However, it is highly important to note that there are stakeholders that are indirectly affected by what we do. For example, in a case where the junior advisor team gives our client's customer some false expectations, like promising that the senior team will fix this issue in 5 minutes. Then the senior team starts handling the case and quickly notices that this issue is actually not something that can even be fixed. This will put the senior advisor team in an awkward position having to explain this to the customer. This entire interaction will most likely affect the customer negatively, and will most likely result in negative feedback towards our client company. And that will definitely reflect on our client's relationship with our company, most likely targeting our upper management who will in turn may have to discuss this with lower management, who will discuss it with their respective departments.

In the above imaginary example, a human error in the junior department can affect the senior department and the customer directly, and indirectly the client company, and management of Webhelp. Therefore, it is good to remember that our actions not only affect ourselves or those around us, but can ripple surprisingly, causing far-reaching consequences. This of course goes for positive things as well; doing a good job with one client's customers can attract more clients and business for Webhelp.

Another thing that I wanted to bring up is that I could not identify any key stakeholders that would have a passive role. While not nearly all stakeholders interact with each other directly, the ones that do interact directly between each other have very much a bilateral relationship where the communication happens both ways and the actions of one group will affect the other and vice versa.

#### 1.2.4 Interactions

As discussed in the background subchapter, the communication that me and the rest of my department do with our customers has not changed much since the beginning of the pandemic. It happens mostly over the phone but in a much smaller extent via email. When interacting with the customers, customer service skills are vital, as you cannot talk to a customer in the same way that you can to a colleague. For example, a customer could get confused if you speak with them in the same technical terms and phrases whereas a colleague most likely will understand what you mean.

One of the internal stakeholders that we interact with is the junior advisor team. The most common interaction is to provide them advice when they consult us on difficult cases or take over the case as necessary. This happens mostly over the phone and is something that was not affected either by the pandemic; it happened the same way before. Therefore, I will leave that part out of the scope of this thesis. Another key interaction that we do with the junior team is to provide them with guidance and help train them when they first start working or if they have received new training, for example regarding a new device. This guidance used to be given in person before the pandemic, at least for the most part, but now has to be given mainly remotely, most often using chat or video/audio calls via applications.

The last but not least of our interactions is with our management team. The management team consists of team managers who are our direct supervisors and also the quality assurance team. Our interactions with them were mostly face to face before the pandemic. Now, they are mostly via audio/video calls or chats via applications. For some instances, also emails. These interactions usually take the form of team meetings, trainings and coaching, for example via monthly employee feedback discussion (feedback from both the employer and employee to each other).

### 1.3 Objectives for the thesis

The main goal of the thesis is to study effective but secure communication and leadership under a pandemic that limits and affects the available methods of communication. This is done by using a diary-form thesis, thus gathering actual work experiences that can be used for the study.

The first objective is to gather a knowledge base to establish current research and theoretical background. It will need to cover the three key areas of this thesis: communication, leadership (with specific emphasis on the communication part of the leadership) and information security. The third topic is of vital importance as information security is not only often regulated by laws and regulations, but it is also an important asset for a company. Different methods of communication also have different information security considerations and also the working conditions during the pandemic differ from the established norms.

The theoretical background will be also used to compare to the experiences gathered into the diary-form thesis. When daily and weekly data is gathered, it can be compared to the existing theory to see if they correlate and if not, why.

Finally, comparison of the existing knowledge base and the actual working experiences can be used to draw conclusions. First to see if the existing research could be utilized to improve

either my own methods of working or the company's processes and methods, or both. Secondly, if the actual working experiences produce any new ideas that could be used to improve either my or the company's methods. Any potential new ideas should also be compared to the existing theory in order to check their validity and usability.

The personal end goal would be to identify best practices that can be used to further my professional growth in the areas of communication and leadership while maintaining or exceeding the current information security requirements. For the company the idea would be to provide information of my own experiences and the results of this research that could hopefully be utilized to improve their existing methods and processes.

## 2 Knowledge base and theoretical background

The goal is to use references from both written and online sources. However, possibly due to the nature of the topic, it seems that there are plenty of online sources available regarding the subject matter and key concepts but not very many written sources.

Many of the written source materials also may explore the subject matter and key concepts from a very technical standpoint which is not the point of this study. Another thing to keep in mind regarding the source materials is that some of them may be old. Information technology grows and evolves at a very fast pace, so source materials that are a decade old or older may not even be relevant anymore.

Another thing worth considering is the reliability of the sources. I did my best to make sure the sources used come from legitimate, reviewed sources. During my research, some of the potential sources turned out to be more or less commercials by companies or sponsored by a company or other party, after closer inspection.

This being essentially a development project that consists of personal development plans and potential development for the company I work for, it will be done in the diary form thesis. That will be a result of comparing the existing theory to personal experiences in practice and then drawing conclusions and potential developmental ideas based on those comparisons. There are a couple of methods that I would like to also utilize during this thesis. The first is the SWOT (strengths, weaknesses, opportunities, threats) analysis and the second is the use of a risk assessment via a risk assessment matrix. The reason why I am not using them in the theoretical background is so that I could gather some more information to make more accurate assessments. Therefore, the plan is to utilize them during the diary stage or as a part of it.

After the theory has been formed, the next thing to do is go into the diary part and put the theory into practice and compare them. However, the idea is to also keep collecting and improving upon the theoretical background in case something needs to be verified via a source or if matters come up during the diary phase that require further study and research. Especially adding more printed, literary sources would something that I would very much to do. The existing online sources seem credible and luckily, they are available.

## 2.1 Key concepts

In this chapter I will introduce the key concepts and topics regarding the thesis. This is a preliminary list of the concepts that I deemed were most relevant and important but if during the writing of the thesis, there come up concepts or topics that may need further explanation, they will be added to this knowledge base. Some of the smaller concepts and methods are introduced and explained later during the diary section.

## 2.2 Internal Communication

Internal communication in the context of this thesis refers to the communication in our workplace, in other words the information that we share, instructions we give as individuals between one another and as teams to other teams and individuals. But why does internal communication matter? According to Barton (2014, 36), internal communication is crucial for organizations, because it happens between employees who have a direct impact on productivity and therefore profitability. Barton (2014, 36) further states that internal communication can affect external communication as well, in the way of creating people who give a positive image of the company to external parties with their effective and positive communication.

The reason why I chose to focus on the internal communication is because I felt that the change to working mostly from home affected our internal communication and the workplace itself and not how we interact with our customers. After all, as we basically offer remote support for the customers anyway, it did not change in practice. Additionally, it has two other benefits: the first being that it will help limit the scope of the thesis and also it will make it easier to protect customer data and to comply with the company's strict non-disclosure agreements.

In the later chapters I will explain the methods of communication that we use. The methods themselves should be familiar as they are very common methods of communication and have been in widespread use for decades, so explaining them in detail feels unnecessary. However,

I wanted to explain briefly how we utilize them in our daily work. All of these methods are used on a daily or almost daily basis, except for the face-to-face communication due to safety requirements caused by the ongoing pandemic.

### 2.3 Effective communication

By effective communication I mean utilizing the methods of communication as efficiently as possible. This means looking at the best practices for each method and to see if we use them as effectively as they potentially could be.

I want to look at what effective communication entails for each method, because there are considerable differences between the methods and while some general communication best practices could potentially be applied to each of them, the differences between the methods warrant a closer, more tailored look. The different methods have different advantages and disadvantages. For example, writing emails has the advantage of allowing for long messages and sending and forwarding messages quickly to multiple recipients but also the downside of not necessarily knowing if the person has received it and also having to wait for them to read the message and then reply back.

Why is effective communication important? It can increase productivity - clear, easy to understand instructions can be easier to follow than contradicting, unclear messages. Also, misunderstandings and correcting their consequences can take time, so avoiding those by effective communication should be important. It can also be beneficial for teamwork and morale. (Kashyap 2021.)

According to Patterson, Grenny, McMillan and Switzler (2012, 27, 28), effective and skillful communication can also result in better financial decisions, savings, better safety and increased trust between teams and employees. Therefore, it could be argued that effective communication is beneficial in multiple, different ways. It is also worth noting that the benefits are not limited only to the company or the employees but there are benefits for both.

### 2.4 Management

Management is about meeting two responsibilities: first, to achieve the results set for you by your organization and second, to retain your people. The results are dependent on what your role and organization, for example sales manager may be expected to meet or exceed sales quotas and are defined as having a quantifiable metric, like a sales figure in dollars. Retaining

people has a rather literal meaning, as it refers to keeping people from leaving the organization. It matters because replacing employees can be expensive and productivity also suffers as the new employee may not yet be as efficient as the more experienced employee that they are replacing. (Horstman 2021, 17, 20.)

I will focus on the management aspects of my work and with special attention to communication when leading or guiding people. In my work, I get opportunities to for example provide more hands-on guidance for junior staff and for example hold meetings where I can explain how certain procedure or tool works. I feel that it is very important for my professional growth that these opportunities are exploited with the best possible efficiency and that is why I want to utilize existing theoretical background to my daily work and try and see if they help me become better at those situations. I also strongly feel that making the best of those situations is not only beneficial to me, but for the junior or new co-workers and their professional growth.

## 2.5 Information security

Information security can be defined as protecting assets, and more specifically assets that are not physical in nature, such as software, data or information stored in digital form. However, protecting people is also part of the information security, as that data or information can affect them or contain direct information about the people. (Andress 2011, 22.)

Information security controls, or the counters to potential threats have a couple of key considerations: First is the cost-effectiveness; the measures taken should be in proportion to the asset being protected. In other words, protecting something that is not valuable with extensive, expensive measures may not be worth it. The second consideration is the effect the control or controls have on the availability or usability of the information; if the extensive security measures prevent people from using the information effectively, it may harm the business by making it less effective than it could be. Therefore, finding balance for these two key aspects is important. (Andress 2011, 23.)

In the following chapters, information security focuses on the potential information security risks that the different communication methods entail. Also, the implementation of different controls to reduce or eliminate those risks and their relationship to the effectiveness of the communication will be discussed.

## 2.6 Email

We mostly utilize this method of communication for sending longer messages that may require a longer time to read or to send attachments like documents, screenshots or small files. For example, it may be used to communicate changes to procedures, new product information or to make adjustments to schedules.

It can be used to communicate to one person at a time or to quickly reach multiple people at once. Therefore, it can be used to communicate urgent information to a lot of people at once and without having to fear that the message may be lost in a busy chat. However, it may not be the quickest method to communicate as responding and waiting for a response may take time. (Bailey & Leland 2009, 166.)

## 2.7 Video/audio conferences

We utilize this method by using dedicated apps for the most of the time. This has become the standard way of doing one-to-one meetings like professional developmental discussions or team meetings for multiple people. We also use it for training, at least when training multiple people at once.

While it can be used to discuss and deliver information quickly, it does usually require at least a bit of setting up as it usually has to be scheduled in order to make sure that the people that have to be present can actually be present.

## 2.8 Chat via applications

Again, we use this method usually via dedicated applications. This is mostly used for team chats where we can discuss difficult problems that we need to solve and thus utilize the collective experience and knowledge of co-workers. Also, it can be used to more casually communicate between the team members, helping to bring the team closer together when physical presence may not be possible.

It can be used to also deliver urgent messages, but usually it works better for individuals as the notifications and messages in individual one-to-one chats are harder to miss whereas in a crowded chatroom, even an urgent message with a dedicated notification can be easier to miss.



## 2.9 Face to face communication

The oldest method of them all, traditional face-to-face communication where the participants discuss and communicate in the same physical space. This used to be our main method for holding one-to-one discussions like monthly employee feedbacks and to hold team meetings and trainings.

Since the start of the pandemic, using this method has dwindled considerably due to safety reasons and requirements. Currently the company views all physical contact and meetings as things that need to be avoided if in any way possible. Since most of the workers are working from home, this method is not available to them anyway. However, some of us, myself included, are still working at the office and the possibility of communicating directly in the same physical space is still possible.

## 3 Diary section

This chapter covers the diary portion of the thesis. My goal is to gather 10 weeks worth of my daily experiences at work, starting on May 31, 2021 and will cover weeks 22-27 and weeks 31-34. The weeks 28-30 are a summer holiday so they are not included. I work from Monday to Friday each week so weekends are not included either. The plans and objectives for each particular week will be decided based on what suits my schedule the best with the objectives of this thesis on mind. For example, the first week will cover management aspects of my job as I have great opportunities to learn and get to do some form of management in practice during that week.

### 3.1 Week 1 (May 31- June 4, 2021)

The main goal for this week will be to focus on management. The reasons for that are that I will get some training for management via workshops organized by Webhelp and an opportunity to guide more inexperienced coworkers in their new duties so all that should allow for a great opportunity to focus on management aspects of my work and the personal growth in the managerial aspects of my work and expertise in general. In other words, I hope to learn new theory about management and hopefully get to put that theory into practice. The workshops are themed for pedagogical skills and motivational skills so those will be the specific aspects of management I will get to study.

My work for that week will consist in great part of my usual work, which is handling the technical support cases and that will happen each day of the week. Aside from the

aforementioned workshops, I will also receive some training for a new line of products, which should help build up my expertise in the products and potential issues we support. There will also be a weekly team meeting, which I can hopefully use as an opportunity to see if our communication is in line with the best practices established in the theoretical background I have studied so far.

*Monday, May 31, 2021*

My work for Monday seems to consist mainly of my usual duties of handling the technical support calls, but there is one part that makes it stand out from the routine; training for new products. Learning about new products is important so that I can handle potential technical support cases regarding them as efficiently and professionally as possible, so I will set it to be my main goal for today to learn as much about them as possible.

Well, after finishing up for the day, I would say that the normal case handling wasn't anything out of the ordinary, as I expected. However, the training was somewhat disappointing for me. It was not because there was anything wrong with the training material itself or the instructor. It was just that there was less new information than I expected. I would say that the goal of learning as much about the products as possible was met, because almost all the information there was something that I already knew. Refreshing your memory is seldom a bad thing, but in this case, I really did remember everything already so even as a refresher it felt a bit pointless personally.

However, the training did bring up an interesting point. Setting up was a bit of a hassle as literally none of the participants joined the online session 100% successfully or as per instructions all of us received beforehand, including me. We had received instructions how to prepare our tools and join the online training session. There had been some changes to the software used and therefore the instructions and following them carefully was important so that everyone would be able to join and so that the software would work properly. These instructions were emailed to us on Friday, so basically the day before the training.

Those problems setting up raised some interesting questions. Even though we were given instructions beforehand, why did we fail to follow them properly? Was it the management or instructor who could have done something differently to improve the preparations? In a Stanford University (2019) article it is stated that preparing and briefing participants is a way to help ensure a more effective meeting so having that was a good thing. Perhaps the reason lies in implementation or another factor or a combination of factors. I hope to investigate this further in the coming weeks when I will investigate the aspects of communication more

closely. I will re-check the established theory to see if there are any pointers or potential solutions to avoid or mitigate these confusions in the future.

*Tuesday, June 1, 2021*

For Tuesday, I will be again handling technical support cases but I will also participate in a workshop where I will get some training for leadership skills. More specifically, I will get to hear more about pedagogical skills or in other words, teaching skills.

My main goal for Tuesday is to learn as much about the pedagogical skills and aspects of management as I can from the workshop. I would also like to set a goal for myself to conduct some further research on that topic, based on what I will learn. For example, if I do not understand something, I can use literature to help me better understand those things or if the training inspires me, to simply deepen my knowledge.

As expected, the daily routine of handling of handling the technical support cases did not contain anything out of the ordinary. However, the workshop about pedagogical skills turned out to be quite interesting.

Most of the things we learned about were on a more general and concise manner as pedagogy is a large subject, since there are different theories and methods on both learning and teaching. However, I still believe knowing the basics can be helpful for my future duties and in many other situations, too.

Learning theories that we covered were behaviorism, cognitivism, constructivism and experiential. Behaviorism focuses on the idea of rewarding good behavior and discouraging negative, such as rewarding good behavior with positive recognition and discouraging undesired behavior with negative feedback. Cognitivism on the other hand focuses on the mind and problem solving, enabling learning through the mind and thinking instead of just behavior. Constructivism builds on the existing foundations that an individual has, like their experiences and background, to construct knowledge rather than absorb it from outside. Experiential learning is based on learning through experiences and practical examples. For example, a learner may try something and the learning happens on the reflection of their experience, like what they did well and what they might do differently to improve the results in the future. (Reis 2021.)

We were also taught about Bloom's taxonomy, which describes the concept of levels of learning. From the lowest to the highest, the levels are remembering, understanding, applying, analyzing, evaluating and creating. Remembering is to recall relevant information from memory, such as the necessary ingredients for a pasta dish. Understanding is a level

where the learner can explain things about the subject and basically should know how on a theoretical level how it works. For example, they know how to cook that pasta dish in theory. Applying means that the learner should be able to apply the knowledge into practice. Again, if using the pasta dish as an example, they should be able to actually cook that dish. Analyzing reflects a deeper understanding of the subject, for example to break it down into smaller components or understand the relations between the different parts better. For example, knowing and understanding why the pasta dish has to be prepared in a certain order. Evaluating means being able to make judgements based on existing standards and criteria. For example, being able to judge the quality of a pasta dish made by someone else. Last but not least, is the create level. On that level, a learner should be so proficient that they are actually create something completely new, for example a completely new pasta recipe. (Griffith & Burns 2012, 33.)

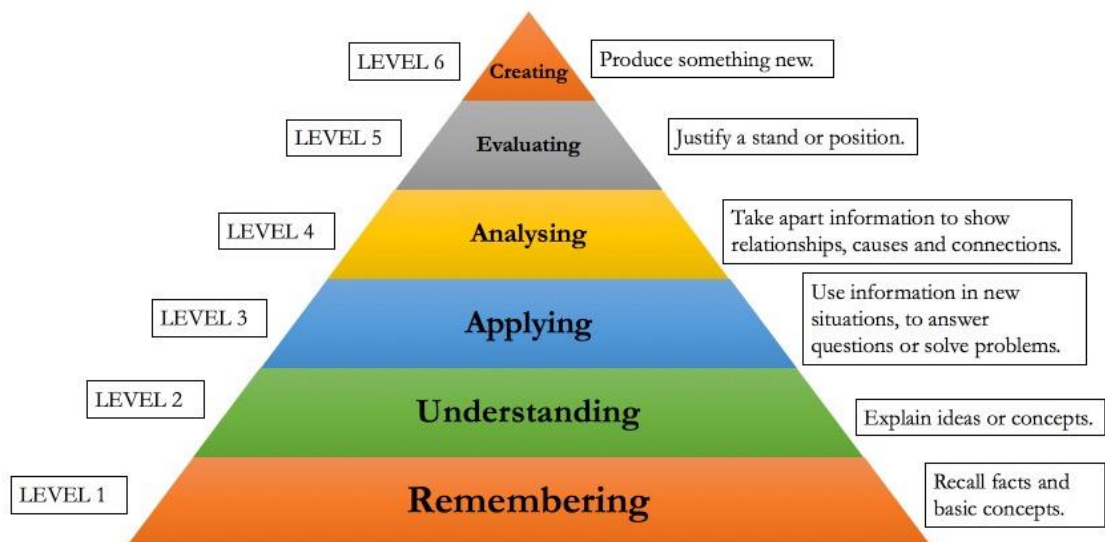


Figure 2: Bloom's taxonomy (Fastiggi 2021.)

Besides the different methods of learning, we also discussed different personality types. Again, there are different theories about personality types as well, but what we were taught were based on the 16 Jungian personality types. They are derived from 4 opposing pairs of personality traits, extraversion-introversion, sensing-intuition, thinking-feeling and judging-perception. The idea is that none of these personality types are better than others, just that they are different. For example, a thinking-oriented person may have a stronger tendency to analyze and think about matters long and hard, whereas a more feeling-inclined person may act more spontaneously without too much consideration about the consequences. (Stephenson 2012, 4.)

To conclude, we were taught rather lot about learning and teaching on a general level and a few hours is not enough to go too deep into a subject like this. But I did learn that it is important to be aware of people being different and thus having different ways of learning and that their different personality types react to different situations and ways of teaching differently. Therefore, knowing your audience and adjusting your delivery to them is key to successful learning and teaching. Overall, I thought this was a very interesting and useful day for professional growth and learning.

*Wednesday, June 2, 2021*

On Wednesday, I will again be taking the usual technical support cases for handling. But aside from that, I will get to mentor and guide less experienced coworkers to get adjusted to their new role. Therefore, I plan to utilize the things I learned on Tuesday and hopefully put them to practice. More specifically, I will try to adjust my guidance style to suit the individual persons the best.

Today I got to guide the less experienced coworkers with their tasks, and it turned out to be quite a challenge. As mentioned earlier, we work so that some of us work at the office and some work from their homes and since I work at the office, I had to guide both people who were physically at the office and some that were at home. Personally, I find it easier to guide and teach people in person, because I rely a lot on my gestures, and I like to show how things are done. I had to guide the ones working from home basically only via chatting with them using an application and that turned out to be more difficult for me. I also had a lot of people asking me for help for different kinds of cases at the same time, both online and in person so I could not utilize all the tools at my disposal, for example using a video call to help explain the things to the people working remotely.

I feel like I did not quite succeed in utilizing the lessons learned yesterday, and I believe it was because of a few aspects. First, I was rather overwhelmed by the multitude of questions and cases that they needed help with, so personalizing my approach was something that I felt I did not have the time for. Secondly, I believe that the lessons I learned yesterday might be more appropriate for classroom or longer course situations rather than guiding colleagues all working on different kinds of cases and tasks.

Despite the challenges, I feel like I succeeded in guiding my junior colleagues because I was able to provide them with answers and a way to go forward. I also made it a point to give them the tools and instructions that would guide them to the right direction so that they can solve those kinds of cases in the future on their own and so that they know where to look for that information independently.

There also rose a particular challenge that I wish to study further in the weekly analysis and find some references for. And that was helping the colleagues to see the rationale in the course of action I suggested them to take. I often have to explain the rationale in the steps I take in order to solve a customer's problem and at least according to my supervisor, I have excellent skills in explaining those things to a customer. However, I was surprised to find how many junior colleagues questioned the advice I was giving them and their reluctance to follow the set of instructions I gave them. My failure, I believe, was that I was blinded by my own experience and expecting that my much less experienced colleagues would view the rationale of my instructions to be as obvious as I did. Therefore, I feel like I need to study for ways of explaining things in a different manner to less experienced colleagues so that they will follow my instructions and see why they are necessary. I also would like see if there are any sources that would explain if it is actually more difficult online instead of in person.

*Thursday, June 3, 2021*

For Thursday, I will be handling the usual technical support calls. However, the main point of interest for that day will be the workshop about motivational skills, another aspect and topic of my continuing management training. Therefore, as for Tuesday, I want my goal for Thursday to be absorb as much new information as possible from the workshop. I also want to set another goal to try and see if that workshop inspires me to find other sources of information about motivational skills or to study other questions it may bring up.

Today I learned about motivational skills and the theory or theories behind motivation. I should also mention regarding these workshops that so far, they are mostly theory and the more practical lessons will come some time later this year.

One of the first pieces of theory we learned about was the so-called Maslow's Hierarchy of Needs. The idea with the theory is that people are motivated by a hierarchy of needs, with the most basic needs in the hierarchy being the ones that need to be fulfilled first before the individual can advance in the hierarchy and start pursuing the higher needs. It starts at the physiological needs being at the base level, which includes the basest of all human needs, like eating, drinking and sleeping, which are vital for survival and therefore take precedence above all other needs. That is followed by safety needs; a person needs to feel that they are safe, not just physically but from other harm as well, such as theft. The third level of needs is belonging, which is the essentially the social aspect of needs; the need to feel loved and to belong to for example a community. The fourth and second-highest level of needs, is esteem. That is defined as the needs related to status and social power. The fifth and final level of needs is self-actualization, which could be described as fulfilling one's potential, such as an

artist becoming a great artist by fulfilling their true, full potential. (Pichère & Cadiat 2016, 9.)

### Maslow's Hierarchy of Needs

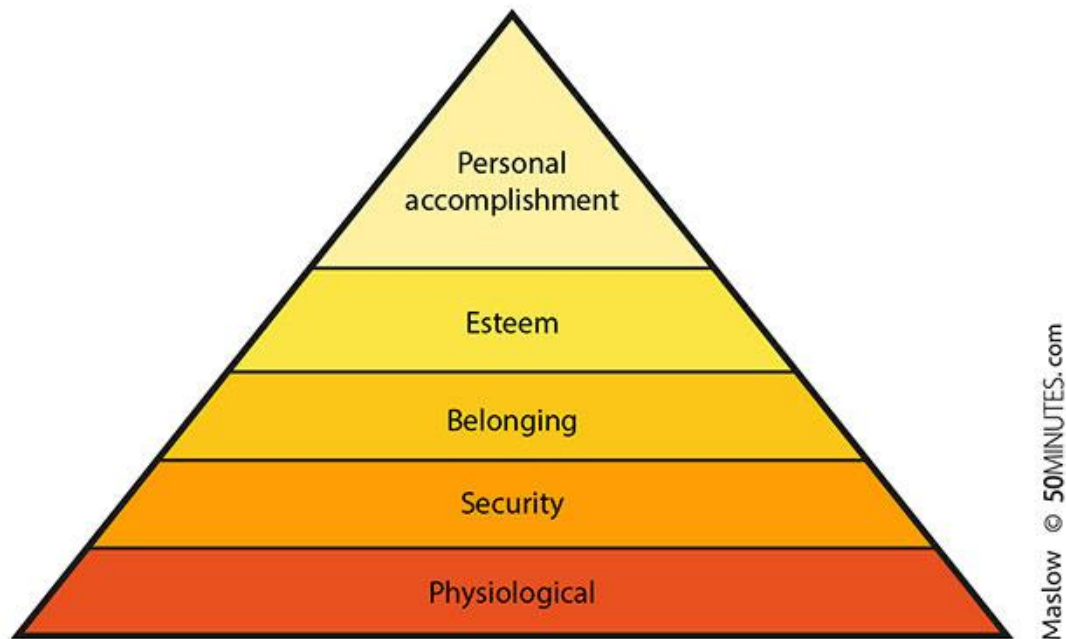


Figure 3: Maslow's Hierarchy of Needs (Pichère, P. & Cadiat, A. 2016, 9)

Another theory that we learned about was McGregor's Theory X and Theory Y. It is essentially a management theory, the X being an authoritative style and Y being a participative style. They relate to motivation so that X views employees as inherently unmotivated, who need to be controlled and supervised strictly and constantly to deliver work, whereas Y views employees as inherently motivated to do a good job and places emphasis on allowing the employees do work more independently and trusting that they will do a good job and are also allowed more into the decision-making. Out of these two, X is viewed as somewhat dated, whereas Y is being viewed as a more modern way of management. (Mindtools 2016.)

The third theory about motivation was Herzberg's Motivators and Hygiene factors theory. In this theory, the idea is that motivators are things that motivate the employees and create satisfaction, for example by providing opportunities for promotions and recognizing accomplishments. Hygiene factors on the other hand are things that help eliminate

dissatisfaction, such as competitive wages. The key thing about this theory is that satisfaction and dissatisfactions are not opposites but basically deviations of a point where an employee is neither satisfied nor dissatisfied. For example, a motivator that might elevate an employee's motivation would be an opportunity for further training and development and promotion opportunities inside the company. A hygiene factor that might lower an employee's motivation could be a salary that is below the industry standard. One of the other key aspects of this theory is that simply raising that salary to the industry standard would only help eliminate that cause for dissatisfaction and elevate the motivation of the employee to the base level. That is because simply meeting a base level of expectations is something that is usually expected by an employee and is neither satisfied nor dissatisfied and only by raising above that base level can they become truly motivated. (Herzberg 2008, 17.)

I feel like I did learn a lot about motivation theory today. Naturally, putting all that rather scientific theory into practice might be a different ordeal altogether, but still, I feel that it will be highly useful for understanding people's motivations and differences in their needs and wants when managing people, should I get the opportunity. All in all, this felt like a very important and useful day.

*Friday, June 4, 2021*

Friday will mostly consist of taking the usual support cases and of a team meeting. It is hard to think of a proper agenda for tomorrow, as I would like to tackle the communication methods on a full week focusing entirely on those aspects. Also, tomorrow is likely to be an extremely quiet day with very few support cases or other activities so I feel like there will be few opportunities for growth, development or studies. But I will try and set the goal of trying to identify some management related topics or aspects that I might need to develop.

Friday actually turned out to be even quieter than expected and even the team meeting did not have much on the agenda. But I suppose hearing that our team had been doing well is good because we seem to be doing the right things. However, for professional growth and development this Friday was somewhat difficult as little happened. But overall, there was plenty to be learned of this week so I am okay with Friday ending up a bit lacking.

*Summary of week 1 (May 31-June 4, 2021)*

During this week, I feel like I learned a considerable amount of management theory, mostly regarding the topics of pedagogy and motivation, since the two workshops mainly focused on



those aspects of management. As mentioned on Monday, the new product training did not teach me as many new things as I would have liked, but it was a useful refresher nonetheless.

Regarding the learning theories such as constructivism and cognitivism, while I think they are useful for a future reference, I will need to study them further and deeper, either on my own or enlist for a course somewhere. That's because they seemed to be quite extensive theories in their own right and we only barely touched the surface. But there was one takeaway that I want to utilize in the future, and that is the fact that people are different and therefore learn differently and utilizing different teaching methods to make sure that those different types of people still all learn something. The different methods being things like having them write down things or make them work in groups or watch a video presentation to make them utilize their own strengths and tap into them. (Reis 2021.)

The Jungian personality types felt like a bit of a mixed bag for me. Personally, I strongly feel that one cannot label people into certain groups or types based on their characteristics and I believe people can have aspects of different types within them. But I think there was still merit in that and I do acknowledge the idea that people are different and therefore need different approaches to management and guidance than others. And looking at the Jungian personality types and the fact that there are 16 of them, it would appear that at least they give some general insight as to what ways people approach things and when you understand the way people might think and feel, it might be easier to guide them. (Stephenson 2012, 4.)

The Bloom's Taxonomy was one of the most interesting takeaways from the week and I do plan to utilize that for both personal understanding of my learning and in potential management or training positions to help me get a better picture of the person's level of knowledge and aptitude regarding the given subject. I find the 6 levels and their definitions to be flexible so that they can rather easily be applied to different topics and the levels themselves well defined. During the workshop we did multiple tests applying it to different subjects like making food or work-related tasks and it proved effective. (Griffith & Burns 2012. 33.)

The motivational skills I felt were quite interesting and important for future reference. Especially Herzberg's Motivators & Hygiene Factors theory was rather eye-opening, because earlier, I had thought that for example a nicer, more comfortable work environment like good chairs would be a way to motivate, but it could potentially only remove dissatisfaction while not actually motivating. But that theory also helped me understand that a base level, where an employee is neither satisfied nor dissatisfied is not necessarily a bad thing but just a base level, a neutral state, so to speak. In order to make the best out of them, the things that cause dissatisfaction have to be eliminated, but that alone won't motivate, they need actual motivators too. (Herzberg 2008, 17.)

The Maslow's Hierarchy of Needs might in parts sound like something that has a place in nature more than it does in the office work, but after some consideration, it does make sense. For example, if the base level of physiological needs like eating or drinking are not met via proper breaks and refreshment opportunities, the employee might be motivated to do little else. (Mindtools 2016.)

The Theory X and Theory Y were quite interesting as well. I feel that I align more with Theory Y myself, as I like to trust people and that they are already motivated to do their best, unless they prove me otherwise. After studying the theories, I did recognize in myself that I do revert somewhat to a more Theory X type; a more authoritative way of leadership if I feel like somebody betrays the trust I usually put in them. Going forward, I feel like I will continue to lean more towards the Y, but, if necessary, I can take clues from the X as well, because the McGregor's theory did not state that they are mutually exclusive and that sometimes both might still be needed. (Mindtools 2016.)

Regarding the problems I faced during the week, I think that the issue of making the newer employees listen to the instructions and simply follow them might have something to do with motivation and more specifically, the hierarchy of needs. In retrospect, I believe they were nervous in the situation and since their need for safety was not met and their motivation to get out of the uncomfortable situation was greater than their motivation to take it as a learning opportunity. Therefore, using a softer approach like calming them down before directly offering them the set of instructions to go forward might have been more fruitful in the long run. I believe my mistake might have been to assume that simply giving them the set of instructions would have been enough to make them feel secure and comfortable going forward. Additionally, some further explanations to my reasoning behind those instructions might have also made them feel more safe and secure about the situation.

The issue regarding the preparation for the training on Monday was actually something that was repeated on Tuesday and Thursday as well, despite the instructions and the way the training was set up online was exactly the same. However, one difference was that not all the participants were the same, the training did encompass other Webhelp sites from the Nordic-Baltic region as well, so that could have played a role. But I actually wish to investigate this issue further in the coming weeks, as I believe it could have something to do with the preparatory instructions having been sent via email.

Overall, this felt like a very useful week, especially about learning management theory. I also hope to see more opportunities to put the theory into practice and to also simply get some leadership experience. Theory is nice, but practice often tends to be a different matter entirely.

### 3.2 Week 2 (June 7-June 11, 2021)

My main goal for this week is to do the SWOT analysis for our email communication. I would like to use the established theory to see how our strengths, weaknesses, opportunities and threats hold up. In this case the strengths would essentially be the good ways of using mail whereas the weaknesses would be the bad. Opportunities in this case could be potential improvements that we are not utilizing. The threats would be a collection of potential threats, mostly security threats, and I would also like to analyze if these threats are being countered properly.

Part of the reason for this is that I do not seem to have anything special coming in the next week so that it will be easier to focus on the analysis. I also fear that it will be quiet regarding the technical support cases as well, so focusing on our internal communication feels more relevant.

*Monday, June 7, 2021*

My day will consist solely of taking the technical support cases and since the amount of them will most likely be very low, it will be a rather uneventful day. However, I will make it my main goal to gather the strengths of our current email communication. Or in other words, see what are the good things that we are doing in our emailing.

The day was mostly routine for me and therefore lacking in personal development chances, but I was able to gather some information regarding our email communication in order to find out our strengths for the SWOT analysis at the end of this week regarding email. In the following subchapter, I shall explain some key points as to what the existing theory has to say about effective email communication and try and pinpoint our strengths or good ways of utilizing the email based on that. I also managed to study some theory regarding email communication, so that did help me gain some professional development at the end of the day.

#### *Effective email communication*

Based on the articles written about effective email communication, what makes for effective email communication is doing the right things while avoiding the potentially wrong things. One of the key things is to first of all identify what is the purpose of your communication and based on that, decide if the email is the appropriate method.

For example, email is said to be good when you want to distribute a lot of information to a lot of people at once, or if you wish to send them attachments. Situations where it is possibly not the best or most effective method include instances where a long discussion or a quick response is needed. The articles also raise privacy concerns, which will be discussed in the potential risks part. (Wilson 2020.)

Another important thing is the structure. One of the crucial things that comes up is the subject field. It should be as informative as possible so that the potential recipient or recipients will immediately grasp what the message concerns. A proper greeting and ending are also mentioned, because they help the recipient(s) to know who was contacting them and to whom the message was meant for, and their importance as proper, professional behavior was also emphasized. (The Writing Center 2021.)

According to the articles, the content should be concise and to the point, but have all the relevant information. Essentially the email content should make it clear who is the one sending it and whom it concerns (the recipients), what is it about, why it was sent and what action is requested from the recipient. (Chapman 2018.)

#### *Our strengths in email communication*

Based on the established good practices for using email, I would argue that we are doing quite well. Using it in the correct situations could be one of our strengths, as we definitely distribute attachments that way and from the email, they are easily accessible. Our management also uses it when they have to relay important messages to large numbers of employees, such as an entire team, so that is another strength.

General structure is also one of our strengths. This view may be subjective for me, but our email messages have a clear subject; I have not felt misled by them or ignored a potentially important message due to a bad subject. Also, it has been quite clear to whom they were addressed to and I have not received emails who were meant for someone else and I have not heard of such reports from others, either.

#### *Tuesday, June 8, 2021*

Since Tuesday appears to consist of the routine of taking the support cases and handling them, I will utilize the opportunity to gather some potential weaknesses in our email communication for the SWOT analysis. That assessment will be based on the existing theory and on our ways of communicating via email.

As for the most of the day, it was routine, as expected. But I was able to identify a couple of larger weaknesses for our email handling.

#### *Our weaknesses in email communication*

The first is perhaps smaller of the two, and it relates to the selection of the correct recipient or I should say, recipients. The second I find to be the larger of the two. And that is the fact that a lot of our mails or at least the ones I receive, are rather extensive walls of text.

By selecting the correct recipient or recipients I mean replying or sending the mail to the correct individual or group. This is something that in my experience happens rarely in our own site, but as mentioned in the beginning of this thesis, Webhelp is a global company with over 60 000 employees and not everyone has gotten the memo. The reason why I called it a smaller issue of the two is because it does happen rarely. But it can be rather annoying and distracting when two people from, for example Morocco, start to work out their personal or professional differences in a way that fills up the mailbox of somebody in Helsinki, who has absolutely nothing to do with that, just because they decided to “reply all” instead of sending an email to the correct individual. Having to mark the messages as read or clearing them out of the way has to be done so that I can focus on the actually relevant stuff and also there is another reason, storage constraints, but I will discuss that further tomorrow when I discuss the opportunities for the SWOT analysis.

The second, but perhaps the larger weakness is the tendency for those long and extensive walls of text. Canavor (2017, 215) states that generally emails should be kept concise, and to the point. In the case of our emails, I feel like they do discuss important points, such as new procedures or changes to them but I cannot help but wonder if they could still be shortened to remove some of the empty air, so to speak. Also, some of the techniques discussed by Canavor (2017, 241), such as using bullet points subheads and boldface for important points might make the emails more lively and easier to read, or at least make the main points easier to read. Many of the people at our workplace do use these methods but the fact remains that many of the emails are long and I cannot help but wonder if some of them could be discussed using a different forum, for example video chats.

I feel that the video chats might help bring some variety, which can be helpful for learning and also that it would reduce the number of emails to read, potentially reducing the risks of people ignoring the emails or skimming through them because they are drowning in them. I do strongly believe that at least part of the reason for many of us failing to follow the email instructions for our training on week 1 was that it was just another long email in a group of other long emails.

*Wednesday, June 9, 2021*

Tomorrow I will once again take some more technical support cases and handle them. I will also receive some refresher training for correct procedures. My main goal for tomorrow, however, will be to try and identify some opportunities for our email communication. These are basically potential improvements that we might be able to seize and thus improve our communication.

Today consisted of taking the usual support cases and some refresher training. The training helped to refresh some of the correct procedures while handling certain cases, nothing new but it was useful to have another look at them. I also managed to identify a couple of opportunities regarding our email use for the SWOT analysis.

#### *Opportunities regarding email*

The first opportunity would be storage capacity for our mail. Unfortunately, it is very limited at the moment, and therefore me and the other employees need to delete emails on a rather regular basis. And that is the reason why the “reply all” emails cause an issue with storage space aside of the other issues they cause. Also, attachments tend to be on the larger side so they take storage, too.

The opportunity would be to increase the storage capacity. I feel that it would reduce the amount of time that we need to take to delete unnecessary mails just to be able to send and receive new ones if we did not need to purge it all the time.

A second opportunity related to this could be that instead of using the mail for attachments, perhaps we could utilize a cloud-based system more like a virtual workspace or drive where we store the attachments like instructions, presentations and so on. Currently our mails are kind of used as a storage for those things, and as mentioned, the attachments take space. If we stored those attachments and files in the online drive or similar, it would save space in our mails, also reducing the need to clear those emails. It would also potentially help make them easier to find when needed, if they were organized neatly in folders and subfolders instead of all of us having to organize them individually within our mailboxes.

*Thursday, June 10, 2021*

Thursday will consist of only the routine of taking the support cases. I will take the opportunity to try and identify potential threats for the SWOT analysis then, and that will be my main goal for the day.

Today I spent most of the day gathering potential threats regarding email. In this context, the threats refer to potential information security threats. I plan to add these to the SWOT analysis and also to analyze the risks more closely for potential and severity in the upcoming weeks, as well as potential counters for them.

#### *Potential email security threats*

The threats regarding emails could be divided to external and internal ones. The external being threats from outside of the company, all with malicious intent. The internal ones can also have a malicious intent, but often they can happen just due to negligence or accident.

The most common external threats take the form of malicious emails. Of those, phishing and spoofing or scamming emails are the most common as they take less skill to do and thus have a lower threshold to commit because in their most simple form, they do not require anything else than writing an email and hoping for the right response. Usually, those types of emails are used for trying to find out credentials to company accounts, such as email, bank accounts or other places that require signing in. For example, stating an issue with the said account and asking for the recipient to sign in using a false link provided by the sender. This would net the sender the login credentials of the victim, and then they can simply use the credentials to log in and do whatever they want and can do with those credentials, without having to bypass security system via hacking or malware. Another very common type is that the sender is posing as a member of the recipient's organization and that they ask the recipient to pay for an order or something similar, and coax the recipient to transfer company funds to the attacker's account. Other types include extortion, like claiming to have sensitive information about the recipient and that they either require money, credentials or something else or threaten to expose that information. (F-Secure no date, 5.)

Aside from the so-called phishing emails, there are still emails that contain malware that when opened, could compromise the network or the device of the one opening them. Their use has dwindled, but is still an existing threat. They have also changed so that the email

itself may not contain the malware but may contain links or attachments that may guide the recipient to a site or attachment that is or contains the malware. (F-Secure no date, 6.)

There are also other threats from outside, like direct attacks to servers and other systems. As these are handled by security systems and because they are not directly related to the communication itself, I chose to leave them out of this thesis. However, as they exist, it is worth noting them. (Bane 2020.)

Then there are the internal factors. These take the form of our own employees doing something malicious, either on purpose or by mistake. One example could be sending an email that contains internal or confidential information to someone outside of the company, either purposefully or accidentally by mistyping the recipient or choosing a wrong recipient for the email contacts. (Stine & Scholl 2010.)

*Friday, June 11, 2021*

On Friday I will get to attend a presentation by our client company so I should learn more about their upcoming products, which will most likely be quite interesting. I will also have a team meeting but not much else planned. I will set as my main goal for tomorrow to learn as much as I can from the presentation. As another goal, I wish to start compiling the SWOT analysis into something more presentable, like a table. My plan is to include that into the end of the week analysis.

Today was a rather quiet day for me, just the team meeting, a rather long, two-hour presentation by our client. It was a somewhat interesting presentation and I think I learned some more about the upcoming products that I need to support. I also managed to start compiling the SWOT analysis that I decided to include in the weekly analysis.

*Summary of week 2 (June 7- June 11, 2021)*

This week was a great opportunity to learn about the recommended or proper methods for email communication in theory. I also feel like I learned about some ways that the company might be doing in both for the good and the bad regarding email communication. It was also a learning opportunity to see how I might personally be able to affect things.



<b>SWOT analysis for the email communication</b>	
<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>• Using it in most effective situations</li> <li>• General structure</li> </ul>	<ul style="list-style-type: none"> <li>• Reply all</li> <li>• Too long emails</li> </ul>
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>• Upgrade mail storage limit</li> <li>• Utilize other tools more</li> </ul>	<ul style="list-style-type: none"> <li>• Malicious emails</li> <li>• Direct external attacks</li> <li>• Internal (human factor)</li> </ul>

Figure 4: SWOT analysis for email

Overall, the company seems to be doing well when it comes to email usage, when compared to existing theory. The strengths were rather solid, like using the email when it is potentially the most effective tool and the general structure of them. However, the weaknesses, especially the number of long emails is something that, when properly addressed could make it much more efficient (Figure 4).

Also utilizing the opportunities that I was able to identify would potentially help with the efficiency greatly. The threats are not unique in any way to our company as they could apply to any use of email, personal, governmental or professional as they are related to the very nature of the tool itself. Due to their significance and relevance to the thesis, I will investigate the threats more closely in the following weeks.

### 3.3 Week 3 (June 14 - June 18, 2021)

Since this upcoming week appears to be another quiet summer week, I would like to utilize the opportunity to explore the threats to email communication security more deeply. My main goal is to create a risk assessment matrix for the email threats in order to visualize and help assess the probabilities of the risks and their impact for our company. I plan to later cover the potential counters for these issues as well.

*Monday - Thursday, June 14 - June 17, 2021*

Unfortunately, I was sick for a good portion of the week so I was not working. Mostly on Thursday though, I managed to analyze the threats to email communication. I made the probability and impact assessments based on the existing theory as much as possible, but I also had to make some own assessments based on our company and its aspects.

*Friday, June 18, 2021*

I am utilizing the risk assessment method called risk assessment matrix. I used part of today to describe what that process is in more detail. I also made a table based on the process itself.

#### *Risk assessment*

While the risks have been discussed earlier, they are yet to be assessed. The reason why I feel that it is important to assess them is to create an understanding about which risks might be ones that need the most attention and which might be less important in the big picture. There are different methods for doing risk assessment, but I chose the risk assessment matrix.

The risk assessment matrix is a visual tool that depicts the risks that a company or other entity might be facing. It consists of two main factors: probability and severity. These are used in conjunction to categorize and visualize the risks into different categories. For example, if a risk has high probability of happening and a very severe impact potential, it is a high priority risk that needs attention. On the other hand, a risk that is very unlikely to materialize and that also has a very weak impact, then it most likely can be either ignored or put lower in priority.

The reason why I wish to use the risk assessment matrix as tool is because the visual representations of the risks it can create are usually rather comprehensive and easy to understand. They also make priority lists and diverting attention and resources easier as they rather clearly represent an order or at least a likely recommended order in which to take care of the risks and implement controls for them.

Today I made the risk assessment matrix and created a table (Table 1) based on it. This should hopefully help illustrate the risks for our email usage based on the overall rating. I will look at the individual risks more closely in the end of the week report.

Probability 1-3	Risk assessment matrix for email		
3			
2	Phishing	Internal threats by mistake	
1		Malware	Direct attacks Internal threats on purpose
Impact 1-3	1	2	3

Table 1: Risk assessment matrix for email

*Summary of week 3 (June 14 - June 18, 2021)*

Looking at the results for the individual risks (Table 1) and starting with internal threats that are caused by mistake, I rated that with a moderate probability of happening as it has happened before in our company that people have sent emails to wrong people or emails that contained wrong information and it also has happened more than once. However, the mistakes have been relatively small and therefore their impact only moderate. It might be because people are more careful when sending more important mails or that contain sensitive information, but I cannot ascertain that for sure.

Direct attacks I rated with a low probability, as according to an article on cybersecurity by Sobers (2021), human error was behind 95% of security breaches so the probability of a direct, intentional attack would be comparatively low, but its major potential risk makes it a moderate one overall. Its impact is higher, because, it could be argued that somebody with the resources and dedication to directly breach a huge company's like Webhelp's security will not do it for fun but rather financial gain (Sobers 2021).

Internal threats I rated with a low probability, as stated above, intentional security breaches are very uncommon when compared to mistakes. I also do trust my colleagues and the

existing controls that would help prevent these types of threats. But the impact was high, again due to the likely reason that should something like that happen, the motivation would most likely be financial and thus substantial.

Regarding phishing emails, I rated the probability as moderate as a compromise between the F-Secure (No date, 5) report stating that it is a very common threat and the fact that I do not see those in my work at all, which could mean that our mail filters or other controls prevent those to a great extent. I rated their potential impact as low, because even should a phishing email find its way to our mailboxes, I trust that me and my colleagues who are trained professionals and who guide others in dealing with these types of attacks, can detect and avert those threats.

Emails containing malware I rated with a low probability because the F-Secure (No date, 6) report states that it has dwindled in number in favor of phishing type of emails. The impact I rated as moderate because while the threat may be substantial depending on the exact nature of the malware but I do believe this is greatly mitigated by existing information security controls that are in place.

#### 3.4 Week 4 (June 21 - June 25, 2021)

Since I used week 3 to analyze the risks to email usage for probability or impact, I thought using the following week to identify different methods that could help mitigate or eliminate the different risks. Therefore, I set it to be my main goal for the coming week that I will identify and explain the different controls that can be used for countering these risks. I plan to do that part during the beginning of the week. On Friday, I shall get further training in management. More specifically, Time Management.

##### *Monday - Thursday (June 21 - 24, 2021)*

Training and informing are some of the most important tools for helping to avoid and combat the email threats. This is in part due to the fact that automated systems cannot necessarily always detect a phishing email and thus human action (or lack of action) is required. Therefore, informing staff about the existence of these threats and training them how to detect and how they should handle the detected or suspected threats is paramount. For example, training the employees to scrutinize emails to make sure that they are legitimate and if they are unsure, rather double-check for example via a supervisor instead of acting on their own. (F-Secure no date, 10.)

Regarding the malware, they can be avoided to an extent, since in the emails that contain them come in forms of attachments or via malicious websites to which a link in the email directs the recipient to. Therefore, by not clicking suspicious links or opening strange attachments is already a form of protection against malware. However, a safeguard like security software that is made to detect, contain and/or destroy malware can be helpful in case malware does get on the device anyway. After all, some of the malicious emails can be very well executed and convincing. Email services may also offer at least some form of built-in security software and checks, but if the email itself only contains a link to a malicious site but no malware in the mail itself, those kinds of security checks may not work since the email itself is clean. (Bane 2019.)

When it comes to the internal threats, again training and information are some of the key aspects. Via training and informing staff on the best practices, mistakes or at least the chance for them can be minimized. When it comes to intentional mischief, controls can help. Like controlling who gets access to what information can help limit the threat by minimizing the number of people and thus the number of potential abuses, or controlling the email service so that it only allows emails to be sent to internal addresses or that the email account can only be accessed via a secure company network. (Stine & Scholl 2010.)

*Friday (June 25, 2021)*

Unfortunately, the training for Time Management Skills that I was supposed to receive today was cancelled. Hopefully it will be held in the upcoming weeks so that I will be able to add it to one of the later weeks. Otherwise, it was a quiet and altogether uneventful day.

*Summary of week 4 (June 21-25, 2021)*

This week I got to familiarize myself with the different controls for dealing with potential threats for email security. They mostly seem to come down to training and awareness, security software and access control. I feel that those controls were already in good state when it comes to our work and for example training and awareness is something that we have and actually teach to our customers as well.

This week I mostly refreshed myself on the different controls for countering security threats for emails as these controls did not bring up any completely new pieces of information for me but a refresher can still be important. I was disappointed that I could not get the time management skills training, as I had been very much looking forward to it. I think time

management would be one of the things that I do need to learn and that might be a weaker area for me. However, I believe we will get that training in the upcoming weeks.

### 3.5 Week 5 (June 28 - July 2, 2021)

My plan for the coming week is to use the most of it to perform a SWOT analysis regarding our use of video/audio conferences like team meetings, training and presentations. The idea is similar to the previous SWOT analysis for our email usage but this time for a different tool. I plan to do this on Monday and from Wednesday to Friday.

On Tuesday, I will get spend almost the entire day guiding junior employees who have received some new training to get them adjusted for their new roles. I will do the guidance both in person at the office for some and remotely for those working from home.

#### *Monday (June 28, 2021)*

Today I used the time to gather some best practices regarding communication using video/audio teleconferencing as a tool for communication. I will then use this established basis when assessing the strengths of our communication. The idea is that if things that we are already doing that can be considered effective based on the theory, they are already our strengths.

#### *Effective video/audio communication*

There appear to be two stages that are important for effective video/audio conferencing. The first is preparation, which is done or at least should be done before the actual conference. Key considerations for preparation are to make sure that everything is in order by making sure you have a working and stable internet connection and that the app or apps you intend to use are working. Even if everything seems to work, it is prudent to also have a backup plan in case something goes wrong, for example a different application that can be used for the meeting. (Stanford University 2019.)

The second stage is the actual conference itself while it is ongoing. Some kind of a briefing about the contents of the meeting can be shared either beforehand or at least in the beginning of the conference itself so that the participants know what is on the agenda for the meeting. Also, it is important to check and make sure that all participants are present and

that their audio and video are working so that everybody knows what is going on and what is discussed. Another important thing is that somebody should be in charge of the conference. This means that somebody should be the one to establish the agenda for the meeting, establish rules like how to signal the rest of the group if they have a question and to make sure that rules are followed and that everybody participates and pays attention. The leader also should make sure that the conversation stays on track and doesn't dissolve into a bunch of side discussions. (Stanford University 2019.)

*Tuesday (June 29, 2021)*

Today I got to guide the junior co-workers to get adjusted to their new duties and after their training. I feel like I was much more successful in guiding them than I was during week 1. For example, there might be some truth in the Maslow's hierarchy of needs, as this time I made more of a conscious effort in calming the mentees down when they were nervous by assuring that we will find a solution together and that we can take some time to go over things together. I also utilized the Bloom's taxonomy (Fastiggi 2021) in trying to customize my approach to the level of learning of the individual to either give them more general guidance if they were otherwise very confident and knowledgeable and more of a hands-on approach for those that needed more of a step-by-step guidance.

I naturally did not do an in-depth analysis for each individual based on the existing theory while trying to guide them, but I rather used the theory I learned as guidelines to the best of my ability. And I strongly feel that simply paying that extra attention to the individuals and their needs and motivations resulted in much better and more focused guidance. We were able to crack even some rare and difficult cases together and everyone seemed to understand and follow my guidance excellently while still doing the actual solving so that it wasn't just me solving the issues by myself through them. I feel that I was able to gain confidence in my ability to guide people in their new roles and I am very pleased that the theory seemed to have worked in practice.

*Wednesday (June 30, 2021)*

Today I actually had a chance to train junior employees by directly teaching them new things. This was not in the plans for the week but it happened on a relatively short notice. I feel that I managed to follow the best practices established on Monday, as I was prepared, I did not make the materials but did familiarize myself with them beforehand and made sure

everything was working before the meeting itself and also had a couple of backup plans in case things did not work out the way I originally intended.

I feel like I also managed to follow the best practices for during the presentation as well. In the beginning, I gave a briefing so that people knew what was on the agenda. I also made sure everyone was connected and hearing and seeing me and the presentation before starting. I also was in charge of the presentation but I tried to ask some questions and asked if everything was clear every now and then, before moving on. I believe it might have been a bit too much of a monologue at some points but there was a lot of material to go through and a very limited time frame for it. In retrospect, it could have also been a good idea to ask the participants to also turn on their cameras for the entire duration of the presentation so that I could have made sure all the individuals were paying attention. Either that or ask questions directly from the individuals instead of the class. But I do feel that they did listen and participate as they all made comments during and after the presentation.

#### *Thursday (July 1, 2021)*

Today I had another chance to train the junior employees, this time teaching them about a different topic. I think it went well just as it did yesterday. However, I feel like today I had to rush a lot more and we went clearly overtime. But I do not think that was at least entirely my fault as I had to fit this session into the rest of my schedule that doesn't give in. Also, there was a lot of material that I needed to go through with them in very little time.

All in all, I think it went well but not as well as yesterday due to the time constraints and the hurry. But I think it was still a learning experience about the importance of time management. While my schedule in this current role and job is only in very small part up to me, I think learning about time management would be important and help me at least do what I can. Hopefully I will have the time management training soon and that it won't be canceled again.

#### *Friday (July 2, 2021)*

Today I used the SWOT (Strengths, Weaknesses, Opportunities and Threats) method to analyze the current situation. Therefore, I would like to explain the method in a brief manner and discuss the basics. I also want to use this opportunity to explain why I have chosen to use this method.



### *SWOT (strengths, weaknesses, opportunities, threats) analysis*

It is a method that can be used to make a compilation of a company's strengths, weaknesses, opportunities and threats. This can be used in more general terms like for the entire business itself, or before implementing a new plan or taking new actions. This compilation should give an overview of the situation and the results can be used to create recommendations and strategies. The idea being that the strengths and opportunities can be embraced to overcome the threats and weaknesses. Or in some cases to eliminate or reduce the threats or weaknesses, depending on the situation. (Schooley 2019.)

The reason why I would like to implement and use this method is to gain an idea about the strengths, weaknesses, opportunities and threats that each of our communication methods used entail. The threats are already covered in part in the theoretical background chapter, but the idea is to create a more comprehensive image about what the potential pros and cons of the methods are, when they and how they could be used and what to keep in mind when using them.

I used today to try and identify the strengths of our video and audio conferencing for the SWOT analysis. I would argue that one of our strengths is the briefing beforehand. In my experience, we are given some kind of a briefing about the agenda for a given meeting or training, usually either beforehand or at the beginning. And they usually provide clear instructions as to how to make sure that everything is ready for the meeting when it does take place.

Another strength would be that our managers and instructors do a great job at making sure everyone is present and that everybody is able to participate. They also make sure that everyone participates during the interactions. Yet another closely related strength is that the instructors and managers definitely take charge and lead the sessions in a way that time is usually used effectively and everything important is covered.

### *Summary of week 5 (June 28 - July 2, 2021)*

This week I had a few opportunities to teach and guide our junior employees in their new duties. I feel like I did better with that than earlier so the theory might be working. I still feel that I need to learn more about the time management regarding the presentations but I hope I will get that training in the near future so that I can also cover it in this thesis. Successful teaching and guidance did give me a confidence boost and also motivated me to learn more about management and I hope to get more opportunities to do that.

I did start the SWOT analysis for our video and audio conferencing but due to the management duties, it was not completed during this week. I did manage to establish some of the theory about the best practices regarding it and also analyzed the strengths to some extent. But I plan to continue that during the next week, before my upcoming holiday.

### 3.6 Week 6 (July 5 - July 9, 2021)

The plan for this week is to continue the process of the SWOT started last week. I will continue from where I left off, starting on Monday by identifying potential weaknesses. If there are any management related opportunities or tasks, I will cover those as well. I also plan to analyze the SWOT results more once all categories have been covered first.

#### *Monday (July 5, 2021)*

I spent today trying to identify potential weaknesses in our audio/video conferencing. In my experience and as discussed in the strengths part, while our preparation works for the most part really well, one weak element is the training sessions and preparations for them. While they are briefed really well and in advance, there often are technical issues in the beginning and usually a great part of the time reserved for training is spent trying to solve them.

Another weakness is also related to the training sessions and it is time management. It is an issue with some instructors more than others and under their guidance, the training sessions have on several occasions gotten stuck at some, often irrelevant points for far too long, causing for example a training that was supposed to be 3 hours to become a 4,5-hour training session. At that point it was hard to concentrate and pay attention. These issues feel like an issue with time management and I shall have to take a look at that in the later part of the SWOT analysis.

#### *Tuesday (July 6, 2021)*

I used today to try and identify potential opportunities regarding our usage of the video and audio calls. It proved to be harder than expected, as I was able to only identify one potential opportunity that has not been seized yet. But this could be a positive problem, since that means that we have been able to seize some potential development opportunities.

One of the opportunities recently realized was giving more employees the ability to share screens. We recently changed to a different application for our video and audio calls but the new application only allowed the management team to share screens. This causes a problem when somebody like me, who is not part of the management team but who would benefit from sharing screens when I do give presentations. Luckily that was recently remedied and me and others can also now share screens when training others.

Another recently realized opportunity was the use of the video calls for some more casual chatting, especially now during the summer when it has been quieter. This was not actually started by the company but rather by the employees spontaneously. It has definitely been welcome and has returned some of the more relaxed interactions between the coworkers that we used to have in person before the pandemic.

Aside from those recently realized opportunities, I was able to identify one thing that actually relates to our use of emails. Using the video/audio conferencing more as a tool for training instead of the email could be beneficial. As discussed during week 1, there are different ways that people learn as their personalities, levels of learning and backgrounds might be different. Therefore, instead of sending a long email explaining a change to a procedure, it might be beneficial to also host a video conference where that thing is explained and trained. Different methods of delivery and thus learning can help people with different learning styles to master the subject more easily.

#### *Wednesday - Friday (July 7-9, 2021)*

I used these days to research the potential threats to information security that using the video and audio conference tools entail. During this time, I also did my normal duties and got some training in the form of a short online course. The course was somewhat of a disappointment as it did not really teach me anything new but I can see why it might have been necessary for the others.

#### *Video/audio call security threats*

Based on the research, there are different types of threats when it comes to security of the video and audio conferences. The key aspects are access control, security of the conference itself and privacy.

The access control refers to simply who can access the meeting and who can control aspects of the meeting. The threat regarding that is somebody from outside accessing the meeting

and potentially either disrupting it by interference like spam in the chat, insults or other nuisances. Another problem with an outsider accessing the meeting is that they could potentially gain access to confidential information or compromise security further by sharing malware via files or sharing links to dangerous websites. (Cybersecurity and Infrastructure Security Agency no date, 2.)

What is meant by the security of the application or the conference itself is the threat of somebody forcibly accessing the data, information or files that were shared during the conference. For example, by somebody intercepting the call and monitoring it remotely but not showing up as a participant so that the actual participants are none the wiser. (Cybersecurity and Infrastructure Security Agency no date, 3.)

The last but not least aspect was privacy. There are different privacy considerations like the privacy of the participants, like what information might be revealed about the participants to the others in the conference and the privacy of the used platform itself. When it comes to the platform, it might be important to know what data the application or platform might collect, with whom it is shared and where it is stored. (Kaspersky 2021.)

#### *Summary of week 6 (July 5 - July 9, 2021)*

This week I used to finalize the SWOT analysis for the video/audio conference calling. I feel like I learned quite a bit about the theory regarding the different aspects like best practices and security threats. I believe it was also useful to see how well they are implemented or used in practice in our company.

<b>SWOT analysis for the video/audio conferencing</b>	
<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>• Briefing</li> <li>• Strong leadership</li> </ul>	<ul style="list-style-type: none"> <li>• Training sessions - preparation</li> <li>• Training sessions - time management</li> </ul>
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>• Using video/audio calls more</li> </ul>	<ul style="list-style-type: none"> <li>• Unauthorized access</li> <li>• Direct external attacks</li> <li>• Privacy</li> </ul>

Figure 5: SWOT analysis for video/audio conferencing

Above I made table about the different categories of the SWOT analysis (Figure 5). Based on the analysis, our strengths seem to lie in briefing and strong leadership. These strengths help to ensure that our video calls are briefed well in advance and the meetings go ahead in an organized and structured manner.

Our weaknesses seem to be related to the training sessions. There the preparation seems to often take too much time and the training sessions time management often fails, leading to situations where the progress has gotten stuck in something irrelevant. I should point out that these trainings are not held by people from our site so we have little in the way of affecting them and while they are excellent instructors otherwise, these are some areas that they could possibly try and improve.

As far as opportunities go, I am pleased to see that actually it was hard to think opportunities that are yet to be seized. However, as I discussed earlier, it could be useful to try and use them more often. That could potentially help people learn, especially because I did learn this week that there are colleagues who do not really read the emails at all.

The threats were interesting and somewhat different from the ones regarding email. That is probably due to the different nature of the tool and how it is used. I will actually use next week to analyze the threats more closely and also take a look at potential counters for those threats.

Overall, during these last two weeks and doing the SWOT analysis did teach me new things about how to effectively use the video and audio conference tools and what threats I should be aware of. I also learned that our company is using them rather well, actually. While there

is still potential for improvement, the overall situation seemed, in my somewhat subjective view, to be better than regarding the use of email.

### 3.7 Week 7 (August 2 - August 6, 2021)

The plan for this week is to focus on the threats for the video conference apps. The first goal is to use risk assessment in the form of risk assessment matrix similar to week 3 to put the threats into perspective. The next goal is to use identify potential counters for the threats. I hope to complete the risk assessment matrix on Monday. On Tuesday and Wednesday, I will have some training so those days will most likely be spent doing that. I plan to explore the counters to these threats during Thursday and Friday.

#### *Monday (August 2, 2021)*

Today I made the risk assessment matrix and created a table (Table 2) based on it. This should hopefully help illustrate the risks for our use of video/audio conferencing tools based on the overall rating. I will look at the individual risks more closely in the end of the week report, and why I came to such conclusions.

Probability 1-3	Risk assessment matrix for video/audio conferencing		
3			
2		Unauthorized access	Privacy
1			Direct external attacks
Impact 1-3	1	2	3

Table 2: Risk assessment matrix for video calling

*Tuesday - Thursday (August 3 - August 5, 2021)*

Actually, the training was moved from Tuesday to Wednesday. So, I spent most of Wednesday doing different training sessions. First of all, I had a brief but intense training about a client process. The process was not new in itself, but it was insightful seeing it from a different perspective. The training was otherwise really good as well. I also had to do a test which basically tested if I was competent to do my job, these tests are done every now and then by our employer to see how well we know what we are doing.

On Thursday, there were a lot of technical issues due to a power outage so my plan for assessing the risks more closely is delayed to Friday. Also due to the issues, there isn't much to be reported of Thursday. Depending on the time available on Friday and the exact situation, I will do the closer risk assessment on Friday and also present potential counters for these threats. Whatever cannot be done on Friday, I plan to do in the end of the week analysis.

*Friday (August 6, 2021)*

I used today to cover the reasoning behind the ratings more closely. I shall also take a closer look at the controls for these risks. Starting from risks with lower risk rating and going to the highest, the first is direct external attack. I used similar reasoning regarding that risk as I did with the same risk regarding email, as they both would be direct, deliberate breaches directly through the security system in place. Therefore, it does have a low probability, but high potential impact should the threat materialize. (Sobers 2021.)

Regarding unauthorized access, I rated it with a medium probability and medium potential impact. I feel that the probability is somewhat reduced by the fact that we are trained information technology professionals who educate others on how to be careful about passwords and credentials so if we do our jobs properly, the probability of some external party using our misplaced online credentials to gain unauthorized access should be low. However, as Sobers (2021) points out in their article, human error is one of the most common problems in internet security. Therefore, I felt that the human factor, despite training, will elevate the risk to a medium probability. The impact I left at medium because while it could potentially cause somebody to be able to attend our meetings or be able to read our communications, I believe our existing controls prevents them from doing much harm.

The worst risk rating was received by the privacy risk. That is in part because the risk in itself is rather broad, encompassing something less significant like the name of a pet but also something more serious like social security information or passwords. It also has multiple

layers of potential impact. Like if the privacy of a customer would be breached, it would affect the customer the most, but also our company for example by damaging our reputation and also the employee or employees who made the error, whether on purpose or not. I gave it a medium probability. The probability is tampered once again by our existing controls and my trust in them, but the reason why it is still medium is because there are multiple layers, of which some are actually not necessarily directly in our control. For example, one interesting point was discussed in a Kaspersky (2021) article, which is the concern regarding the platforms companies use. More specifically, if any data is saved or stored of the communications, where exactly it is stored, how it is used and who has access to it.

#### *Potential security solutions for the threats in video/audio conferencing*

Access control is one of the most important aspects. By limiting who can access the meeting and who can control it helps to keep outsiders out. Things like passwords or access codes known and shared only to those who should have a legitimate access can limit the threat. Besides restricting access, one useful tool is to verify the attendees. This means checking and making sure that the profiles of the attendees are legitimate and that the person using that particular account is really who it is supposed to be and that the account used is not compromised. A simple solution for this could be using the video to verify the participants using their web camera. If these security solutions fail and somebody still gains unlawful access, there should be a way to regain control and get rid of the outsider. For this, it is important that at least one of the legitimate participants, for example the leader, has the ability to mute, disable and remove anyone who should not be there. (Browne 2020.)

The security of the application and the conference itself is very similar to the email security discussed earlier. This involves somebody from the outside for example intercepting the communication in secrecy or hacking a server or device or network to gain access. Since the idea of this kind of an attack is to be stealthy, it can be difficult for the participants to detect or counter and it relies heavily on the security software, encryption and other security measures implemented to the information technology systems used. Like with the email technical security, this is something that I will not go too deep into, but keeping software, security software and security settings up to date can be helpful to counter these threats. At least if the known holes are plugged, it forces a potential attacker to use time and effort to create a new one. (Kaspersky 2021.)

When discussing privacy, one concern is the privacy of the employee or employees themselves. This mostly comes down to the environment. For example, where you are physically can matter as you have to pay attention to what could be visible in your camera



view or what sounds the microphone might pick up. Therefore, testing the camera view beforehand or checking your surroundings can be helpful. The reason why it matters is that even if you trust your coworkers, you might not want to share personal details about your life like pictures of your children or the note containing your doctor's appointment with them. (Kaspersky 2021.)

Another interesting thing that came up was the privacy concerns of the application itself like where it stores the data and with whom it might be shared. There are different applications for these conference calls and they may adhere to different terms and conditions of use. It is good if you know where the data is stored and what rights to it you have in case you need to delete it. Also, you might want to avoid using a platform that sells your sensitive information to outside parties and therefore choose a different application that is stricter about your privacy or doesn't store the data in the app or the company's servers. (Kaspersky 2021.)

#### *Summary of week 7 (August 2 - August 7, 2021)*

This week was mostly spent exploring and analyzing the threat and security landscape of video/audio communication. While some of the threats were similar to the ones the email communication faces, potentially due to both methods relying on computers or smart devices, the internet and other common factors, some were also different and thus worth remembering.

Again, many of the controls for these threats were familiar to me from training and they are things that we also teach to our customers. But still, it felt important to be reminded of the different security considerations for this manner of communication, too.

I think that the most important revelation for me this week was the Kaspersky (2021) article that pointed out the concern about the role of the platform holder in the security and privacy. It is actually rather obvious upon closer consideration that whoever develops, maintains and designs a tool for video and audio communication holds a considerable power and responsibility in how secure it is. Part of the problem is also that because it is a different company, the controls of your company do not extend to them.

One potential reason why I feel that the consideration for the owner of the platform may have been overlooked by me earlier is that I was too focused on my own conduct and doing my part for the security and also on our own company and how it is doing regarding security. Therefore, I got blinded to the fact that there is a third party to be aware of. But it is also worth remembering the main control for that issue - the fact that companies or individuals can choose which platform to use.

### 3.8 Week 8 (August 9 - August 13, 2021)

Since the coming week doesn't seem to have any special coming up, I plan to use at least the vast majority of it to take a look at the use of chat as a communication method, looking at the effectiveness and security aspects. Since the chat can be for the most part done via the same tools as video and audio communication, many of the aspects may be similar.

Therefore, I believe I will be able to cover the effectiveness, security and the analysis all during this week, as it is a more concise subject matter.

#### *Monday-Tuesday (August 9 - August 10, 2021)*

During these two days, I received some training regarding new procedures and features regarding our work. I used these two days to also gather and study effective methods for using chat as a communication tool. While the same tool can be used for both video and audio calls and chatting in most cases, chatting and video calling differ enough to be worthy of a separate look.

#### *Effective chat practices*

Admittedly, it was harder to find existing sources regarding chats that take place internally, with many either focusing on communicating via chat with a customer or advertising chat applications. However, there were some articles that provided insight as to what could be the best practices.

One thing that came up was consolidation. What this means in practice is sending one message that contains the necessary information instead of splitting it into several separate messages. There are a couple of reasons why it matters. One is notifications, depending on the app and settings, if you receive ten separate messages, you may get as many pop-up notifications and message sounds which can be much more distracting than just the one. Another is that it ensures that your message stays intact and more comprehensive. (Singh 2018.)

Another important matter is the status of the recipient. If you see that their status is "do not disturb" so it most likely means that they are doing something important. In that case, it may be for the best to wait until they are done, unless your message is urgent. (York 2020.)

A third matter worth considering is the use of correct or relevant chats for the matter at hand. As an example, if you have something specific to discuss with one individual, it might be a good idea to message them directly instead of writing to them in the group chat. That is to ensure that your message to them is not lost within the other messages and to ensure privacy, if it is a delicate matter. (Singh 2018.)

*Wednesday, (August 11, 2021)*

I used today to make an assessment on how effectively we utilize the chat in our work when compared to the established best practices that I studied earlier this week. I decided not to include a SWOT analysis for this subject, as I feel that it is concise and narrow enough for a smaller scale analysis. Therefore, I will mostly look at the effectiveness itself.

Consolidation is something that I have noticed we are doing well. While there may have been some messages that have gotten somewhat split into several messages, for the most part our communication in the chat is very consolidated, making it easy to follow and read. Also, it ensures the information keeps together and is not lost in the potential replies that may appear between the messages - especially important in group chats.

In my experience, I have also noticed that the status of the recipient is respected. I have not at least personally received any unimportant messages directed at me while my status has been busy and I have not witnessed any events where somebody has failed to respect such a status, if not counting emergencies, of course. I also have come to the conclusion that people use the statuses when necessary so you can trust that the person actually is busy and not just pretending to be busy.

Using the correct group chat or addressing the correct individual is also in a good state, at least for the most part. I can admit that I have personally also made the mistake of posting a funny meme in a chat where it did not belong, so while it does happen, I would say that it is rare. And I think a part of it is that my colleagues self-monitor and remind others actively if they use a wrong chat, which helps to keep the chats smartly organized and functional.

Overall, I would say that we use the chat as a tool very effectively when compared to established best practices. The self-policing between the employees in my opinion, is a sign that our workplace community cares that the chat remains as efficient and effective as possible. Also, the cleanliness of using consolidated messages and respecting the status of fellow employees and superiors make it effective - using it when necessary and in the correct and most efficient way.

*Thursday - Friday, (August 12 - August 13, 2021)*

I used these two days to identify potential threats to chat use. I also used the time to add potential controls and counters against them. I shall use the end of the report to create a more thorough analysis of the overall chat usage and where we stand at the moment in its use.

*Chat security threats and controls against them*

Actually, many of the threats regarding chat are similar to the ones that affect the video conferencing situations. This in part due to the fact that often the same applications may contain both the chat and the video/audio call functions. Also, they have a similar idea where you have “rooms” or spaces where certain people meet and discuss so many of the same rules apply. But to briefly cover the threats, they are malware and direct attacks, user-based errors and unlawful access.

Due to the similarity, the controls against these threats are similar. Same rules of access control apply to limit the threats of unlawful access, security software and updates help against malware and direct attacks. By user-based errors I mean if some employee for example accidentally shares information with people who should not have access to that information. This can be mostly countered with training and information and having control to who gets access to what and by having contingency plans in place, in case some information is accidentally leaked to the wrong place despite the training and existing controls. (Freire 2019.)

One interesting concept is end-to-end encryption. While not unique to chat applications as it can be used also for example in emails, it is noteworthy as not all chat applications offer it. What it does is that it encrypts the sent message on the sending device and decoded on the receiving device. The keys to encrypt and decode are stored on the devices themselves so even if some outside party were to intercept that message, they would not be able to read it without the keys. (Perlroth 2019.)

*Summary of week 8 (August 9 - 13, 2021)*

This week was mostly spent on studying effective methods for chat and potential risks that using the chat entail. I also checked how our company is doing in following those best practices. When comparing the established best practices to what we are doing, I was pleased to notice that we are using the chat quite well.

Personally, the best practices made sense as following them should result in rather clear and thus effective communication when using chat. I also feel that I already adhere to them, but it was good to be reminded of them so that I can try and keep them in mind when chatting in the workplace. The potential security threats and the controls against them were also somewhat familiar to me, especially because they are to a large extent the same as they are for the email and video/audio call security. However, end to end encryption was an important reminder because not all applications support it. Therefore, along with privacy, the end-to-end encryption or the lack of it can be crucial factors when deciding what application or applications a company uses in order to have effective security for their communication.

### 3.9 Week 9 (August 16 - August 20, 2021)

My plan for the coming week and actually for the week after that as well is to cover face to face communication. More specifically, I plan to take a look at what is effective face to face communication and if there are also any security considerations regarding that communication method. I plan to also try and find some studies or theoretical knowledge to see if face to face communication even has a purpose anymore or if it could be completely replaced by other means of communication.

Another thing that I will do in the coming week and the week following it will be that I will get to give presentations regarding a topic in our work for my colleagues, especially for the junior employees. I plan to use those opportunities to see how well I do and I want to utilize the lessons learned earlier about the teaching methods and my experiences in the previous weeks. Should I encounter any problems or if I feel like something did not go as well as it could have, I plan to also try and find some theory that could potentially help me in the future.

#### *Monday (August 16, 2021)*

I spent today trying to find examples of effective communication when done face to face. I tried to make it as concise as possible and to focus on a few key points, as the topic is rather broad. I also made it my plan to focus on things that might be most relevant to presentations in training and weekly team meetings, since almost all of our meetings are one of those two things.

### *Effective face to face communication*

Perhaps unsurprisingly, some of the key considerations that make for effective face-to-face meetings are same or very similar to those of the video/audio conference calls. Preparation and managing the meeting itself being of the most important.

When preparing for a meeting, it can be worthwhile to take a moment to think if a meeting is required or if there is a quicker, more efficient way to use instead, like email or other venues. If a meeting seems like the appropriate choice, either before the meeting or as the first thing, the agenda should be established so that the participants know what it is regarding, just like when doing the meetings via video calls. (Sinclair 2019.)

During the meeting, it is important to make sure everyone participates. When doing it face to face, it is not about making sure if people can hear you as much as it is about asking questions or comments to make sure that everyone is paying attention and has understood what has been discussed and also to make sure that everyone can participate and bring forth their ideas and thoughts on the matter. Another important thing is time management so that the meetings are efficient so that all necessary information has been discussed and understood and that the meeting doesn't get stuck into a more trivial matter for too long. (Bryant no date.)

### *Tuesday (August 17, 2021)*

Today I got to give a presentation to my coworkers as a part of my management training. I think it went well, despite having a rather strict time constraint and a lot of things that I had to present to my coworkers. I managed to say everything I needed to say and even had a bit of time for questions and managed to at least give a general answer to each one. I also got positive feedback from my colleagues about the presentation so I believe it must have gone well over all. Tomorrow I shall have another presentation so hopefully I can keep up the good work.

### *Wednesday (August 18, 2021)*

Today I started working remotely again and it has been a long time since the last time. That brought some technical issues along with it, and therefore I was not able to work for the most part today. However, I did manage to give the presentation I needed to give and it also went well today. Again, I managed to stay well within the timeframe and cover everything I needed

to. This time there were no questions, but it might have been due to different people being present. I should have a third such presentation on Friday.

#### *Thursday (August 19, 2021)*

Today was also plagued by technical issues, this time preventing me from working at all. These two days have been a great reminder about the realities of working from home and how susceptible for issues it can be. This time an issue with my internet provider prevented me from accessing the internet and without internet, my work was impossible because pretty much everything I need is online. However, I used this day to my advantage by looking at what secure face to face communication is in a nutshell.

#### *Secure face to face communication*

When it comes to the face-to-face meetings, it could be argued that the security matters come down to physical security. That is simply because they take place in the physical realm and mostly access control ensures that only the correct people have access to the meeting place, for example an office room.

In the physical realm it is easier to see who is in the room at the moment and in a close-knit office like ours, it would be very quick and easy to notice who shouldn't be in the room. Access control features like locked doors that require an access card or a passcode can prevent unlawful entry to the company premises and having other layers of security like doors or areas that require a different kind of access code or keycard will further hinder the possibilities of an intruder listening in on the conversation. Also, these same reasons and methods help to prevent somebody from accessing the conversation remotely, as that would still require at least some kind of physical entry to breach the physical space where the meeting is taking place. (Heijden no date.)

#### *Friday (August 20, 2021)*

Today, the issue at my network provider's end continued and therefore me and my supervisor made a decision that I would return to the office until the issue is resolved. It indeed seemed prudent in a situation where they had to pay me for working but where I could not work at all. At the office I was able to work normally and I also got to give a third and final presentation for the week about the same topic as before. That one also went well and I did

get positive feedback. During next week, I might end up giving more presentations of the same nature but it remains to be seen.

#### *Summary of week 9 (August 16 - August 20, 2021)*

The highlight during the week for me was getting to give the three presentations. Based on the positive feedback I got and my own feeling that they went as well as they could, I do not see any immediate things that I would need to improve or study how I could have done better. I believe it is worth noting that these presentations also had a lot of mandatory content that I needed to deliver but in a short amount of time. Therefore, there was little room for improvisation or anything else than making sure all of the content was delivered and on time.

I also got to take a look at face-to-face communication briefly. My intention is to continue studying it during next week. More specifically, after taking a look at what makes for effective face-to-face communication and what potential security considerations it may have, I would like to investigate if it has a place in a world where we can do many of the same things remotely via video calling.

#### 3.10 Week 10 (August 23 - August 27, 2021)

My plan for this 10<sup>th</sup> and final week is to study face-to-face communication more closely. I am interested in trying to find sources and existing theory about what benefits the face-to-face communication still might have. After all, video calling entails being able to see the other person and hear them in a very similar manner to a face-to-face meeting.

I would like to find some answers to a few questions: Are the face-to-face meetings a relic of the past that have lost their meaning due to advances in technology? If there are any benefits to face-to-face communication over video conferencing, what are they? Are the benefits substantial enough that it is worth considering going back to face-to-face meetings if and when the pandemic is over?

#### *Monday-Tuesday (August 23 - August 24, 2021)*

I spent these two days trying to find potential benefits for face-to-face meetings. I tried to narrow the focus to internal meetings rather than meetings with a client or customers



because we do not meet our clients or customers in person and it is not my job to meet the clients anyway. Many of the sources I saw also took the face-to-face meetings with clients into account, but there were still points that apply to internal meetings.

According to Dahl & Morris (2021), face-to-face meetings are more productive. The number of ideas generated is higher in the face-to-face meetings. However, they seem to be of better quality as well, being both better or more original ideas, and the types of ideas are also more varied in face-to-face meetings.

Another thing related to productivity is focus. More specifically, in video or especially audio conferences, people may be tempted to do something else than pay attention, such as browse social media. While not impossible, it could be argued that it is harder to get away with something like that when meeting face-to-face in person. (Weiss 2014.)

Another consideration is that people prefer face-to-face meetings, if given the choice. This appears to also be true for younger generations as well. This may have relevance to our workplace, as many of our employees are quite young. (Hendee 2015.)

*Wednesday (August 24, 2021)*

I used today to investigate potential benefits of video conferencing. My plan is to check what the advantages of it are so that they can be compared to the advantages of having face-to-face meetings. That way I am hoping to be able to draw some conclusions as to which method might be better for our company in the future, if the pandemic is over at some point.

Focusing on the advantage that was pretty much the only one relevant to us, is the commute or lack thereof. When meeting online, we save time because we do not have to travel to our workplace and we also save money. This applies to both the employees and the company. (Bozeman 2020.)

For the employees, the savings would be in time as we would not have to spend any time going to work. We would also save money in the commute. Even though commute costs are tax deductible to some extent and our company offers some compensation to using public transportation, it still costs us money directly. Time is also definitely valuable, as it can be used to something else altogether.

As for the company, there could be a potential saving if we would not need the office space. However, it should be noted that our department is only one part of Webhelp Finland and the other departments may not be able to do their work remotely. We also would need at least some kind of a base or office where to store our things like spare computers, accessories and

so forth. But still, that could potentially mean that the office could be reduced in size, like renting or buying a smaller place for the future, which might bring savings that way.

*Thursday-Friday (August 26- August 27 2021)*

I spent these two days looking at and trying to weigh the options about which would be better going forward, face-to-face meetings and working at the office or video conferences and working remotely from home. To our activities as a company, it has surprisingly little effect as we did not meet our customers or clients face-to-face even before the pandemic. It mostly affects how we handle our team meetings, training sessions and other internal activities. I plan to draw some conclusions based on this comparison this weekend.

As such, working remotely has mainly one benefit to our company, which is potential savings. The overhead costs should be reduced as electricity and other costs like water are reduced at the office. Also working remotely could potentially offer the opportunity of reducing the office space in physical size, bringing further savings. However, there might be some other costs that I am not aware of regarding working from remotely that our company has to deal with.

The benefits of face-to-face meetings to our company should be better productivity. That is not trivial, as Kenton (2021) defines it, productivity is output per unit of input. In the case of employee productivity, it can be translated as how much money the employee brings to the company after reducing the wage that has to be put into the employee. Thus, better productivity equals more money for the company.

The benefits to employees regarding working from home are mostly related to time and cost of travel. When we work from home, we can save the time required to go to work five times a week, two times a day. For example, in my case, I save approximately 90 minutes a day, translating to approximately 7,5 hours a week. That is not a trivial amount of time that I can use for something else than mandatory traveling every week. Saving money on traveling costs also means that we have more money to spend on something else. Furthermore, things like the room we use for work and internet connection are tax deductible, bringing in further savings.

One potential benefit of face-to-face meetings for the employees is the human interaction. After all, most executives do appear to prefer it over online meetings (Forbes, 2009, 2). And I have noticed this at our workplace, too. Some of our employees simply feel too isolated and lonely working from home or can not concentrate there and thus have to work at the office.

*Summary of week 10 (August 23 - August 27, 2021)*

I spent the most of this week contemplating on the benefits of face-to-face meetings and its potential value in an era, where technology allows us to talk to each other over long distances, even with video so that we can see each other. For our company, it seems to have surprisingly little difference, because face-to-face meetings may increase productivity and thus profitability, but having them online has potential savings, but from what I have been able to gather, the difference is not major either way.

As for the employees, it comes down to a choice between monetary savings and more free time versus motivation and morale. That is because the face-to-face meetings are the preferred method of communication and lack of interaction in the same physical space is already causing feelings of isolation and loneliness in some of the employees. But on the other hand, the use of video conferencing saves time and money, which can be more valuable to others.

With these things in mind, potentially the best way would be some type of a hybrid model. A model where some can choose to work from home and the others at the office, based on their individual needs and desires. That way, the company could still potentially achieve savings by having a smaller office space but being able to tap into increased productivity of those who enjoy being physically at the office. For the employees, it would give the freedom to choose which is more important to them, the joy of having other people present or more free time and money.

Actually, this has been investigated at our workplace already. We were asked in a survey about how we would like to work in the future and the options explored were working entirely from home, from the office only or something in between. Unfortunately, I am not privy to the results of the survey or the decisions or conclusions that our leadership has drawn from that. However, my understanding is that the company management wants to implement potential future operations after the pandemic is over and they have a more stable present situation. Thus, at least for the time being, we continue to operate in this hybrid model where those who can work from home and those who can not work at the office.

#### 4 Conclusions

After having completed the diary part, I feel that I was able to meet the objectives I set out for the thesis, at least for the most part. I was able to assemble into the knowledge base best practices and established methods that I could then use as a basis for comparison to see if our company was doing well or not. I feel that I was able to find knowledge as to what makes for example good communication the specific formats or tools that I covered. Finding proper sources was possibly the most difficult part in trying to fulfill that objective, as there seemed to be many blog posts and opinions about the matter but not as much concrete studies and other research that would have helped to add some credibility to the best practices.

I was also able to compare the theory to what me and the company were doing in regards of communication. I think the theoretical background and knowledge base helped me to mostly affirm that I was already doing mostly the right things regarding information security, management and communication. The same goes for the company, as the existing practices are in large parts ones that were deemed efficient in the theoretical background as well. However, I did learn new things too. First of all, I strongly feel that establishing those theoretical best practices is helpful because that way I know that they are worth focusing on. There were also some new things that I learned and will definitely want to keep in mind going forward, such as the privacy factor regarding security. Also establishing theoretical background for management in the training given by the company was extremely interesting to me.

However, I did learn new things too which I felt were important for meeting the objective of professional growth. First of all, I strongly feel that establishing those theoretical best practices is helpful because that way I know that they are worth focusing on. There were also some new things that I learned and will definitely want to keep in mind going forward, such as the privacy factor regarding security. Also establishing theoretical background for management in the training given by the company was extremely interesting to me.

I feel that the objectives for the communication and information security regarding it were now met and at least for the time being do not warrant further investigation in regards to professional growth. On the company level, the communication seems to be effective for the most part and the improvements would be relatively minor. Also, the information security seems to be at a great level so I do not see any near future needs to explore those matters further. However, information security situations may develop quickly, so being proactive and at the very least aware of the current security environment probably will offer further opportunities for learning both for me and for the company.

The management training was something I definitely want to utilize more in the future. Unfortunately, there have not been further training sessions since the early summer. I believe

it may be because of the holiday season as many of the attendees and instructors were away at the same time. But I hope to see more of them in the future as I felt that the theory they helped explore would be helpful in the management situations. Also, the real life opportunities to manage and train people were helpful experiences and I feel that the more I get to do them, the better I get. Therefore, potential opportunities that I wish to explore for further professional growth or even how to improve company processes would be related to management, training people and leadership.

## References

### Printed

- Andress, J. 2011. *The Basics of Information Security*. Waltham: Elsevier Inc.
- Bailey, K. & Leland, K. 2009. *Email in an Instant*. Franklin Lakes: The Career Press, Inc.
- Barton, P. 2014. *Maximizing Internal Communication*. First edition. New York: Aviva Publishing.
- Burns, M. & Griffith, A. 2012. *Engaging Learners*. Bancyfelin: Crown House Publishing
- Canavor, N. 2017. *Business Writing for Dummies*. Second edition. Hoboken: John Wiley & Sons, Inc.
- Herzberg, F. 2008. *One More Time: How Do You Motivate Employees?* United States of America: Harvard Business School Publishing Corporation.
- Horstman, M. 2016. *The Effective Manager*. Hoboken: John Wiley & Sons, Inc.
- Patterson, K., Grenny, J., McMillan, M. & Switzler, R. 2012. *Crucial Conversations*. 2<sup>nd</sup> Edition. New York: McGraw-Hill.
- Piché, P. & Cadiat, A. 2016. *Maslow's Hierarchy of Needs*. 50MINUTES.com
- Stephenson, R. 2012. *Jungian 16 Types Personality Test*. 1<sup>st</sup> Edition. RichardStep.com Publishing.

### Electronic

- World Health Organization. 2021. *Timeline: WHO's COVID-19 response*. Accessed on May 10, 2021. [https://www.who.int/emergencies/diseases/novel-coronavirus-2019/interactive-timeline?gclid=Cj0KCQjw-LOEBhDCARIsABrC0Tk-1rzUcXjcbqUkurxGWgphDy61OZcEhVax\\_-FSybIEKMDZ3hGi1EaAlqQEALw\\_wcB#event-81](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/interactive-timeline?gclid=Cj0KCQjw-LOEBhDCARIsABrC0Tk-1rzUcXjcbqUkurxGWgphDy61OZcEhVax_-FSybIEKMDZ3hGi1EaAlqQEALw_wcB#event-81)
- Vasel, K. 2021. *CNN Business*. The pandemic forced a massive remote-work experiment. Now comes the hard part. March 11. Accessed on May 10, 2021. <https://edition.cnn.com/2021/03/09/success/remote-work-covid-pandemic-one-year-later/index.html>
- Radovic Markovic, M., & Salamzadeh, A. 2018. *The Importance of Communication in Business Management*, The 7th International Scientific Conference on Employment, Education and Entrepreneurship, Belgrade, Serbia. Accessed on November 6, 2021. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3578378](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3578378)

Webhelp. 2020. What we do. Accessed on May 13, 2021. <https://webhelp.com/the-group/>

Kashyap, V. 2019. HR Technologist. Effective Communication in the Workplace: How and Why? May 20. Accessed on May 10, 2021. <https://www.hrtechnologist.com/articles/employee-engagement/effective-communication-in-the-workplace-how-and-why/>

Wilson, F. 2020. Ntaskmanager. 7 Best Tips for Effective Email Communication in 2021. July, 13. Accessed on May 13, 2021. <https://www.ntaskmanager.com/blog/effective-email-communication/>

University of North Carolina at Chapel Hill. 2021. Effective Email Communication. Accessed on May 13, 2021. <https://writingcenter.unc.edu/tips-and-tools/effective-e-mail-communication/>

Chapman, B. 2018. Forbes. Five Steps To Improving The Overlooked Skill Of Effective Email Communication. August 6. Accessed on May 13, 2021. <https://www.forbes.com/sites/forbestechcouncil/2018/08/06/five-steps-to-improving-the-overlooked-skill-of-effective-email-communication/?sh=61f401281908>

Bane, C. 2020. Tripwire. 12 Essential Tips for Keeping Your Email Safe. December 8. Accessed May 13, 2021. <https://www.tripwire.com/state-of-security/featured/essential-tips-for-keeping-your-email-safe/>

Stine, K. & Scholl, M. 2010. The American Health Information Management Association. E-mail Security: An Overview of Threats and Safeguards. April. Accessed on May 13, 2021. <http://library.ahima.org/doc?oid=99319#.YJ2JHKgzYuV>

Stanford University. 2019. Best Practices for Effective Video Conferencing. March, 8. Accessed on May 13, 2021. <https://uit.stanford.edu/videoconferencing/best-practices>

Cybersecurity and Infrastructure Security Agency. No date. Guidance for securing video conferencing. Accessed on May 13, 2021. [https://www.cisa.gov/sites/default/files/publications/CISA\\_Guidance\\_for\\_Securing\\_Video\\_Conferencing\\_S508C.pdf](https://www.cisa.gov/sites/default/files/publications/CISA_Guidance_for_Securing_Video_Conferencing_S508C.pdf)

Kaspersky. 2021. Online Video Calls & Conferencing: How to Stay Safe from Hackers. Accessed on May 13, 2021. <https://www.kaspersky.com/resource-center/threats/video-conferencing-security-how-to-stay-safe>

Browne, N. 2020. Paloalto Networks. Best Practices for Video Conferencing Security. April 4. Accessed on May 13, 2021. <https://blog.paloaltonetworks.com/2020/04/network-video-conferencing-security/>

Singh, A. Getapp. 2018. The 7 rules of business chat etiquette your team is definitely breaking. July 18. Accessed on May 13, 2021. <https://www.getapp.com/resources/business-chat-etiquette-rules-for-small-business/>

York, D. 2020. Harvard Business Review. Best Practices for Instant Messaging at Work. Accessed on September 12, 2021. <https://hbr.org/2020/03/best-practices-for-instant-messaging-at-work>

Freire, O. 2019. Forbes. Cybersecurity Chat: The Security Risks Of Popular Collaboration Apps. . Accessed on May 13, 2021. <https://www.forbes.com/sites/forbestechcouncil/2019/04/03/cybersecurity-chat-the-security-risks-of-popular-collaboration-apps/?sh=6791aa133e1d>

Perlroth, N. 2019. The New York Times. What Is End-to-End Encryption? Another Bull's-Eye on Big Tech. November 19. Accessed on May 13, 2021. <https://www.nytimes.com/2019/11/19/technology/end-to-end-encryption.html>

Sinclair, N. 2019. Nature. The 11-step guide to running effective meetings. July 29. Accessed on May 13, 2021. <https://www.nature.com/articles/d41586-019-02295-z>

Bryant, A. No date. The New York Times. How to Run a More Effective Meeting. Accessed on May 13, 2021. <https://www.nytimes.com/guides/business/how-to-run-an-effective-meeting>

Heijden, E. No date. If Insurance. Don't touch this! Physical security controls for IT and ICS. Accessed on May 13, 2021. <https://www.if-insurance.com/large-enterprises/insight/risk-consulting-magazine/risk-consulting-2019-1/physical-security-controls-of-it-and-ics>

Schooley, S. 2019. Business News Daily. SWOT Analysis: What It Is and When to Use It. June 24. Accessed on May 13, 2021. <https://www.businessnewsdaily.com/4245-swot-analysis.html>

Wilson, F. 2021. Ntaskmanager. How to Use the Risk Assessment Matrix in Project Management. February 11. Accessed on May 14, 2021. <https://www.ntaskmanager.com/blog/risk-assessment-matrix/>



Reis, R. 2021. Stanford University. Teaching and Learning Theories. Accessed on June 1, 2021. <https://tomprof.stanford.edu/posting/1505>

Fastiggi, W. 2021. Technology for Learners. Applying Bloom's Taxonomy to the Classroom. Accessed on June 1, 2021. <https://technologyforlearners.com/applying-blooms-taxonomy-to-the-classroom/>

Mindtools. 2016. Theory X and Theory Y. Understanding People's Motivations. Accessed on June 3, 2021. [https://www.mindtools.com/pages/article/newLDR\\_74.htm](https://www.mindtools.com/pages/article/newLDR_74.htm)

Sobers, R. 2021. Varonis. 134 Cybersecurity Statistics and Trends for 2021. Accessed on June 17, 2021. <https://www.varonis.com/blog/cybersecurity-statistics/>

Dahl, W. & Morrie, C. 2021. GreatBusinessSchools. Face Squared - The Numbers Behind Face to Face Networking. Accessed on August 24, 2021. <https://www.greatbusinessschools.org/networking/>

Weiss, G. 2014. Entrepreneur. Why Face-to-Face Communication Won't Disappear (Infographic). Accessed on August 24, 2021. <https://www.entrepreneur.com/article/238058>

Hendee, C. 2015. Denver Business Journal. To heck with tech: Millennials prefer face-to-face meetings, and Denver's great for that. Accessed on August 24, 2021. [https://www.bizjournals.com/denver/blog/broadway\\_17th/2015/08/millennials-prefer-face-to-face-meetings-and.html](https://www.bizjournals.com/denver/blog/broadway_17th/2015/08/millennials-prefer-face-to-face-meetings-and.html)

Bozeman, R. 2020. LinkedIn. The Benefits of Video Conferencing. Accessed on August 25, 2021. <https://www.linkedin.com/pulse/benefits-video-conferencing-ruth-bozeman/>

Forbes. 2009. Business Meetings The Case for Face-to-Face. Accessed on September 12, 2021. [https://www.forbes.com/forbesinsights/StudyPDFs/Business\\_Meetings\\_FaceToFace.pdf](https://www.forbes.com/forbesinsights/StudyPDFs/Business_Meetings_FaceToFace.pdf)

F-Secure. No date. Understanding The Email Threat Landscape. Accessed on November 21, 2021. <https://www.f-secure.com/en/business/resources/your-complete-guide-to-email-security>

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