# Czech University of Life Sciences Prague

# Faculty of Economics and Management

# Department of Management



## Diploma Thesis

## Virtual teams in practice – challenges faced and lessons learned from the COVID-19 pandemic based on a case study

## Lara Glut

# CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

# DIPLOMA THESIS ASSIGNMENT

Lara Glut

Economics and Management
Economics and Management

Thesis title

**Virtual teams in practice – challenges faced and lessons learned from the COVID-19 pandemic based on a case study**

---

**Objectives of thesis**

The objective of this thesis is in two major parts:
(1) to identify challenges that employees and their managers had to face during the COVID-19 pandemic as they were forced to work from home with no notice.
(2) to find solutions and recommendations on how to prepare for future emergency challenges and operate as an efficient virtual team.

**Methodology**

This thesis comprises two parts: one theoretical, and one practical.

The theoretical part will use current literature to summarise current thinking on the topic of virtual teams, mainly with a retrospective look back at concepts and practices up to and including 2020.

The practical part will be based on a study of a specific company, to identify by questionnaire and interview, the situation various staff members found themselves in and how their managers are handling this situation.

The questionnaires and interviews will be analysed, concluding with identifying any difficulties experienced by staff and the company, lessons learned, and whether the situation could have been handled better (or differently).

The costs and effects of any proposals will be identified.

## The proposed extent of the thesis

Approx 60 – 80 pages

## Keywords

Team operation in emergency situation, challenges of virtual teams, virtual versus face-to-face work environment, management of virtual teams, COVID-19, working from home, case study

---

## Recommended information sources

Armstrong, M. (2010), Armstrong's essential human resource management practice : a guide to people management. London UK.: Kogan Page, 432pp. ISBN 978-0-7494-5989-5

Krasnozhon LO., Rothschild DM., (2010), Lessons from post-flood recovery of New Orleans and Prague, chapter in 'The Political Economy of Hurricane Katrina and Community Rebound', Chamlee-Wright E., Storr VH. [Eds], Cheltenham UK.: Edward Elgar Publishing Ltd., ISBN-13: 978-1848442382

Morely S., Cormican K., Folan P.; An Analysis of Virtual Team Characteristics: A Model for Virtual Project Managers; Journal of Technology Management & Innovation vol.10 no.1 Santiago 2015

Rentz K., Lentz P., (2013), Lesikar's Business Communication: Connecting in a Digital World, New York, USA.: McGraw-Hill, 720pp., ISBN-13: 978-0073403212

Zolingen S.J. van, Donmez, O. (2013), The problems of a virtual multicultural team (VMT) analyzed, Washington DC. USA : The Annual Conference of the Academy of Human Resource Development, AHRD, (proceedings), available at https://hdl.handle.net/2066/121852

---

## Expected date of thesis defence

2020/21 SS – FEM

## The Diploma Thesis Supervisor

Ing. Richard Selby, Ph.D.

## Supervising department

Department of Management

---

Electronic approval: 2. 3. 2021

**prof. Ing. Ivana Tichá, Ph.D.**

Head of department

Electronic approval: 3. 3. 2021

**Ing. Martin Pelikán, Ph.D.**

Dean

Prague on 11. 03. 2021

---

**Declaration**

I declare that I have worked on my diploma thesis titled "Virtual teams in practice – challenges faced and lessons learned from the COVID-19 pandemic based on a case study" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the diploma thesis, I declare that the thesis does not break any copyrights.

In Prague on March 9th 2021                    _____

**Acknowledgement**

I would like to thank my supervisor Ing. Richard Selby, Ph.D. for his supervision and valuable advice and my family, friends and partner who all gave me mental support and encouraged me during my work on this thesis.

# Virtual teams in practice – challenges faced and lessons learned from the COVID-19 pandemic based on a case study

**Abstract**

The thesis deals with the topic of virtual teaming in the context of the COVID-19 pandemic which has underlined the significance and relevance of virtual teams, especially during emergency situations. The work aims at analysing the firm VIVnetworks.com s.r.o. which was as many other businesses forced to move all of its operations to the virtual space in the first half of 2020 and therefore had to relocate its employees from a face-to-face to a solely virtual team. The research aims at identifying main challenges that employees and their leader had to face during working from home which represented a new and unknown situation for the team and summarize lessons that the team learned from this experience. The study uses two research methods including a questionnaire and interview in order to assess perceptions of both, the team and its leader to objectively determine whether and how the change in the work environment affected the team's performance and overall functioning and which areas of the team's operations were affected the most. Concluding, the work summarizes main findings and offers recommendations on possible improvements and in case of future recurrences.

**Keywords:** team operation in emergency situation, challenges of virtual teams, virtual versus face-to-face work environment, management of virtual teams, COVID-19, working from home, case study

# Virtuální týmy v praxi – výzvy a ponaučení plynoucí z pandemie COVID-19 na základě případové studie

**Abstrakt**

Tato diplomová práce se zabývá tématem virtuálních týmů v kontextu pandemie COVID-19, která podtrhla jejich význam a relevanci, zejména v krizových situacích. Práce se zaměřuje na analýzu firmy VIVnetworks.com s.r.o., která stejně, jako mnoho dalších společností byla nucena přesunout všechny své operace do virtuálního prostoru v první polovině roku 2020, a proto musela přesunout i své zaměstnance z běžného fyzického do zcela virtuálního týmu. Výzkum si klade za cíl identifikovat hlavní výzvy, kterým museli zaměstnanci a jejich vedoucí čelit během práce z domova, což pro tým představovalo novou a neznámou situaci, a dále shrnout ponaučení, která si tým z této zkušenosti vzal. Studie využívá dvě metody výzkumu včetně dotazníku a rozhovoru, aby posoudila jak vnímání týmu, tak i jeho vedení k objektivnímu určení, zda a jak změna pracovního prostředí ovlivnila výkonnost a celkové fungování týmu, a které oblasti provozu týmu byly ovlivněny nejvíce. Na závěr práce shrnuje hlavní zjištění a nabízí doporučení pro možná zlepšení a pro případ nových krizových situací podobného rázu v budoucnu.

**Klíčová slova:** operativa týmu v nouzové situaci, výzvy virtuálních týmů, virtuální versus fyzické pracovní prostředí, vedení virtuálních týmů, COVID-19, práce z domova, případová studie

# Table of Content

# 1 Introduction

The introduction presents main issues and objectives which are the subject of the thesis. The main topic will be introduced and the context of the theme will be provided to allow a better understanding of the relevance and choice of the topic.

The thesis deals with the topic of virtual teaming and analyses its role and development in the context of the COVID-19 pandemic that has affected all of our lives since late 2019, early 2020. Before the world became aware of the SARS-CoV-2 virus, technology had already been a large part of our everyday lives at home and at work and even though the virtual life and communication that we had been experiencing on a daily basis through our smartphones, computers, social media, conference calls etc. had grew into an inseparable element of our existence, still human and social interactions stood above it all and people thought of physical contact and face-to-face meetings as one of the most natural, essential and common things regardless of the circumstance. However, with the arrival of COVID-19 everything changed and socializing suddenly became an almost rare luxury that was not a matter of course anymore. Countries all over the world were forced to apply safety measures and restrictions in order to slow down the spreading of the virus and protect the health of the people. This of course also reflected on the global economy as companies had to figure out whether they could find other ways to keep their business operations going and not having to face major losses. Many firms reacted by moving all or most of their employees and operations to the virtual space if that was possible according to the area of their activities. This is where virtual teaming comes in. Virtual teams, also known as distributed teams have been applied long before any digital technologies were available as a distributed team is simply any group of people that works towards a common goal while being separated by distance. With time virtual teams have gotten more and more put into connection with modern digital technologies as they play a big role in today's communication especially with distance being a factor.

The reason for this topic choice was sparked by the increasing significance of virtual teams especially in the context of the very current global situation of firms moving co-located teams into a virtual and distributed workspace which naturally suggests that it would be interesting to find out which challenges these teams would face after having to adapt to completely new work conditions, a new work environment, and the general nature of virtual teams which is characterised mainly by a lack of physical interactions,

communication via technology and being separated from the rest of the team. The subject for analysing these potential challenges is a small-sized company VIVnetworks.com s.r.o. which resides in the centre of Prague, Czech Republic and operates in the area of online marketing. This company was chosen purposefully as the online sector was able to continue its activities despite the ongoing crisis and therefore presented an opportunity to examine how the company and its team was able to handle the move from the conventional office to a home office.

# 2 Objectives and Methodology

## 2.1 Objectives

The main objective of this thesis is divided into two major parts. The first part of the main objective is aimed at identifying challenges that employees and their manager of a small sized company VIVnetworks.com s.r.o. which operates in the area of online marketing had to face during the COVID-19 pandemic as they were forced to work from home with no notice. The COVID-19 pandemic brought many changes and special measures in the beginning of the year 2020 which affected all of us including many companies and their operations and in this context the primary aim is to determine whether challenges were faced during times in which the team of employees including their leader had to work in the conditions of a virtual team and to characterise their nature.

The second part of the main objective is to summarize lessons learned by the team and its leader and make recommendations on how the challenges that the team had to deal with, given the unusual circumstances, can be prevented in future emergency scenarios.

### 2.1.1 Research Questions

In order to reach the main objective, the research aims at answering the following research questions:

a. Which challenges were faced by the team and its members during the adaptation of virtual teaming conditions during the first COVID-19 outbreak?

b. How did the team leader handle the management and leadership of his team after the company and its employees were forced to work from home and communicate solely virtually without any notice?

c. How were the overall levels and quality in the areas of motivation, communication, collaboration, synergy, productivity and leadership affected by the separation of all team members and lack of physical interactions due to social distancing?

d. Which were the lessons learned after going through the experience of working in a virtual team due to emergency measures?

## 2.2 Methodology

This thesis comprises two parts, one theoretical, and one practical.

### 2.2.1 Literature Review

The theoretical part, more precisely the literature review is an assessment of current literature which was used to summarise current thinking on the topic of virtual teaming, mainly with a retrospective look back at concepts and practices up to and including 2020 based on secondary data obtained from scientific papers and articles, academic works, books and other sources. The literature review aims at explaining the essence and structures of virtual teams, including their origin and types. Further topics also include the comparison of face-to-face and virtual environments, main differences between these two systems, advantages and disadvantages presented for both concepts and furthermore challenges that can occur due to the specific characteristics of virtual teams and their operations. Stated challenges are followed by recommendations on how to face them and the significance of the role of the team leader is pointed out.

Definitions and characteristics of all mentioned topics are provided using methods such as description, summary and critical evaluation by identifying strengths and weaknesses of particular issues. Additionally, abstraction, which separates irrelevant aspects of certain phenomena from relevant elements, is used throughout the whole literature review to make sure that only appropriate and accurate sources and information are presented. And also, induction and deduction are applied to draw conclusions from general information or generalise specific definitions if a more detailed explanation is needed for a better understanding of certain issues.

### 2.2.2 Practical Part

The practical part is based on a study of a real company example. The small sized company VIVnetworks.com s.r.o. operates in the area of online marketing and the subject of the study are its employees that form a team which is further described in the chapter *4.1*. The company and its employees had to face a never before experienced situation due to the COVID-19 pandemic and were forced to move all team members and the company's operations to a virtual, distributed space.

The research is based on primary data which were obtained using a combination of quantitative and qualitative research methods.

### 2.2.2.1  Quantitative Research

The quantitative method is applied in the form of a questionnaire which is a detailed study of a selected field or area gathering information about attitudes, impressions, opinions, satisfaction levels and other factors among a selected or random sample of the population. In the case of this study the selected sample and the subject of the survey is the whole team of Affiliate Managers of the company which consists of 17 members. The questionnaire was distributed electronically and answers were collected anonymously. The questions of the survey aim at characterising group members by age and gender and furthermore identifying challenges which and if team members faced in the areas of motivation, trust, communication, teamwork, perception of the team leader and related topics during the first COVID-19 outbreak in the first and second quarter of 2020 resulting from the unusual and new conditions of having to work in a virtual team. Apart from challenges, the second main outcome will be lessons that the team learned during the experience of working as a virtual team. The survey consists of 45 questions that use a variety of question types including open (unstructured) and closed (structured) and semi-closed questions along with single choice, multiple choice questions, Likert scales and dichotomous questions (see *APPENDIX A*). The analysis of gathered materials consists mainly of quantitative descriptive statistics with the use of weighted averages but also combines this method with a qualitative analysis of perception and judgment of individual team members. The ultimate goal of this research method is identifying challenges and lessons learned from the employees' point of view which are summarized at the end of chapter *4.4*.

### 2.2.2.2  Qualitative Research

In addition, qualitative research is realised in the form of an interview, this time analysing the perceptions and point of view of the team leader. An interview is a methodically conducted conversation with the aim to obtain desired information and statements. The interviewer is the researcher and the interviewed subject is the team leader of the Affiliate Managers' team who is the main support pillar responsible for this team, its well-being and its performance. Further responsibilities are described in the chapter *4.1*. The majority of the questions used in the interview are of open character. In total 20 were asked and answered. Due to the ongoing COVID-19 pandemic which recommends minimised personal contact, the interview was conducted electronically via direct

communication with the team leader who was asked to write down answers to all questions asked and delivered in an electronic document (see *APPENDIX B*). The intent of this research method is to obtain opinions on the same topics asked in the survey, only from the team leader himself to complete the whole picture of the situation within the team. The statement of the team leader will later on be compared to the outcomes of the employees' answers and possible differences or similarities will be pointed out.

After gathering data from both research methods, the opinions of the employees and the leader are compared to identify similarities or differences. This approach is intending to take into consideration both points of view, firstly of the team members but also of the team leader to make sure the whole picture is being painted based on the opinions of both parties equally. The aim of combining both methods is to complete the quantitative descriptive statistics with subjective opinions of employees and team leader to create a complex image of the team's abilities to handle stressful and challenging situations. Based on the overall results conclusions were drawn in terms of individual challenges which were faced by the team, lessons learned by team members and team leader and recommendations for future recurrence cases were stated including costs and effects of the proposals. The overall ability of the team and its management of handling the difficult situation was analysed and it was evaluated how well the team functioned in the virtual conditions and what could have possibly been done better or differently. In case of identifying findings that suggest positive outcomes resulting from the change to a virtual team and virtual management, these will be acknowledged and lessons learned will be identified in both case scenarios. All data were finally used to answer the research questions and fulfil the main goal of the thesis.

# 3 Literature Review

## 3.1 Conventional Teams

To understand how virtual teams operate it is necessary to firstly define conventional or also called traditional teams. How are groups of people actually differentiated from teams as such? Is a team simply a group of people working on one project? These are questions that were also asked by Evangelu and Grundel (2011) and the answer to them is that a group can be defined as two or more people that were put together in the context of a given project where each member is focusing on their own goals and tasks and their individual efforts, whereas a team is a group of 2 or more people who share and work towards a common goal and have the same vision and purpose. Not only do team members focus on reaching the set goal collectively, but they are also committed to each other as team members and colleagues who support each other in the team activities.

Apart from sharing the same goals and being devoted to common efforts, a traditional team is also a team that operates in a physical or also referred to as face-to-face environment therefore its team members work in close physical proximity which is usually within one office or one building and have regular physical interactions. The greater part of communication within physical teams takes place face-to-face simply because it saves time and has more effective results than for example writing an email, waiting for a response and then responding and waiting again. By using verbal communication, issues are usually resolved in less time with a lower risk of miscommunications and misunderstandings. Physical teams usually attend regular face-to-face meetings to get and give updates, discuss tasks, go through the progress of a current project or plan an upcoming project (Bell, Kozlowski, 2002).

## 3.2 Virtual Teams

### 3.2.1 General Definition of Virtual Teams

The term "virtual" was firstly mentioned in medieval Latin between the years 1350 and 1400. The Latin term "virtuālis" means "effective" in the sense of having the effect of something without the form or appearance of it (Collins Dictionaries, 2014).

As the name itself suggests, what will be described as a virtual team is a team that operates in a space or environment that functions without the need and presence of

physical interaction. Therefore, this topic is mainly talked about in the context of and closely connected to the digital world that surrounds us and which is constantly developing. One of the main attributes which is used to characterise and define virtual teams is the use of information and communication technologies (ICTs) which include the internet, wireless networks, cell and smartphones, computers, software, middleware, video-conferencing, social networks, and other media applications and services enabling users to access, retrieve, store, transmit, and manipulate information in a digital form (Shen et al., 2014).

However, there are also other aspects that contribute to the definition of virtual teams and which explain they aren't necessarily only thought of within the technological context as earlier in the day technology was not as advanced as we know it today. Virtual teams are defined by many factors including also the distance that its members work within each other and working times which can indicate whether we are talking about a virtual or rather co-located team. It should be mentioned that virtual teams or also called distributed or remote teams emerged long before any digital technologies were available when people worked together to reach a common goal despite being separated by large distances in the earlier times. Of course, the rapid development of electronic information and communication media in the past few years has helped significantly and contributed to making the operations of these teams faster, easier and more efficient (Shen et al., 2014).

"Apart from these more general differentiations, the more specific definition of virtual teams is still controversial" (Bell, Kozlowski, 2002). However, what is generally agreed on is that virtual teams consist of (1) two or more persons who (2) cooperate interactively to achieve common goals, while (3) at least one of the team members works at a different location, organization, or at a different time so that (4) communication and coordination is predominantly based on digital communication as mentioned above. Most commonly, in companies, electronic tools such as e-mail, phone or video conferencing is used to overcome the distance barrier. According to Hertel et al. (2005) it is important to note that the last two aspects in this definition: (3) and (4), are considered as dimensions rather than as separated criteria that distinguish virtual teams from conventional face-to-face teams.

Extreme cases of virtual teams can be situations in which all members are working at different locations and communicating solely via digital means. This is considered to be extreme as virtual teams usually have some kind of physical contact, but the virtual contact

prevails. Nonetheless it is rather unusual that teams work based on solely virtual communication and is also rather not recommended considering other aspects that help to ensure good and productive teamwork and work relationships which will be mentioned later on (Juneja, 2015).

Schulze, Krumm (2016), Bell, Kozlowski (2002) and Griffith et al. (2003) suggest that instead of trying to draw a clear line between virtual and non-virtual teams, it might be more fruitful to consider the relative "virtuality" of a team and its consequences for management. As summarised by Hertel et al. (2005) "from this perspective, virtuality of a team is one aspect among other team characteristics (e.g. diversity, autonomy, time-restriction) that might broaden our understanding of teamwork in general." Possible indicators or measures of virtuality are the relation of physical or face to face to non-physical communication, the average distance between the individual team members, or the number of working locations and the number of members at each of these locations.

Concluding, virtual teams are primarily defined as geographically distributed groups that communicate by using digital technologies and other indicators including as mentioned by O'Leary and Cummings (2007):

- working times of individual team members
- average distance between individual team members
- number of persons involved
- characteristic of communication means
- presence and intensity of face to face communication
- frequency of physical interactions
- amount of working locations and number of members at each location

### 3.2.2   Origin of Virtual Teams

As mentioned before, the term "virtual" was firstly mentioned in the 14th century but by the late 1950s the term started taking up a new meaning with the development of computer software. We may think that remote teams emerged fairly recently with the introduction of PCs in the 1960s followed by the popularity of cellular phones in 1970s, voicemail in 1980s and finally of the world wide web in the 1990s which later became an inseparable part of offices and communication of the 21st century, but that is not entirely so. Even though virtual teams are closely connected to modern technology which plays a

major part in their today's operations we can actually trace distributed teams way back to prehistoric times as a virtual teaming itself can consist of any team that joins people working together to accomplish a common goal from separate locations. From the complexity of the Roman Empire to the critical transportation of the Wells Fargo stagecoaches, teams have been geographically dispersed and highly effective for a very long time (Webster, Wong, 2018).

According to Powers (2018) even the concept of working from home is not new. Historically speaking, home and the workplace were actually one and the same place in many industries.  If we look at farmers, bakers, seamstresses, shoemakers, potters, weavers, and blacksmiths, they have always worked from their homes. Later, due to the Industrial Revolution in the later 18th century many workers were moved out of their homes and into factories for work. Later on, in the early 20th century with the access to widespread electricity and public transportation people had the means to travel further to work and companies were able to recruit employees from a geographically widespread area which meant more opportunity for both, companies and the workers. Hence people moved even farther from home to offices equipped with telephones, telegraphs, and the typewriter. Nonetheless, the OPEC oil crisis in the 1970s led to rising prices of oil and therefore traveling to work got more expensive. This is where Jack Nilles, sometimes called "The Father of Teleworking" steps in to look for ways to reduce the cost of driving to work. He conducted the first formal tests of telecommuting which from that point grew rapidly and with further development of digital technologies and teleworking, virtual teams started to move in the direction as we know them today. From what we can observe today, the home-office trend is becoming more common in many companies all over the globe and given the COVID-19 pandemic that started early in the year 2020 we can expect them to grow even more due to limitations of physical contact but also other reasons such as globalization and creation of international teams and constantly developing technologies that sometimes can make working in virtual teams the easier or less expensive option.

### 3.2.3  Forms of Virtual Teams

As described by Webster and Wong (2018) generally 2 main forms of virtual teams are differentiated:

a. Virtual Team

A completely virtual team arises and is often constructed when companies require special skills and knowledge connected to a particular region, resources, or simply expertise from employees who are distributed and located elsewhere than the rest of the team and the seat of the business. Another reason for creating a solely virtual team can be due to a cost-saving strategy of a company which decides to reallocate its resources from rent and maintenance expenditures elsewhere. This is usually possible in areas like e.g. online marketing or other areas that already work on mainly virtual oriented markets or sell virtual products, also for parts of a business that deals mainly with communication or support services rather than having physical interaction with clients, customers or merchandise.

b. Semi-Virtual Team

Whereas a semi-virtual team arises when a company needs to bring in external employees because of their unique expertise and skills, however the company still wants to remain a mainly face-to-face environment. This way the team members need to partially operate on a virtual basis with only a part of the team and combine both styles of communication. An example would be when a particular company is trying to recruit a native Spanish speaker, but the company itself is located in Poland where it is very challenging to find a native Spanish speaker with the expertise in the given field the business operates in. The solution can therefore be hiring a new employee who might be located in Spain or in another country and work externally using virtual communication technologies. Of course, the distance does not have to be as big as reaching across borders. Even if the employee would work from a different part of the country or a different office than the rest of his team, he would be considered as a virtual team member because of his distribution and means of communication.

Virtual and semi-virtual teams can also emerge if the employees are allowed to acquire the benefit of working from home or if other extraordinary measures require companies and their employees move their operations to distributed teams such as an highly infectious disease, an office reconstruction, etc. Commonly various forms of virtual work are differentiated depending on the number of persons involved and the degree of interaction between them (King, Frost, 2002).

### 3.2.4 Types of Virtual Teams

Looking at virtual teams more specifically, the reasons for their creation are very often aims of cost reduction or faster problem solving and innovating in modern companies. Several authors have identified different types of distributed teams which can be summarized by 8 main categories depending on temporal distribution, lifespan, aims and objectives and the role of the team members.

a. Networked Teams

These are generally geographically dispersed and can include members from outside the organization. Most of the time, these teams are constructed to bring together cross-functional members to share their expertise and knowledge on a specific issue or topic. This allows companies to acquire valuable team members with different skills which can be difficult to find within a bounded area. Members are not necessarily there to stay for an undefined period of time. If a team member was assigned a specific task, he or she can be removed from the team after completing it or they will be reassigned. "The lifespan of a networked virtual team depends on how much time it takes to resolve the issue" describes Juneja (2015). Networked teams dissolve after fulfilling its purpose, after reaching the goal and completion of all tasks. In specific areas of business, a large variety of skills and expertise can be required, therefore the best solution for companies is finding external workers to ensure that clients' needs are fully met. Of course, another advantage besides being able to acquire talented and skilled people from farther localities is also cost saving which comes with having external employees.

b. Parallel Teams

The second type is the parallel team which is usually formed by members of the same organization. It is referred to as a parallel team, because its team members, apart from fulfilling their primary assigned role in the given company, take on another - parallel activity at the same time. This kind of team has a rather shorter lifespan and is usually applied in multinational enterprises when a global perspective is needed. Members from different departments are put together into a virtual team with the aim to review some processes and operations and make recommendations for improvements and give constructive feedback. An example that was used to explain how these teams work more closely is based on consumer goods companies which often team up their sales, marketing, manufacturing and R&D (research and development) professionals who work at different locations into parallel virtual teams with the main objective to review how effectively the

company is approaching the local market in the individual areas and if any improvements should be made to product specifications, sales strategies, and others (Cordery et al., 2009).

c. Project or Product Development Teams

Project or also called Product Development teams are considered to be the pioneers in the development of the virtual teams we know today and were firstly introduced in the 1990s. In this concept team members are brought together for a clearly outlined project which requires special expertise and so people from all around the globe gather to reach one common goal. The project has a clearly defined goal, beginning and end and can take from several weeks to several years depending on the difficulty of the project. The project involves matters regarding the development of a new product, information system or organizational process which is expected to ensure specific, measurable outcomes at a set due date with given resources. In practice we can see many examples when companies are trying to introduce their product to a new market. Compared to parallel teams, product development teams have their own competencies to make decisions rather than just being consultants. These teams work as individual units towards a specifically assigned project led by a project manager (Evangelu, Grundel, 2011).

d. Permanent Teams

These teams have been defined as teams that are created for a period of time that does not have a specified end date with the main goal to fulfil day-to-day work tasks which are significant for the company in the short- and long-run. Permanent teams, or also called functional teams are formed by members who cover the same role but work individually and at the end their efforts are combined to reach the final result of the organization. The desired outcomes are often measured by KPIs (Key Performance Indicators), which should motivate the team members to be as effective as possible. These teams are a solid part of the company's organizational structure and only a significant change of this structure could result in closure of permanent teams. Functional teams are supervised by their team manager. One example of these teams is an international consultation team that is in charge of clients across different markets (Panteli, Duncan, 2004).

e. Service/Support Teams

Thanks to virtual teams there are services like support centres and 24/7 phone or online customer care used and offered by many companies in areas such as telecommunication, transport or retail. These types of teams are usually made of members spread all over the globe across different time zones which allows them to cover the whole

24-hour period or the working hours are divided into several shifts in case support teams are based in one country or time zone. These teams are very independent in terms of its members who each work on their own requests and queries, however the work is continuous. We could compare this concept to a relay-race where team colleagues take over after each other from where the other person has left off (Mello, 2015).

f.  Action or Crisis Teams

Action or crisis teams are basically ad-hoc teams that are created only for a very short period of time. They are created in case of a sudden occurrence of an acute problem or issue which requires an immediate response in order to find a solution. These problems can include for example sudden accidents, natural disasters, technical issues but also business-related issues such as market crash or changes in business relations etc. The team is created solely for the purpose of solving the specific problem and after it is resolved, the team resolves as well. Due to the acute establishment of such team, its members have no possibility to discuss anything in advance and have to react in the given moment without any notice. The hiring party's expectations and demands of these types of teams are usually very challenging as they need to deliver the best possible solution in the shortest amount of time possible, with maximised outcomes and minimized costs with no specific resources given in advance. Neither the time span or the purpose can be determined beforehand which makes the whole process much more difficult in comparison with teams that can actually prepare and plan all operations due to having full information before the project begins as described by Evangelu and Grundel (2011). For example, NASA forms a virtual action team consisting of leaders sitting in NASA headquarters in Houston, astronauts in space, engineers & scientists in different locations across the globe who are ready to step in during a sudden crisis to ensure a successful space mission.

g.  Management Teams

As the name already tells, these teams are formed by managers who are its members and who work for one organization but are geographically dispersed across cities, states or continents. The aim of these teams is to discuss common strategies, visions, review decisions and e.g. distribute the budget for future investments. These teams apply to all companies that have more offices in more locations and have a rather vertical organizational structure (Wong, Burton, 2000).

h. Offshore Teams

Offshore teams are created when a company wants to move a part of its business to a low-cost location such as India or the Philippines to save expenditures. Therefore, a part of the company is located in a completely different country, even on a different continent most of the time and it has to virtually communicate with the onshore team to coordinate all operations. In this case, the onshore team is more of a leading force and the offshore team collaborates to reach desired results (Mello, 2017).

## 3.3 Virtual Teams versus Traditional Teams

Both, traditional and virtual teams go through the five stages of Tuckman's (1965) model of team development as these are necessary in order for the team to be able to grow, face challenges, find solutions and reach desired goals. The biggest factor that differentiates virtual from conventional teams is the use of technology. Communication via information and communication technologies really changes the team dynamic in many aspects in comparison with the concept of the traditional team. Besides the virtual communication, other aspects such as time zone differences and cultural differences shape the nature of virtual teams. Some of the main differences are outlined in the following sub-chapters.

### 3.3.1 Selection of Team Members

When it comes to onboarding new team members, in the case of traditional teams, members are usually interviewed and later on selected based on a face-to-face meeting. In the case of virtual teams, this situation can be difficult for both, the company and the soon to be employee. Starting with the interviewing process, which may be difficult if both parties don't have the opportunity to schedule a physical meeting. This is mostly replaced by an online call using web cameras to have at least some kind of real interaction. On the other hand, when accepted for the job, the new team member has to face working alone and solitude which he should be prepared for. Usually while recruiting such team members qualities such as: ability to solve problems, independence, ability of decision making, good communication skills, discipline and proactive behaviour are required and looked for by the companies. Some people might prefer little face-to-face interaction while others may struggle and especially at the beginning of the onboarding process the employee can struggle with understanding first tasks and operations due to the lack of introduction in a

face-to-face environment with individual supervision. It is therefore crucial that when selecting a new virtual team member, he or she possesses such qualities in addition to the basic functional skills (Souza, Colarelli, 2010).

### 3.3.2 Organizational Structure

Compared to traditional teams, virtual teams often support a flatter organization structure with a rather weaker authoritative leadership and the aim to encourage creativity, make work processes faster thanks to less need of confirmation and constant consultation with the supervisor. On the other hand, it can be difficult to draw the perfect line between giving employees enough space to be creative and independent and still having sufficient control over them. In the case of virtual teams, it is suggested to have some kind of reporting system which the employees use to record their activities and future plans and a regular virtual meeting schedule with the manager to make sure both parties give each other updates and receive all information needed (Wong, Burton, 2000).

### 3.3.3 Leadership Style

In terms of leadership, when the leader is not able to physically monitor and assist his subordinates, another solution and strategy on how to lead a remote team well apart from using virtual sophisticated monitoring systems is also delegating. Delegating can be found more often in virtual teams compared to traditional teams as it supports the rather democratic way of leadership that the majority of leaders prefer to use within distributed teams, although it is true that generally the democratic style of leadership is becoming more frequent in both concepts. It also allows team members to grow faster knowledge- and skill-wise, fulfil tasks more efficiently and more independently which can really contribute to creating a strong and capable virtual team (Cascio, 2000).

### 3.3.4 Communication and Decision-Making

In co-located teams it is common to have face-to-face interactions almost throughout the whole working day as colleagues usually sit together in one office and attend weekly meetings to go over what is new, give and receive project updates, review what has been done and discuss some possible issues or plans for the upcoming week or chosen period of time. Conventional teams therefore have a lot of access to updated and current information which is clearly verbally communicated and there is sufficient space to ask more questions

and consult further details with colleagues or supervisors throughout the working period. However, in virtual teams this is very limited. Virtual team members have much less opportunity to discuss issues and receive as many updates, not to mention if they do, it is mostly not face-to-face which brings other disadvantages such as lower clarity and no real perception of emotion which can lead to miscommunications. In the case of distributed teams, more frequent virtual meetings and updates are required to make sure no questions are left unanswered and that everyone is confident about the tasks they were assigned and what is expected of them. These virtual meetings can also help to reduce loneliness and increase social interactions which can be a great motivator and help team members to receive new energy to manage tasks more effectively. Support among colleagues and from the team leaders is very crucial in terms of remote teams to keep up the motivation and enthusiasm of the team members. Within global virtual teams, time zones are another problem which can stand in the way of fast and efficient communication and problem solving as each member may operate during different hours and this can create a real barrier to efficient communication, decision making and problem solving (Grosse, 2002).

### 3.3.5   Relationship-Building

Building real and quality relationships within virtual teams can be very challenging. Opposed to conventional team members who meet on a daily basis, have lunch together, attend meetings and share discussions which lead to developing close social ties, virtual team members need to make much more effort if they want to strengthen their team relationships and overall dynamic. Remote teams usually experience only rarely face-to-face meetings therefore they mainly maintain interactions using conference calls and video calls, which serve primarily for work purposes, however traditional teams often chat in the office about personal things which brings them even closer rather than discussing work-related things only. Having personal relationships affects how team members work together, to which extent they help each other and support each other. The fact, that virtual team members do not have any face-to-face contact, or mostly only very little can have an effect on the team in the long run where it becomes clear, that the team does not have such a strong bond compared to co-located teams which can be a great disadvantage that presents itself on the overall motivation, productivity and results of the team. Having personal links to one another can encourage much faster and easier communication as members know each other, how the other expresses himself, what he means by what he is

saying. Also having a positive tie to a colleague can make people react faster to another's requests and calls for help or advice and make the overall communication pleasant above the only work-related level of communication and perception. It is suggested that virtual teams have some kind of personal interaction, in the virtual, or if possible in a face-to-face way at least semi-frequently to ensure smoother communication and better synergy of the team. This should be initiated by the leader of the team in the case that the team has not found an own way to connect within (Juneja, 2015).

### 3.3.6   Building Trust, Cohesion

Gaining and building trust among team members of a conventional team is much easier than achieving the same in a virtual team. Establishing trust is closely connected to building relationships, which has been discussed in the previous paragraph. Therefore, having physical and more personal interactions on a regular basis with co-workers and the team leader/manager is definitely a big advantage compared to remote teams which have to make much more effort to build strong relationships based on trust without seeing one's colleagues everyday and having casual conversations. Hill et al. (2009) conducted a research in which he studied and compared traditional face-to-face teams and virtual teams that used solely technological means of communication. The findings showed that face-to-face communication during an initial meeting has a more powerful influence on the level of trust than a virtual meeting. Concluding, face-to-face interaction has a bigger impact on establishing trust than virtual communication. Another study by Warkentin et al. (1997) found that members of face-to-face teams have established stronger relationship ties and a higher degree of cohesion compared to distributed team members.

### 3.3.7   Productivity

In a majority of cases productivity seems to be harder to maintain in virtual teams, however there are more factors influencing this aspect. One influence affecting productivity is how well team members handle social distance and separation from colleagues and supervisors. While some individuals prefer to work alone and their focus is at its peak while working independently, others can feel discouraged and demotivated due to lack of social interactions and support from the leader or colleagues. Other factors are also quality leadership and communication within the team, motivation, access to information and authority to make decisions. All these factors are in the hands of the

management which must provide support and do the best to make work operations as easy and effective as possible to enable employees to be their most productive selves. Generally, it helps when problems can be solved almost immediately in the office using verbal communication rather than working out issues in long electronic communications. From this point of view do face-to-face teams have a certain advantage (Armstrong, 2014).

### 3.3.8  Satisfaction

Several studies examined the level of satisfaction among face-to-face teams compared to virtual teams and found that virtual teams are generally less satisfied in the workplace. For example, Staples and Jhao (2006) found that the virtual team members in his study experienced a lower level of satisfaction due to the heterogeneous nature of their team. Another study conducted by Cicei (2012) assessed 80 students who were divided into two groups where one group worked on a given project in virtual teams and the other worked in a face-to-face environment. The findings showed that student members of face-to-face teams were more satisfied with the overall quality of team work than students working in virtual teams.

### 3.3.9  Conflict

Due to the distributed and diverse character of virtual teams, these teams seem to experience a greater extent of conflict which is rather heterogeneous in comparison with traditional co-located teams. Several studies found that conflict is more frequent in virtual teams and concerns mainly the areas of collaboration, competition and avoidance. Technology also plays a role in the occurrence of conflict. In distributed teams, technology can contribute to issues and lack of communication resulting in conflict throughout more areas due to relying solely on technology without having face-to-face interactions (Liu et al., 2008).

## 3.4  Advantages and Disadvantages of Virtual Teams

### 3.4.1  Advantages

Virtual teaming has been growing in popularity and brings many benefits based on which virtual teams are becoming a common part of many organizations. The main and

often mentioned opportunities and advantages of virtual teams opposed to conventional teams are the following:

- Cost Savings, Reducing Travel Time

One of the most common reasons why companies decide to create virtual teams is in order to reduce costs. Having people work from home can save the organization large expenses for rent or maintenance of the real estate in which its offices are located. Other costs also include e.g. energy and water bills, cleaning and security services and costs related to travel or food compensations for employees which all lose their purpose and need in distributed teams. In order to cut down costs, companies also use outsourcing to low-cost regions where wages are lower as well as the overall expenses of the company's operations, creating off-shore virtual teams. Further costs resulting from accommodation, travel and other daily allowances are in the case of remote teams greatly reduced, even eliminated completely thanks to communicating solely via technological advancements (Bergiel et al., 2008).

- Leverage Global Talent

Another great advantage of virtual teams allows organizations to search for new team members outside of the country or region the company mainly operates in or has its origin in and thus acquire people with great skills and knowledge of local markets abroad which increases the opportunity of the company to find the exact person they are looking for and also increases the chance for people to get the desired job even though they would normally not be able move to another country for the job position. This way companies are able to gather experts and specialists from all around the world to work on a given project. Of course, the more people are involved in the discussion or project development, the more ideas are generated and the access to a greater pool of potential team members using virtual teaming can help organizations not only gain pure experts in the field and thus widening the knowledge base of the company but using it to address and be able to respond to a broader scope of issues and finding appropriate solutions. In the opinion of Snyder (2003) companies using only face-to-face meetings and verbal communication can never access such a pool of talent among employees as virtual teams have the possibility to. Additionally, members of virtual teams can be a part of several teams simultaneously which offers companies great flexibility to distribute skills and knowledge across different projects (Clear, MacDonell, 2011).

- Employee Workforce Availability Utilization, Flexibility

Within international virtual teams another advantage is that its members can be available round-the-clock due to their global geographic dispersion and different time zones which is a great benefit e.g. for support teams etc. where people work to cover 24/7 shifts. Having an international team is a good tool to increase the working times utilization for more effective and productive work processes. Looking at individual team members, with a high virtuality comes greater responsibility which leads to higher motivation and empowerment of individuals (Morely et al., 2015).

- Team Diversity

Virtual teams offer great diversity within their members as they very often consist of members with different origins, cultural habits and communication styles which enable the team to be much more creative and unique rather than conventional teams that are bound by time and location. Embracing creativity can be a big motor for development, innovation and growth and therefore a big advantage of virtual teams. Being diverse goes hand in hand with discouraging discrimination, whether it concerns gender, age, religion, ethnical background, sexuality etc. which helps the team to focus only on its productivity and performance and not basing results on irrelevant attributes. Having physical disabilities does not have to be limiting for employees in the case of virtual teams either, whereas in a face-to-face environment this could easily represent an issue for the affected person in terms of (not) having the same opportunity to get employed as someone without a handicap (Bergiel et al., 2008).

### 3.4.2 Disadvantages

Naturally, there are also some drawbacks that come with virtuality which are important to be aware of before forming and during the management of a virtual team. According to many sources the main disadvantages include:

- Cost of Technology

In today's world technology is the key element that makes virtual teams work and plays a big role in communication and overall work processes, not only in virtual, but also in conventional teams. The organizations basing its operations on remote teams need to consider an investment into a high-quality communication technology system which will allow all members to have the needed support and communication tools to get in touch with colleagues, supervisors and customers and work as effectively as possible without

unnecessary technological obstacles caused by a slow system with low capacity etc. Usually an efficient system is supported by a combination of multiple technologies such as instant messaging, emailing, online calling, video-conferencing and so on. Apart from having high quality standards, these systems need to be very secure to prevent any risks of losing valuable information and data. Therefore, a higher cost of having all the necessary systems arises (Ebrahim et al., 2009).

- Lack of Expertise in Technological Applications

According to Lipnack and Stamps (2000), people under the age of 30 are "more likely to be more computer-facile than their more senior leaders, who may not even have the simple skill of rapidly pointing and clicking (and perhaps even typing)". Compared to the younger generation of the millennials, or also called generation Y, who are used to modern technologies being a part of their everyday life, a generation gap occurs in terms having the ability to work in a team that is based on using modern technology and therefore issues can arise and slow down the productivity and efficiency of the team and its members. Snyder (2003) suggests to provide employees with some training, however, not based on age groups, as he mentions that all age groups can experience issues with using ICTs even though it may be easier and more intuitive for younger members.

- Cultural Differences

As virtual teams are often formed by members from all around the world with different beliefs, habits and from different cultural settings, apart from this being an advantage from the diversity perspective, this can also become a disadvantage when it comes to communication, building trust and problem solving. For one, different cultures have different styles of communication and expressing oneself. While for example a South Asian team member is used to a very polite, formal and emotionless way of communicating, an American team member on the other hand has a very straight forward, not hiding any emotion-type of communication style which combined can easily create a conflict just because these two individuals did not understand each other properly and were not able to translate the other's message into their own communication style and perception. This is often a result on non-verbal communication which is essential to virtual teaming and its concept. Another issue can occur while working on a project when some cultures are used to a strict and organised way of working, while others prefer a more free-flow and laid-back approach. In general, many significant activities and processes which involve the team such as thought processes, ways of handling stressful situations, problem-

solving, decision-making, effective communication and so on can suffer under the influence of different cultural attitudes (Bell, Kozlowski, 2002).

- Lack of Social Contact

This topic is closely connected to the nature of individuals as some team members may not have the right psychological prerequisites to be part of a solely virtual team. For certain people it is essential and fundamental to have regular face-to-face contact in order to be motivated, to build trust and relationships with other colleagues and deliver results. Simply having the security and certainty that there is easy access to help, assistance or consultation and also moral support if needed in terms of verbal communication can be a significant factor affecting the performance of the team. For some the feeling of loneliness can cause lack of motivation and low productivity which has a negative impact on the team's and the company's achievements. Effects such as stress, demotivation, decrease in productivity among others can be a result of lack of physical interaction among the team (Schulze, Krumm, 2016).

Other drawbacks described by Rosen et al. (2007) also include a greater vulnerability towards mistrust, miscommunications, lacking synergy and conflicts.

## 3.5 Critical Success Factors of Virtual Teams

Several authors have determined critical factors which significantly contribute to the success of virtual teams. The summary of main findings which can be distinguished in three main categories is presented in the following sub-chapters.

### 3.5.1 Organizational Structure

Within the organizational structure there are several factors and prerequisites for successful virtual teaming including human resource policies to recognize, support, and reward virtual team members and leaders. Furthermore, training during the launch but also during the course of regular ongoing operations and an open-minded and supportive management approach among others. All processes must be supported by experience with collaboration and communication technologies which are a crucial organizational factor in virtual teaming (Germain, McGuire, 2014).

### 3.5.2 Team Processes and the Virtual Environment

For a successful support of virtual teaming it is necessary to meet requirements of creating and operating in an optimal environment which is supported by creating opportunity for having interactions that replace and compensate physical interactions from the conventional face-to-face environment, also providing and ensuring visibility for all team members and the team leader in terms of ongoing activities, their progress and individual and group efforts. The management must provide sufficient and proactive support to employees to prevent issues forgotten or lost in the virtual communication. It is recommended to include face-to-face meetings if possible to improve communication, in-team relationships and the overall team performance, ideally on a regular and frequent basis to create a certain structure. All team members should have equal access to information and acknowledgment. The leader should aim at establishing trust and synergy within the team as these factors are significant in overcoming the social distance and lack of physical interactions which contribute to teamwork in the traditional work space. Strategies, rules and tasks are strongly advised to be verbalized in order for a clear understanding and interpretation. Crucial is also team empowerment and a creating a reward system which serves to motivate team members and secure their productivity and proactivity. Enabling employees to make own decisions is another significant tool which for one helps employees to become more independent and on the other hand it helps to accelerate work operations and overall achievement of goals. This way the leader has more time on his hands to support other areas and team members who might be having issues (Morley et al., 2015).

### 3.5.3 People

The third area are the people, the most important factor in a team or a company in general. Especially in virtual teaming, building relationships, trust and having interactions is so essential for success. Having distance barriers leaves team members with simply having to trust one's colleagues that they will fulfil their part of the work which is necessary for others to build on and vice versa. Trust must also be present between the team leader and his subordinates for the leader to allow them work independently and make own decisions and for employees to confide in the leader's help and support. Lack of trust can also lead to limiting knowledge sharing. A mix of communication styles such as emailing, instant chatting, calling and video conferencing is crucial to prevent

miscommunications and misunderstandings which can result from context getting lost due to lack of verbal communication and emotion for example when emailing is the only main communication tool used, especially in multicultural teams this is of great importance. Virtual team members should possess several skills and traits which are needed for successful virtual teaming such as: self-discipline, individual accountability, excellent team participation skills, and trust. These qualities should be a subject of the selection process during the establishment process of a remote team to ensure the best possible outcome (Rosen et al., 2007).

## 3.6  Management and Leadership of Virtual Teams

A leader figure plays a significant role in every team, whether co-located or dispersed. The team leader or manager is the role model for all team members and his responsibility is to support the team, help the team members face challenges which they cannot face and solve on their own, find solutions and lead the way towards his vision and achievement of set goals. According to Kurtzberg (2014) "Management of virtual teams is not only necessary but also critical for effective functioning."

Every leader should have a certain set of skills to successfully manage any team, and specifically regarding the management of virtual teams the leader should be able to adapt it to the attributes of the given environment. The following practices are considered to be very helpful and crucial for successful leadership of distributed teams:

### 3.6.1  Leading by Example

The leader or manager of the team is expected to be an example for his team members. The leader cannot or should not expect his employees to have certain skills or behaviours if he himself does not meet them. Therefore, the leader must encourage the required behaviours of his employees by acting the way he expects them to act as well. Setting the right example and being a good role model helps strengthen the relationships and level of trust and respect between the employee and the leader (Day et al., 2004).

### 3.6.2  Creating Visibility

One of the greatest challenges of virtual teams is the lack of social contact and interactions. One of the leader's main tasks is therefore to ensure that his team feels connected and supported. Visibility must therefore be established on several levels:

a.

The leader must be frequently visible and available to his employees in case of needed consultations, but also if there is no apparent issue that needs solving. This can be achieved by setting up a weekly schedule of video-calls which should take place on the level of the whole team but the leader should also take time to speak to every team member, or smaller groups of members individually in accordance with the size of the team. By having frequent online face-to-face meetings employees will have more certainty and confidence about being informed about everything that is going on which will allow them to work effectively and independently. Having the comfort of knowing they have the space and time to express individual worries or concerns or simply have a verbal conversation can really take the edge off and make the team members feel less isolated.

b.

Apart from having direct interaction between the leader and his team, the supervisor should also make sure that there is visibility and sufficient contact within the team itself. This means that the leader should encourage the team members to interact with each other, also encouraging informal communication with the aim to maintain and strengthen the relationships and synergy of the team. This aims at reducing the feeling of social distance and separation as well.

c.

To be able to manage the team effectively, the leader needs to be able to have visibility in terms of having a clear overview of how his team is progressing and how assigned tasks are being fulfilled, in other words he needs to monitor the team's activities. Usually this can be achieved by using a recording system where all tasks are assigned to individual members who then have to report back on how they are doing, if they have carried out given assignments and what the status of all their activities is. This is also a solution for holding employees accountable based on individual progress which is being recorded (Jones et al., 2005, Malhotra et al. 2007).

### 3.6.3 Team Empowerment, Delegating Authority

A very important trait that team members of virtual teams should possess is working independently and handling responsibility on their own as they might have limited access to the support of the leader due to geographic distribution, time difference or limited time for consultations. However, for employees to fully master and use these skills, the leader

must provide them with appropriate authority and resources to enable them to make own decisions without needing the manager's approval and supervision on every step of the way. This way teams can operate as an independent unit, preventing operations from being slowed down in order to deliver desired results in the given time period (Nydegger, 2010).

### 3.6.4   Acknowledgment of Efforts

Another significant practice that should again be used in the management of all types of teams, but plays a very important role in virtual teams is the acknowledgment of efforts and establishment of a reward system. Creating a reward system for employees is a highly motivational tool which benefits team members and also the company as a whole assuming positive outcomes. Crucial is that employees have a clear knowledge of what is expected of them and also knowing that they are cared about and not taken for granted by the management. It is again the team leader's responsibility to establish such structure, make sure to set goals that are challenging but realistic and see that all members understand what their responsibilities are. Aside from setting up financial rewards that employees can reach, it is essential to provide them with the knowledge that they are valuable and valued members of the team without whom it could not function and acknowledge individual and group efforts, not only end results (Mukherjee et al., 2012).

## 3.7   Possible Challenges of Virtual Teams and Recommended Solutions

### 3.7.1   Building Trust

"Trust is the denominator of efficiency" is a quote that Powers (2018) adopted from a company leader she had worked with and she describes that this phrase "hits the nail on the head when considering all of the skills, behaviours and actions that make a team successful." According to her, there is no long-term success without trust which is crucial for building a strong virtual team as it is regarding a traditional team. She and Serrat (2009) both agree that the issue with trust is that it takes much longer to establish it than to diminish it which can happen in only a few moments. Low, or no trust can result in decreasing productivity, demotivation of team members and overall worsening results. Certain conditions need to be met in order to establish trust which include a shared culture, social context and values, physical proximity, information exchange and time. These requirements can be more difficult to achieve in terms of remote teams than in

conventional teams which therefore represents a real challenge for organizations that base their work on virtual communication.

Serrat (2009) differentiated 4 types of trust in the context of professional relationships to explain how it is more challenging to gain trust in a virtual team compared to a conventional team:

a. Deterrence-Based Trust

Deterrence-Based Trust is the very basic type of trust which is connected to consistent behaviour and the possibility of violating trust in the case of not keeping what was promised and agreed on. Punishments can be the aftermath in these cases which serve as a warning and advice to fulfil what is expected of one. This kind of approach does not work well within virtual teams according to the author.

b. Calculus-Based Trust

This type of trust is similar to Deterrence-Based Trust based on fear of punishment in the case of disappointing expectations but also on being rewarded in the case of preserving the initial trust. Calculus-based trust therefore compares the cost of breaking trust and the relationship connected to it with benefits that can result from making the effort to keep the trust up. This kind of trust is easily broken as expectations are not always easy to meet and cannot be sustained in the long run in a virtual team.

c. Knowledge-Based Trust

Opposed to the first two approaches, this style is not built on control, but on information. Knowledge-Based Trust arises when one person collects information and has sufficient knowledge about another person which helps him to foresee his behaviour. To gain a deeper understanding of another person it is necessary to develop a relationship which requires "repeated interactions, communication, and efforts" says Serrat (2009). According to him this is the least that a virtual team should aim at achieving in terms of trust.

d. Identification-Based Trust

The last kind of trust described is called Identification-Based Trust which represents trust that individuals develop by fully understanding and supporting one another to the extent that one person is able to act on behalf of the other thanks to fully embodying and uniting with one another's needs and desires. To achieve this level of trust the author suggests for organizations to create common goals, values and interests which especially

virtual teams should focus on as this is one of the more suitable approaches on how to gain trust within a dispersed team.

Furthermore, Kirkman et al. (2004) have interviewed over 75 executives, team leaders and team members of Sabre, Inc., "An innovative organization in the travel industry" to identify the most significant challenges that virtual teams face and one of them was the issue of trust. What was found is that most of the interviewed people in addition with researchers agreed that "Building trust is the greatest challenge in creating successful virtual teams and organizations" and trust has been called "the glue of the global workplace". Also, Handy (1995) suggested that the more virtual features a team has, the more important it is for the team members to have physical interactions for building trust which can seem as a paradox but face-to-face contact is essential for an efficient course of a virtual team. This is also supported by the statement of Jarvenpaa and Leidner (1998) who agree that even though one of the key characteristics of virtual teams is eliminating physical interaction, it is absolutely crucial to ensure regular face-to-face meetings within a distributed team to build trust among other attributes. Concluding Cascio (2000) adds that "Lack of trust can undermine every other precaution taken to ensure successful virtual work arrangements."

### 3.7.1.1 Recommendations

Serrat (2009) summarizes that the right approach on how to build trust is always dependent on the typology of the specific team, but in general when it comes to virtual teams it will not be enough to wait for the trust to come naturally and all members will have to work on building it. At first trust might have to be only presumed but with time it will be possible to base it on mutual identification. "Trust is not one-dimensional, but changes as a relationship develops" says the author. To build trust successfully in a virtual team it is necessary to ensure free and efficient communication, frequent and open discussions and most importantly grow an own culture and identity of the team through socialization and physical interactions which will help to build relationships and therefore trust.

Powers (2018) adds that there are ways to build or repair trust among the team, therefore if trust was not there in the first place or was lost, it can be restored. Very closely connected to trust are social relationships. The stronger our social relationships are with

others, the more we tend to trust them and vice versa. Therefore, one of the advice in order to build trust is encouraging building social capital among team members. If the team is a global team it can be very helpful to pick talking themes such as individual cultures and traditions and compare them with each other. Other than discussing each other's background it is suggested to share some personal hobbies and interests and find some common favourite activities etc. Another idea mentions that managers should spend more time mentoring and coaching rather than micromanaging their team members. By providing individual attention in order to develop the skills of the employees further and thereby giving them room to grow, they will feel the trust coming from the team leader's side and thus room for the team members to return some of the trust back to the team leader will be created which will strengthen the overall trust and togetherness of the team. Another great motivating and trust building tool is delegating responsibility and leadership to the team members instead of giving all the power and final to the manager. This way employees realise they are being acknowledged and trusted to handle more operations and decisions on their own, which increases their motivation for further progress and develops a sense of not wanting to disappoint the team leader as he has put faith into the chosen team members. As today technologies are the most effective way to keep virtual teams in close contact and constant communication it is important that the manager makes sure that his employees are aware and comfortable to reach out any time in case of any questions, needed consultations or uncertainties. Virtual teams should establish a regular reporting and virtual meeting system to ensure open discussions and frequent feedback from the team leader to team members and vice versa. Thanks to the support that the virtual team receives from their leader or manager is crucial for building trust. Other tools for creating trust within the team include creating an environment where team members can present new ideas and are invited into the conversation about important topics and decisions. Acknowledgement and appreciation of workers and their efforts by their leader is also very significant for building relationships and trust and should be incorporated in every team's communication to establish mutual respect and values. Last, but not least, having personal interactions not always related to work subjects will help build a more personal tie that makes forming trust so much easier and more natural.

Kirkman et al. (2004) concludes that generally, building trust can be very challenging and requires constant physical interaction and communication, therefore this represents a challenge for virtual teams which usually have very limited or in some cases

no face-to-face meetings. Hence, this is his main recommendation on how to conquer this challenge - encourage and organize frequent face-to-face contact and build strong relationships. Tools to achieve that include establishing structures and patterns for physical interactions, creating social bonds by reinforcing consistent and frequent schedules of physical meetings, usually by the leaders and using teamwork and team performance to compensate a possible lack of social synergy.

### 3.7.2   Communication

As Bakken (2018) mentioned "Communication is key in any workplace". No matter what kind of environment, communication is crucial for maintaining relationships, passing on and working with information, solving problems, collaboration and delivering results. Specifically concerning virtual teams, communication was identified to be one of the major challenges that these teams face. Virtual teams rely mainly on technology as a communication tool and in this context Beranek (2000) suggested that technology can have a significant impact on the way these teams work and operate, however this statement can be applied to all kind of teams according to Mortensen and Hinds (2001) as face-to-face teams apart from having the benefit of regular physical interaction use electronic information and communication technologies for work purposes as much as distributed teams do. Nonetheless, virtual teams have the great disadvantage of not having any or only very little face-to-face interactions compared to co-located teams for reasons such as large geographical distribution, low encouragement of organising face-to-face meetings by the management or team leader, no personal relations with colleagues which discourages the interest to meet them in person.

Informal communication can greatly influence the dynamic and overall team performance and commitment. It makes up close to 75 minutes of a workday. This kind of communication is very essential and has a significant influence on the team's collaboration. Informal encounters during a work day usually take place during lunch breaks, after meetings or at the work desk among adjacent team members and are unplanned which makes them personal and memorable. In contrast, virtual teams experience a great lack of informal exchanges and the majority of communication is work related and formal. The result of insufficient informal communication is the decline of the team's ability to share knowledge, build trust, collaborate and be cohesive. Especially in unstable and dynamic teams is it crucial to focus on embracing informal exchanges via face-to-face

confrontations which have been described as indispensable specifically in regards of team collaboration and synergy, strengthening the in-team relations and preventing conflict (Herbsleb, Mockus, 2003).

Concluding, quality communication in a team including informal communication is closely connected to efficient work, fast problem solving, clear transmission of information which ensures efficient work processes and an overall increase of productivity and performance. In terms of distributed teams this can be a much bigger challenge than for conventional teams, (needless to say that it often represents a big challenge for co-located teams as well), due to the fact that the majority of the communication happens through the use of technology (Eisenberg et al., 2019).

Various issues can occur in the case of virtual teams which do not have access and the possibility of physical interactions as described by Anderson et al. (2007), Webster, Wong (2008), Bergiel et al. (2008), Kirkman et al. (2004) including:

- Unclarity of exchanged information resulting in imprecise results and unnecessary and complicated work processes, slowing down the team's performance.

- Low transparency of communication representing a difficulty for the team leader or another team member who is therefore not able to interfere in the employee's communication for needed decision-making, giving feedback and reacting to the given situation which appears to require the assistance of a superior.

- Problematic resolving of conflicts - sometimes the easiest way to solve a problem is to simply talk an issue out face-to-face whether it is personal or work-related which gives the people involved clarity, needed explanations and saves time, if it concerns a larger group of people this is even more accurate as it makes the whole brainstorming and discussion process much easier without having any technological and distance barriers.

- Long response times - in the case of communicating solely through technology it can often occur that one has to wait a long time for a needed response or feedback which limits the person from proceeding with their work.

- Different communication styles which are harder to manage and interpret in the virtual environment due to cultural diversity.

- Technological difficulties - in a case of an outage or system-collapse there is no way for the team to communicate and stay in touch if a problem needs solving or requires a virtual meeting.
- Social disconnection - apart from specific issues related to the productivity and efficiency of the team, being socially detached from the rest of the team and having nobody to discuss or chat with can result in demotivation and exhaustion which then affects the communication style and overall team spirit.

### 3.7.2.1 Recommendations

One recommendation made by Bakken (2018) focuses on the very beginning of creating a virtual team which is the hiring process. She says that it is important to analyse one's communicating skills before hiring a new employee, especially if they are meant to become a part of a virtual team. Of course, getting a good insight only from one interview can be difficult, therefore several interview rounds are recommended ideally using different mediums each time if possible such as a face-to-face meeting as well as communicating via writing and calls. Looking at the process of communication itself, another solution is to create and set up guidelines on how communication processes should be applied and used. These guidelines should also according to Rentz and Lentz (2013) include the following recommendations:

- Setting and providing a unified communication platform for all team members to ensure easy and efficient communication among one or several colleagues that is being safely stored and is traceable if needed.
- Setting up a straight forward time schedule, ideally on a weekly basis including frequent team meetings and one-on-one meetings with the team leader.
- Appointing and specifying how team members should interact with each other, which kinds of communication mediums (such as emails, video conferencing, instant messaging via online chats, sharing files and others) should be used for which work processes, which conversations should involve the supervision of a superior and in which time horizon these activities should take place.

- Investing in a technological platform that allows the team and its members to record activities, their level of advancement and plan upcoming activities which helps for one, the team to have a more clear overview of what needs to be done and what was yet achieved and also for the team leader to monitor what his team members are doing and how they are progressing with their tasks.
- Setting up response time limits within which team members should at the latest reply to colleagues, clients or the team leader to ensure efficient communication and prevent long response times which can result in unsolved issues or low overall performance.
- Especially in international teams where language barriers can play a role in challenging efficient communication it is advised to avoid slang or colloquialisms.

Concluding, to ensure quality communication within a virtual team it is crucial to "foster a culture of communication" within the virtual team (Beranek, Martz, 2005).

### 3.7.3 Motivation

Motivation is generally one of the key attributes to reach desired results and create an efficient and productive work space and while motivation does not necessarily promise outstanding results, its absence will certainly cause problems. In the context of virtual teams, motivation can be often a challenge as for the individual team members who can struggle to keep themselves motivated and also for the team leader or manager who should be the main person to help his team to stay motivated and encouraged. Naturally, distributed teams bring a bigger amount of uncertainty compared to co-located teams. Also, employees working in a virtual environment seem to give up more easily than employees working in a physical, face-to-face environment when faced with challenges and tasks. "Therefore, the manager must focus on motivation as it is a critical element of any performance team regardless of whether the team is collocated or is virtual" explain the authors. Keeping up motivation of employees can be especially challenging in distributed teams as they lack physical interaction which can be crucial. In face-to-face teams, colleagues can motivate each other simply by their presence, active support and results which can motivate others to aspire and reach the same, or even better results than

their teammates. Having the physical presence of the team leader or supervisor can be highly motivating, if of course the team leader's attitude is not rather discouraging. Compared to working in home office conditions, having the supervisor looking over one's shoulders and him being there as a supporting figure is a big motivating motor as employees tend not to want to disappoint his expectations and show active and efficient participation in the physical environment. Therefore, without having the physical presence in virtual conditions of neither colleagues nor the team leader, one can be easily demotivated and his or her performance is likely to decrease if the manager does not make sure to focus on motivating his team members even more in the virtual space. The team manager should focus on motivating each of his team members as individuals as well as the team as a whole. Therefore, the team leader needs to use a combination of different approaches and adjust them according to the nature of the team and individual personalities. Especially maintaining motivation in a virtual environment is again closely connected to having regular contact and building a relationship. Personal ties go hand in hand with having an impact on the other person including the ability to motivate them (Snellman, 2014).

### 3.7.3.1 Recommendations

According to Collins (2001), Jones et al. (2005), Kirkman et al. (2002), Kurtzberg (2014), Snellman (2014), these recommendations were made:

- The manager should not only make assumptions about what would motivate his team members but simply ask them and use their feedback to create a motivational structure which will bring real results.
- Avoiding demotivation of team members by being overly present and monitoring every move they make or giving them lower responsibility than in usual circumstances.
- Using a combination of motivational factors rather than focusing only on financial rewards. Other important rewards that are highly motivational are for example personal acknowledgements, praise for achievements, recognition, the opportunity to develop new skills, promotion to a better position and others. In many cases, personal factors can be much more motivating than a simple raise.
- Praising the effort, not only the end result.

- Giving employees constructive feedback and helping them to find solutions or making improvements.

- Praising employees also in front of their colleagues and supervisors to set an example and let the employee know he is valued and officially acknowledged, however sensitively not to discourage the others at the same time.

- Letting team members know that they have it in their power to reach desired goals, encouraging and emphasizing the whole work process instead of only pushing for the end result.

- Setting goals that are challenging but reachable and realistic.

- Creating a reward system for all team members, making sure that everyone understands it completely and what exactly they will be rewarded for.

- Taking time for each member of the team to make sure they get the support and assistance needed for them to feel comfortable and confident in their work.

- Really listening to employees' needs and creating a space where they can give positive and negative feedback on how they feel in their work space and what they would change or do differently in order to be more efficient and motivated.

- Encouraging regular team meetings where brainstorming and discussions can take place to motivate employees by listening to their colleagues, what their struggles are and being able to help each other or others.

- Not overwhelm employees by unnecessary bureaucracy which could create a barrier for actual work operations and be very demotivating.

### 3.7.4  Overcoming Social Distance, Maintaining Relationships and Good Teamwork

Another challenge that is very specific for working in a virtual environment that dispersed teams definitely face is overcoming the social distance, feelings of loneliness and isolation and maintaining relationships which affect the overall level and quality of teamwork and is absolutely crucial for any type of team to function and deliver results. This topic is one of the biggest disadvantages of virtual teams and affects many areas from communication, motivation, synergy to productivity and more. Virtual teams are characterised by a lack of physical interactions which represents a huge challenge for team

members and the team leader. Not having the opportunity to discuss matters face-to-face can result in miscommunications, slow or ineffective problem solving, unclarity and uncertainty in general and in terms of communication, demotivation of team members, negative effect on established or developing relationships within the team, little control over ongoing operations and how they are progressing from the leader's point of view, poor coordination and collaboration of the team as a whole etc. Not only does social distancing affect individual team members but the team as a whole. Being separated can negatively reflect on the team spirit, its internal relations, ability to work together and ultimately reaching common goals and expected performance (Kimble, 2011).

As mentioned before, informal communication plays a big role in building and maintaining healthy relationships which is again in virtual teams absent or very rare. Caproni (2001) also warned, "Many researchers and practitioners are concerned that high-quality relationships may be particularly difficult to achieve in teams in which team members are geographically dispersed." He adds that virtual team members will be less productive and satisfied than teams working in regular, face-to-face conditions due to feelings of isolation and detachment. The main challenge therefore arises for the team leader who needs to ensure that his employees can overcome these feelings and at least partially compensate for the lack of social and informal contact they are experiencing. It has been long believed that employees feel satisfied and motivated in the workplace thanks to having regular physical interactions with co-workers.

In the research that Kirkman et al. (2004) conducted in Sabre, Inc. the team members which were moved to a virtual space have expressed that they most miss having interactions with their colleagues and miss sharing their successes but also facing challenges together. "Sometimes I can't reach anyone by phone and it's frustrating. When you work in an office, you just look over their cube and there they are.", described the Account executive.

### 3.7.4.1 Recommendations

Tackling this challenge is again mainly in the hands of the team leader. Firstly, the leader should be aware of each member of his team in terms of how they respond to working individually and separated from their co-workers, generally recognizing individual needs. Some may find it very challenging and suffer from demotivation, low work satisfaction and low productivity due to the lack of physical contact while others may

enjoy working independently in a more quiet workspace. Based on the analysis of the overall dynamic of the given team the leader should in any case seek to compensate for the lack of social interactions even if his team is made of mainly individuals that seem not to be having an issue with working apart (Berry, 2011).

Further recommendations were made by Armstrong (2014), Kimble (2011), Kimble (2011) and Kirkman et al. (2002):

- Organising team buildings and training sessions - creating opportunities for face-to-face activities to strengthen relationships.
- Initiating regular meetings including regular face-to-face meetings as much as possible according to given conditions of the team (budget, distance, time difference, travel cost etc.).
- Setting up a schedule to maintain daily communication within the team itself and within the team member/team leader relationship.
- Combining different types of communication such as writing, calling, tele/video-conferencing to keep employees informed and up to date and make sure they do not feel like they are missing out on anything.
- Paying close attention to social needs of individual team members.
- Initiating contact from the leader's side rather than waiting for the team members to speak up.
- Building a team culture with own traditions and regular activities that include every single member.
- Encouraging activities where team members including the team leader have the chance to get to know each other better, sharing personal information like hobbies, experiences etc.
- Encouraging team members to stay in close contact with each other and support each other.
- Establishing mentor-protégé relationships to give team members the feeling of inclusion and involvement in all matters.
- Creating a group chat for informal and general conversation.
- Designate a time-slot each week to catch up with what's going on with everyone.
- Starting regular meetings with ice breakers and informal conversation.

- Establishing a team spirit by creating a shared vision, team slogan etc.

### 3.7.5 Productivity, Task and Time Management

Working in a virtual space can among other aspects be very challenging in terms of productivity, task and time management. The traditional, physical office environment naturally creates a structure for example by given work hours, an organisational division and distribution of team members across the office space and of course the fact that the office is obviously not a space meant for relaxing, but working which naturally motivates and encourages people to be productive and create some kind of values. However, moving the work space to a distant environment which is most commonly the home of the employees, the so-called home office, stirs up the dynamic of the workplace entirely. For some team members it can become difficult to manage their time wisely and effectively in a homely environment without colleagues or supervisors around, without having a proper structure and having no or low ability to build such a structure themselves and be disciplined. In the first possible case scenario the employee devotes less time to work activities due to distractions in the homely environment such as spending time with family members, doing household chores, resting and others that disrupt their ability to concentrate, keep their focus and stick to their usual work schedule. The second case scenario is poor time and task management resulting on the other hand in working overtimes, until late and long hours and ultimately leading to a potential burnout due to a lack of boundaries and a structured work regime. Adding to that, team members of a distributed team need to have the ability to work independently and take on more responsibility which represents another challenge for employees who rely on the support and supervision of their team leader resulting again in low work productivity (Bakken, 2018).

### 3.7.5.1 Recommendations

Armstrong (2010) recommended ensuring accountability and enforcing a structure based on feedback and reporting. Team members should have a clear understanding of what their responsibilities are and in what time horizon it is expected of them to deliver. Having regular one-on-one meetings with the supervisor where the staff member is expected to share his weekly progress can strongly encourage the employee to be productive in order to be able to submit a different and progressed update each time.

Adding on to having regular check-ins and meetings to make sure that all parties are up to date and have necessary information about the current situation and ongoing processes, these updates should also be recorded in a way so that they can account for individual team members and their efforts, possibly for their lacking activity using special platforms for assigning tasks and recording their status. Motivation and praise are also crucial for employees to stay productive. If employees are demotivated it often leads to a decrease in productivity as well and praise and acknowledgment are a great motor for employees to stay focused and disciplined because they know that their efforts will be recognized. Various reward systems can contribute to the employees' level of productivity such as rewarding the person who finishes a given task first can keep the whole team on their toes and constantly proactive.

### 3.7.6 Other Challenges

Other challenges identified by Armstrong (2010), Gressgård (2011), Griffith et al. (2003) include:

- mental health issues
- quality leadership of virtual teams
- managing stress
- working in different time zones
- language and cultural differences
- attention span issues

## 3.8 Current Research

Due to the COVID-19 pandemic which has brought many changes and challenges for the global economy and society, businesses and institutions have been forced to adjust their operations and reorganize their teams into virtual teams which ultimately made many companies move their employees to distant workplaces and allow them to work from home. The affected team members consequently had to face a sudden change of their usual work environment, communication and collaboration means and all matters related to known work processes of their previous face-to-face workplace. Naturally this transition has brought its challenges in the context of virtual teaming. The following case studies have examined challenges faced by people or teams that were affected by the COVID-19 pandemic and have identified the following outcomes:

a.

Hayes et al. (2020) has assessed a random sample of 326 people above the age of 18 using a survey, who have been working from home due to the COVID-19 restrictions and focused on finding out whether social distancing contributed to increased stress levels and potential burnouts among the assessed sample. The findings of the research showed that the overall stress level of the sample was higher than before the implementation of the COVID-19 restrictions. The study also found that people that are not used to work from home and were forced to do so during a sudden change had higher Work-Related Burnout scores than people who already had experience with working from home. Concluding, the case study showed that all participants on average experienced more perceived stress, nonetheless the increase was greater for people who had not been working on home office conditions before the first COVID-19 outbreak.

b.

Another research conducted by Kaushik and Guleria (2020) aimed at examining what impact the COVID-10 pandemic has on the workplace. The data was collected by mainly qualitative methods such as interviews and questioning HR (human resources) consultants, top level employees of the HR department and working professionals who were again forced to work from home due to COVID-19 measures. These main challenges were identified resulting from having to work from home:

- distracting work environment, issues with focusing on work
- detachment, lack of psychological association with the company
- need of individual self-motivation, commitment and discipline of all employees otherwise resulting in un-productivity.
- difficulties to manage and maintain accountability for employees
- loss of motivation and therefore loss of productivity

c.

Miller et al. (2021) has chosen the area of software development to investigate how developer teams of a large software company were affected by the COVID-19 pandemic when they had to work in new conditions of a virtual team. Data were gathered using surveys with a total of 2 883 responses from developers. The findings revealed that the main challenges faced were:

- issues reaching milestones

- decrease of productivity

- negative effect on team culture, communication and social connection

- lack of social interactions with colleagues

- decrease in communication ease with co-workers

# 4  Practical Part

## 4.1  Introduction of Assessed Company and Subjects of the Study

The chosen company which is the subject of the study is VIVnetworks.com s.r.o. which is a Czech, small-sized company with the main seat in Prague, Czech Republic operating in the field of online marketing, more specifically affiliate marketing. Affiliate marketing is performance marketing which means that parties providing online marketing within an affiliate network gain direct commission of validated orders which they have mediated for certain advertisers, respectively their e-shops and thus contributed to their revenue. VIVnetworks.com s.r.o. is the leading organisation in the CEE who provides the services of affiliate marketing to many big brands and e-shops.

The team which will be examined throughout the research is the team of Affiliate Managers who each are responsible for managing individual client accounts. More specifically, each Affiliate Manager has an own portfolio of advertisers usually in one area such as fashion, furniture and gardening, sport, health and lifestyle, electronics etc. which he or she takes care of. The main task of Affiliate Managers is to help generate as much revenue through the affiliate network (Conversion Junction) as possible. Activities which an Affiliate Manager does on a daily basis include:

- management of individual accounts of advertisers within the affiliate network

- communication with the advertiser

- communication with publishers who are responsible for promoting the programs and generating revenue

- creation and management of promotional campaigns for advertisers and publishers

- invoicing of to be paid out commissions

- launching new programs

Simply put, the Affiliate Manager is responsible for the accounts assigned to them with the main goal of generating as much revenue as possible which requires all kinds of activities and skills such as communication skills, organisation of tasks and campaigns, accountability towards the team leader and individual clients, usually account managers speak at least 2 languages or more depending on the markets their advertisers operate in, ability to work in a team, ability to work individually and proactively ensuring the best possible support for their clients.

The team is led and supervised by one person, representing the position of the Affiliate Team Leader. The team leader's main responsibilities include the following:

- Supervising the team and all team members.
- Making sure team members are supported and have all information and knowledge needed for fulfilling tasks.
- Organising training and workshops for development of current or new skills.
- Setting up regular team and one-on-one meetings with all team members.
- Giving constructive feedback.
- Encouraging team members to work as a team and not only individually.

(VIVnetworks.com s.r.o., 2021).

## 4.2 COVID-19 Context

At the end of the year 2019, a new type of a coronavirus was identified in the city of Wuhan, China. The disease COVID-19 caused by the virus SARS-CoV-2 spread rapidly, resulting in an epidemic throughout China, further developing into a global pandemic and affecting the whole world. The highly infectious virus is associated with respiratory problems causing death in several cases. Due to the highly contagious nature of the virus, all countries around the world were forced to take measures to protect their people which ultimately meant going into a lockdown and stopping almost all social and economic activities (WHO, 2021).

The Czech Republic firstly closed down all schools on the 11th of March, following with officially declaring the state of emergency on March 12th. During the next few days all businesses including shops, restaurants and services had to stop their activities with

some exceptions such as grocery stores or pharmacies, and most people working in offices were forced to work from home. The borders were closed as well and the country suddenly stood still (MZČR, 2021).

As in every crisis, some businesses were more affected by the government restrictions and overall conditions than others. Some were lucky and able to find a solution to continue business activities during the lockdown. One of the sectors of the Czech economy that was able to adjust and maintain their operations is the sector of e-commerce. The study done by Laštůvka (2020) is the biggest study examining the effect of the COVID-19 pandemic on the e-commerce sector in the Czech Republic. According to his research, the e-commerce industry has been experiencing constant growth for the past few years and the events resulting from the pandemic have even accelerated it. Especially in particular areas of online spending. The first quarter of the year 2020 has shown significant shifts in online spending trends across various e-commerce sectors. Particularly, March 2020 marks the beginning of the e-commerce boom which strongly correlates with government restrictions and their timing. The highest increase in revenue in the first quarter of 2020 compared year-on-year with 2019 was observed in the fields of health (+203.56%), construction materials (+109.47%), children's merchandise (+97.71%) and cosmetics (+124.19%). On the other hand, the highest decline was seen in the areas of gardening, fashion, or office and work supplies in the first quarter of 2020 compared to the first quarter of 2019.

During the second half of April 2020 the restrictions in the Czech Republic started to slowly retreat, for example starting on the 24th of April, people were allowed to meet in larger groups than 2 people, during the next week certain shops were also allowed to reopen. However, the official state of emergency of the country in which special restrictions and laws can be easily and quickly authorized lasted until the 17th of May and from the 18th of May the republic was allowed to return to all activities and socializing as in the previous, usual circumstances before the pandemic.

## 4.3  Research Sample, Time Setting of the Study

The research sample consists of a total of 18 respondents of which 17 are respondents of the survey and one respondent was interviewed individually. The 17 respondents are all team members of one team and represent the position of Affiliate Managers. The 18th respondent who was interviewed is the leader of this team. Closer

characteristics and work responsibilities of the respondents are described in chapter *4.1*. The total number of respondents is quite small for the reason that the overall size of the company is small, however answers from all team members were collected which represents a full sample and a quality source of relevant information about the overall situation and perception of the team as a whole. The team leader was individually interviewed to create a combination of research methods and to get a clear and well described insight into his/hers point of view. The survey consists of 45 questions in total listed in *APPENDIX A* and the interview was based on 20 questions listed in *APPENDIX B*. All team members including the team leader normally work in an office space in which they have very close proximity to each other.

*Table 1: Basic information about assessed sample*

| Position | Number of respondents | Research method | Average age | Average length of employment in VIVnetworks.com s.r.o. |
|---|---|---|---|---|
| Affiliate Manager | 17 | Survey | 29 | 1.7 years |
| Team leader of Affiliate Managers | 1 | Interview | 30 | 7 years |

*Source: Own input (data from survey), 2021*

The team of Affiliate Managers consists of 11 females and 6 males. In *Table 1,* other basic information about the team can be found such as the average age of respondents which is 29 years, where the youngest team member is of the age of 20 and the oldest member is 41 years old. Also, the average length of employment in the assessed company VIVnetworks.com s.r.o. was determined which is 1.7 years.

Regarding the team leader who is the main subject of the qualitative research, based on their age and time of employment in the company, it can be deduced that the fact that he or she is the similar age as the average age of his subordinates can be very helpful in relating to the employees and building a closer relationship based on trust just because the age and potential generation gap is not large. Also, the fact that the team leader has been in the company the longest of all team members suggests that they are the most experienced

which is naturally expected of the manager and should implicate a positive leader-employee setting.

As all other businesses, the assessed company VIVnetworks.com s.r.o. was also forced to move all its employees to a home office environment and manage all operations from home. As mentioned in the chapter *4.2*, even though restrictions began to decrease during April and May, the company in this study decided to keep its employees in home office conditions until the 15th of June out of safety reasons. Therefore, the time period during which the team was placed into conditions of a virtual team is from 16/3/2020 until 15/6/2020.

## 4.4 Analysis of Quantitative Research: Survey

In this chapter of the thesis the main research method, the survey, will be analysed. The questionnaire was distributed among 17 team members consisting of Affiliate Managers. The analysis is divided into subchapters according to several main topics that are focusing on identifying individual challenges that employees could have potentially faced during working from home in this period: 16/3/2020 – 15/6/2020. The analysis aims at determining challenges and lessons learned from the experience of having to work in a virtual team using weighted averages as part of quantitative descriptive statistics combined with the qualitative aspect of summarizing perceptions, emotions and attitudes of individual team members. The chapter will be concluded by a summary of identified challenges and lessons learned from the employees' point of view.

### 4.4.1 Work Environment

The first aspect to be analysed is the work environment of the virtual team its members found themselves in after moving their usual office workspace into their homes. The aim is to analyse how they reacted to the change of environments, how the new conditions affected their performance, if they struggled with working from home or if on the opposite they have enjoyed some benefits of the home office conditions.

4.4.1.1 General Perception of the Virtual Work Environment

In *Graph 1* relative values of the workplace preferences are shown. All respondents of the team were asked which work environment they prefer more, if they prefer working in an office environment in physical proximity of other colleagues or if they are more

comfortable working in a more quiet workplace such as a home office. The result shows that the majority of 64.7% of the team chose the usual office environment as their main preference. The reasons for choosing the physical, co-located environment include the following:

- Importance of separating work life from private life which is difficult to do while working from home.

- Working in close proximity of colleagues creates a more positive atmosphere to work in and improves the overall mood.

- In need of consultation or discussion, colleagues are close by which makes it easier and faster to solve problems and complete tasks, there are no response delays due to distance barriers, communication is more efficient.

- Better focus and discipline, the homely environment is too distracting.

- Want to see and work with colleagues rather than work alone, need of social interactions.

- Higher productivity and efficiency in the face-to-face environment due to less distractions and a more wok-friendly environment.

- Better time management, the homely environment creates a tendency to work overtimes and difficulty to stick to a set time schedule and given working hours.

The most common reason for choosing the face-to-face workplace as a preference was the fact that the home office lacks the possibility of having physical interactions which makes it harder to communicate, solve problems and support each other, opposed to the usual office conditions in which it is a matter of minutes to work things out with a colleague who sits in the same office.

Employees who chose the home office as their preference have justified this choice by having an introverted personality and therefore preferring the quiet and comfort of their homes.

*Graph 1: Workplace preference*
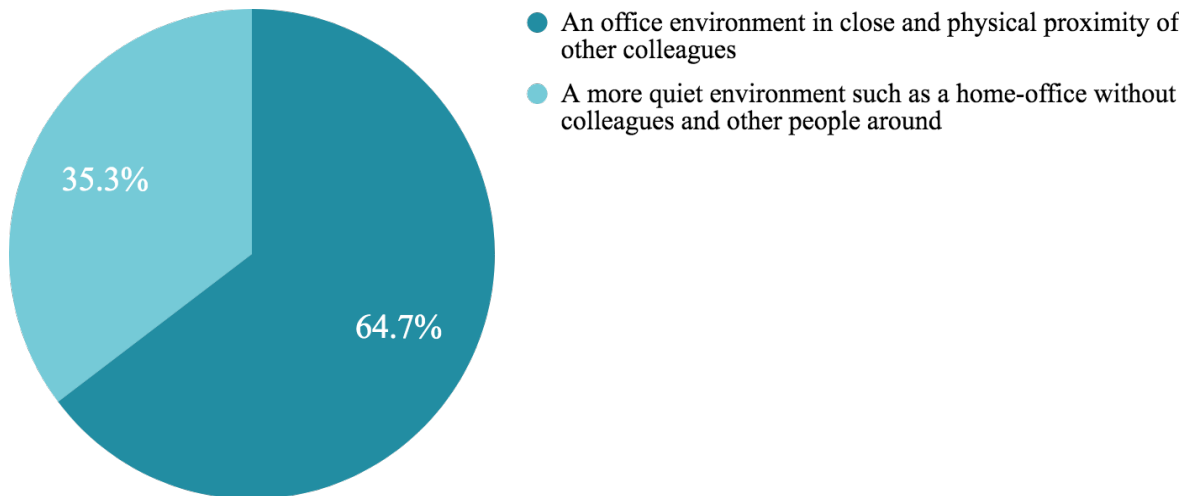


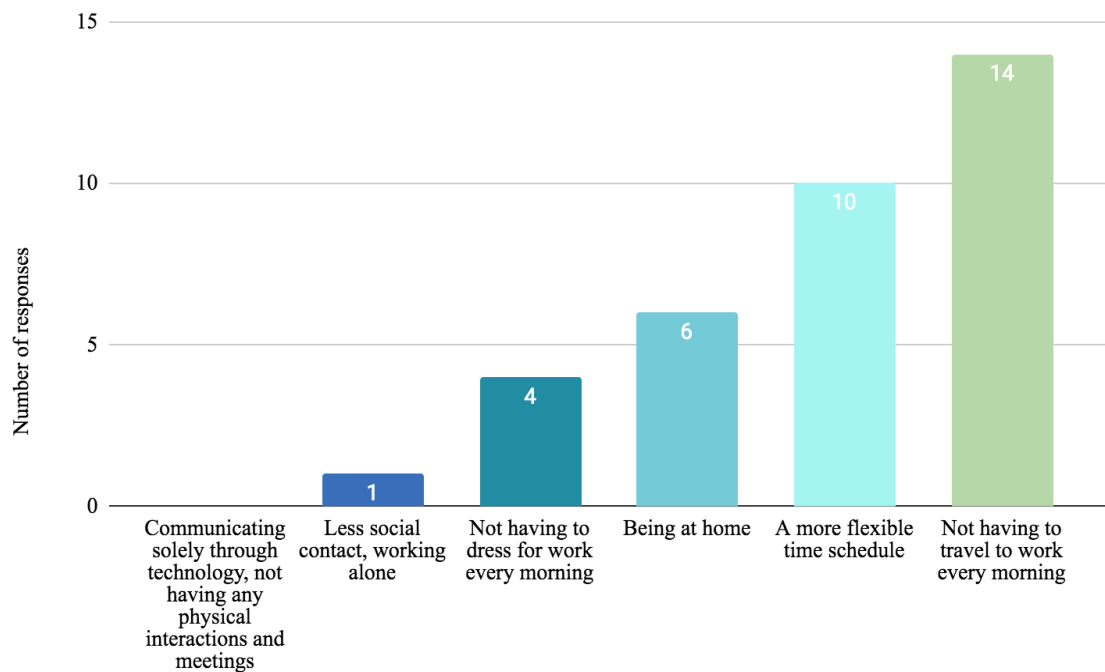*Source: Own Input (data from survey), 2021*

The respondents were also asked if they have worked in a home office environment before with the aim to determine, whether their previous experience with working in a virtual team has affected the way they were able to handle the sudden switch to a virtual environment during the first COVID-19 outbreak in the Czech Republic. 64.7% of all respondents have had a previous experience of working from home before, therefore they were familiar with some of the challenges resulting from being a part of a virtual team. Whether this experience has influenced them and contributed to their overall experience and performance in the COVID-19 case will be determined in some of the following chapters.

Apart from having different preferences, all respondents agreed that the move and change of work environments itself was very well organised and clear. This suggests that the management had the situation under control and made sure that all employees were aware about the changes which would be applied and that it went very smoothly and did not cause chaos or confusion which ensured a good start of the virtual teams' functioning.

Furthermore, *Graph 2* depicts which aspects of working from home the team members enjoyed the most and which the least. The aspect that was pointed out by the most employees (14 in total), which they enjoyed as a benefit from being in a virtual team and in the home office was that they did not have to travel to work every morning which would save them time and means and allow them to spend the time more effectively at home, starting work earlier or simply sleeping in to have more energy for the day. The

second most favourite was the fact that employees were able to adjust their working hours and therefore have a more flexible time schedule which allowed them to manage a bigger volume of activities and tasks during the day. On the other hand, no one from the team enjoyed the lack of social interactions and all members chose social distancing and communication solely through technology as their least favourite aspect of working from home. Based on this information it can be assumed that the insufficient amount of physical interactions might represent a challenge for the team as it has acknowledged that it does not favour this attribute, however the direct impact will be determined in the next chapters.

*Graph 2: Preferred aspects of working from home*



*Source: Own input (data from survey), 2021*

4.4.1.2  Maintaining Focus in the Virtual Environment

*Graph 3* shows how well team members were able to focus on their work while being in the home office environment also taking into consideration whether or not the respondents had a previous experience with working from home. The respondents were asked to define how easy or hard they found keeping their focus based on a scale from 0 to 3 which represents the following levels of focus:

*0 - I could not focus at all in the home office environment, there were too many distractions.*

*1 - I could focus fairly good although compared to the usual office conditions I felt slightly distracted.*

*2 - My focus was on the same level as in the face-to-face environment, I did not feel any difference.*

*3 - The home office environment is the ideal workplace for me where I can focus on my work the best, it was easier for me to focus on my work here than in the normal face-to-face work conditions.*

*Graph 3: Level of focus relative to previous experience of working in a virtual team*
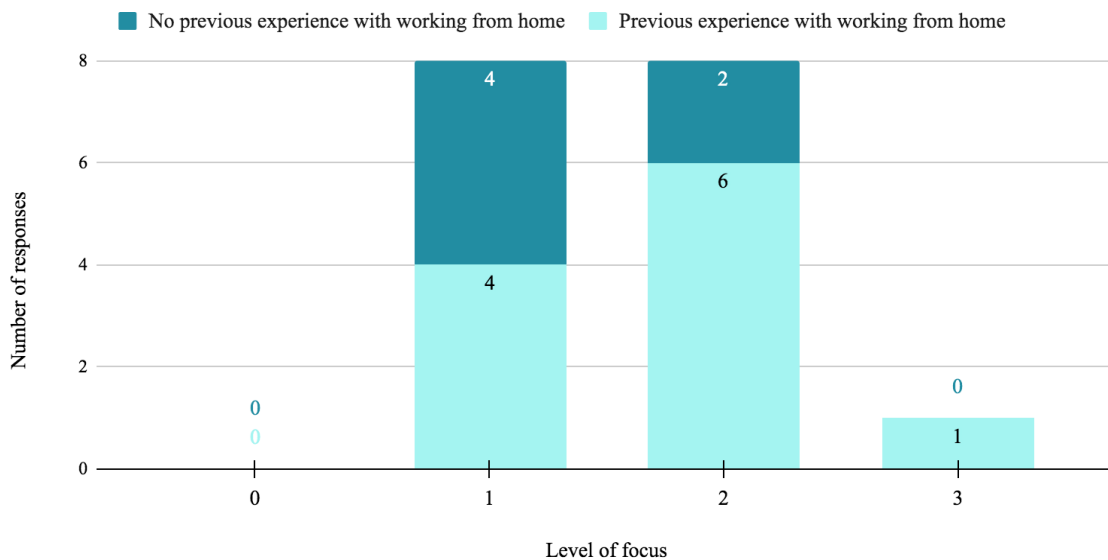


*Source: Own input (data from survey), 2021*

Based on the responses and looking at the graph, it is obvious that the majority of the team, respectively 94.2% experienced a fairly average level of focus without any positive nor negative extremes during their time of working from home. Specifically, 47.1% of respondents described their level of focus as fairly good, although they experienced some distractions and the other 47.1% have not experienced any increase or decrease of focus as a result of the change of environment thus their focus remained at the same level. No member of the team had a particularly negative experience with maintaining attention and one respondent even described the home office as the ideal workplace where they could focus the best. The weighted average of the focus level based on this scale is 1.6 points

which almost equals its median and therefore represents a generally neutral focus level of the team that was not influenced by the change of environment in any extremely negative nor positive way which translates as the team having a constant steady attention level independently on the work environment.

64.7% of the respondents found that maintaining certain habits as in the previous, physical environment helped them feel more like being at work and kept their focus. These habits include the following and can be used as an example to help others who struggle with focusing in the home workplace:

- Getting up at the same hour as if going to work.
- Maintaining the usual morning routine: getting dressed to work every morning, ladies also recommended applying make-up etc.
- Assigning a special space at home which is solely meant for work purposes, keeping a clean and tidy desk, ideally a separate room which is separated by a closed door.
- Sticking to a strict time schedule to finish work early, preventing from getting tired and exhausted from working all day due to prolonged breaks and an inconsistent schedule.

Additionally, the data showing if team members have had a previous experience of working in a virtual team were used to examine if people having worked from home before were able to manage their attention and focus ability better than individuals that had to face being a part of a virtual team for the first time. In the case of the first most common response which is represented by point 1 on the scale, data show that the ratio between employees that did and did not have a previous home office experience is 50:50=1 and therefore at an equilibrium, showing no influence on the actual focus ability of the respondents. In the case of point 2 on the scale, this ratio is 75:25=3 showing a slight dominance of respondents who have previously worked from home, however in terms of this particular team this aspect does not significantly affect the outcome of the ability to concentrate in the distributed workspace.

4.4.1.3  Time Management in the Virtual Environment

The respondents of the survey were also asked about how they were able to manage the working hours during the home office period, whether they had experienced struggle to

keep the same time schedule as in the conventional workplace or if they had maintained the same regime. 58.8% of respondents identified time management as a challenge of working in a virtual team and found it more difficult to manage their time throughout the working day and often had the tendency to work until later and longer hours and do overtimes. 23.5% of respondents have not experienced any struggle and were able to maintain their usual working schedule which they were used to from the office environment. The remaining 17.6% of team members used the fact that they saved time for travelling to work in the morning as their advantage and were able to finish work earlier.

### 4.4.1.4 Conclusion

The data show that keeping up focus and concentration in the home office environment did not represent a challenge for the assessed team as the weighted average shows that the team did not experience any significant irregularities and the fact of having a previous experience of working in home office conditions did not play any role in this aspect either. However, more than half of the team struggled with time management in the virtual environment which caused them to work longer hours, take breaks more frequently which can ultimately result in lower efficiency. When working until late evening hours, the majority of colleagues or clients have most probably already finished working which means that they will be able to reply on the upcoming day the earliest, which means that the overall responding time and time to fulfil a given task or conclude a certain communication is being prolonged due to the employee who is not available during the hours he or she usually is supposed to in an office as the working time also influences the time at which they will be able to go home. Taking longer breaks during the day can also result in longer response times and spending time on more activities including non-work-related ones can be distracting and affect the focus of the employee on the actual work. This result can ultimately affect the productivity of the team, however if the employees who have more spread out working times maintain their level of productivity this must not necessarily affect the team's performance. Productivity will be analysed in another chapter and the conclusion will take into account all factors analysed.

### 4.4.2 Relationships, Cohesiveness, Teamwork and Trust within the Team

4.4.2.1 Relationships and Team Spirit

Firstly, members of the team were asked whether they have established relationships with their team colleagues since their joining of the team with the aim to analyse what the general spirit of the team was like before the outbreak of the COVID-19 pandemic. Based on the quality of previously established relationships it will be possible to analyse whether and which role the personal ties have played in mastering the challenging situation of having to work apart and communicate only virtually and potentially how they have been affected and if that represented a challenge for the team.

The question asked was the following: *"Since your joining of the team in VIVnetworks.com s.r.o., have you established relationships with your team colleagues?"* and the team members were asked to choose one of these answers:

 *a.* *Yes, I have established mainly positive relationships, I have found friends among many of my colleagues.*
 *b.* *I have not built any relationships, positive, nor negative, I would not meet my colleagues outside of work.*
 *c.* *I have built rather negative relationships, I do not socialize with my colleagues personally in- or outside the office.*
 *d.* *None of the above*

The results show that 88.2% of all respondents have stated to have built mainly positive relationships with colleagues even on a friendship-like level. Only 5.9% which is the equivalent of only 1 team member in this case has stated that they have not built any relationships, not positive nor negative ones and one person has not stated any specific answer and chose option d). This clearly shows that the overall relationships in the team of Affiliate Managers are very positive and strong and that its members were able to create real bonds with their colleagues, in some cases build real friendships.

Furthermore, team members were also asked to rank the nature and quality of their in-team relationships and team spirit using a scale from 0 to 3 where each point represents the following characteristic:

*0 - Only formal - all matters discussed are mainly work-related, socializing does not take place in- or outside of the workplace.*

*1 - The relationships and the overall mood of the team is rather negative, no team bond or spirit has been established.*

*2 - The overall relationships of the team are rather positive, but the team bond is not the strongest, socializing takes place only within the workplace out of politeness.*

*3 - The team has a very strong team spirit, even friendships were established and the team takes part in activities also outside of the workplace.*

*Graph 4: Quality of in-team relationships and team spirit perceived by team members*
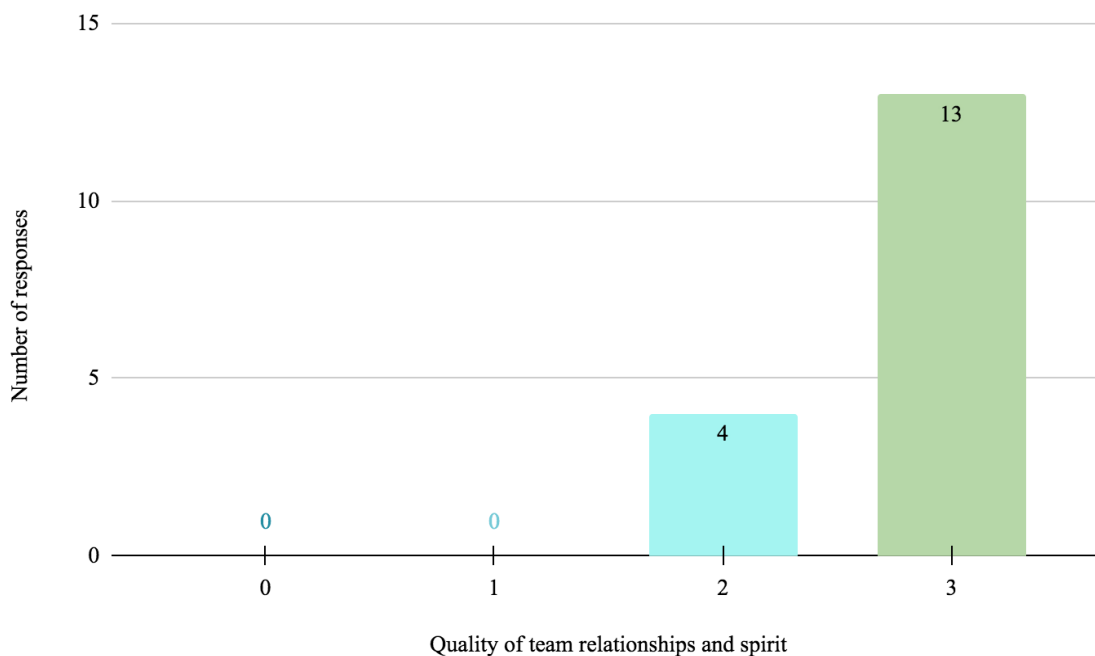


*Source: Own input (data from survey), 2021*

Based on the responses, which can be seen in *Graph 4*, 76.5% have described the relationships within the team and the overall team spirit as very strong and positive which is supported by friendships among the team and the team's participation in common activities even outside of the workplace. The remaining 23.5% similarly perceived the personal ties within the team as rather positive, however they have the opinion that the team bond is not the strongest. The weighted average of the quality level of relationships within the team perceived by all team members is 2.8 points.

The mentioned figures suggest that the team has a strong team spirit and very strong personal ties among individual members which ultimately represents a great advantage and prerequisite for handling the before unknown virtual environment and all changes and challenges connected to it well, however the real effect will be analysed in the upcoming paragraph.

The next question that respondents were asked to answer aims at examining whether team members felt that their relationships within the team were somehow affected as a result of the first COVID-19 outbreak and the changes that all employees had to face as a new virtual team. The majority of 70.6% stated that their relationships to their colleagues have not changed since they had worked apart. The remaining respondents shared two different opinions. 11.8% of respondents expressed that their relationships to their colleagues have gotten stronger thanks to the change of environment, however the last part of the group represented by 17.6% answered oppositely, saying that their relationships to their colleagues have actually suffered from the change. The main reasons for an improvement of relationships stated were that team mates supported each other more because of the uncertainty of the situation during the first COVID-19 outbreak which meant that they started calling each other more often, even people who would normally not communicate as frequently in the usual office conditions, already making plans for the next time they would see each other face to face which gave them something to look forward to. Also, colleagues were sharing their concerns, feelings and moods throughout the more frequent communication which brought them closer together and strengthened existing bonds. On the other hand, individuals that felt that their relationships had suffered have justified these statements by the fact that they had been the most recent members of the team and because of the COVID-19 outbreak they did not have enough time to build strong relationships an get to know all colleagues properly in the face-to-face environment, therefore the separation made them feel even more further away from the team and the establishment of strong personal ties.

4.4.2.2 Conclusion: Relationships and Team Spirit

Based on these outcomes it can be stated, that maintaining relationships within the team did not represent a crucial challenge for the team as the majority has not experienced any significant changes and only 17.3% have actually had a negative experience due to the fact of joining the team later than the rest and therefore having less time to build strong

relationships which was even harder in the virtual space. Overall it becomes clear that thanks to the previous strong ties which were established in the conventional, physical workspace, the team was able to face working in a virtual team in terms of relationships very bravely without negative repercussions.

4.4.2.3  Cohesiveness, Teamwork

Additionally, the team was also questioned about the nature of cohesiveness and teamwork, again before and after the change or work environments to assess whether the switch to a virtual team affected the team's synergy in any way. Employees were firstly asked to identify the nature of their team on a scale from 0 to 3 which is depicted in *Graph 5*:

*0 - The team does not work together at all, each member is focused only on own individual achievements.*

*1 - The quality of team work is very poor, the communication lacks efficiency, problems are solved very slowly and only a few members make an effort to work together as a team.*

*2 - The team work is fairly good, but there is room for improvements in terms of communication, mutual support and synergy.*

*3 - All, or the majority of members take an active part in working together to achieve common goals, support each other and the communication is very clear which enables the team to work efficiently, the team work is supported by the fact that the team socializes and takes part in team activities also outside of the work environment.*

Apart from showing how respondents identified the nature of the team's synergy based on the scale, *Graph 5* also depicts how respondents felt that that nature was affected by the change to a virtual environment, whether it was affected positively, negatively, or not at all. In this case, the opinions of team members varied fairly. Based on collected answers, 58.8% acknowledged that the team still has to work on improving communication, mutual support and synergy although the current level of these aspects is already fairly satisfying. Only 35.3% of members agreed that the majority of team members takes an active part in working together as one unit and only one person identified the cohesiveness and teamwork level as poor and lacking efficiency and mutual

effort. None of the members perceived the synergy of the team as non-existent. The weighted average of the team's teamwork ability in the usual, co-located workspace equals 2.3 points. These data represent the team members' view on their synergy nature before the COVID-19 outbreak. However, after experiencing working in a virtual environment, separated from all colleagues, 23.5% have perceived a positive effect of the distributed workspace on the team's ability to teamwork. 17.6% have contrarily felt that the dispersion has caused a negative impact on the team's synergy and the remaining 58.9% have not experienced any effect at all. Positive effects perceived by team members were the following:

- The distance has forced team members to rely on each other more and even if they are farther apart, they ultimately have gotten closer.
- The team has grown thanks to facing working apart which has benefited the team's synergy and ability to communicate and work together.
- Through the tough situation, colleagues have learned to support and help each other more.

On the other hand, these were the negative effects mentioned:

- The quality of teamwork has suffered because of lack of physical interactions and informal communication during lunches, cigarette- or coffee-breaks.
- Due to no physical contact, colleagues were not motivated or did not have such opportunity to organise group and non-work-related activities which usually strengthened the team as a whole.

*Graph 5: Cohesiveness and teamwork on a scale from 0 to 3 relative to perceived change due to change of environment*
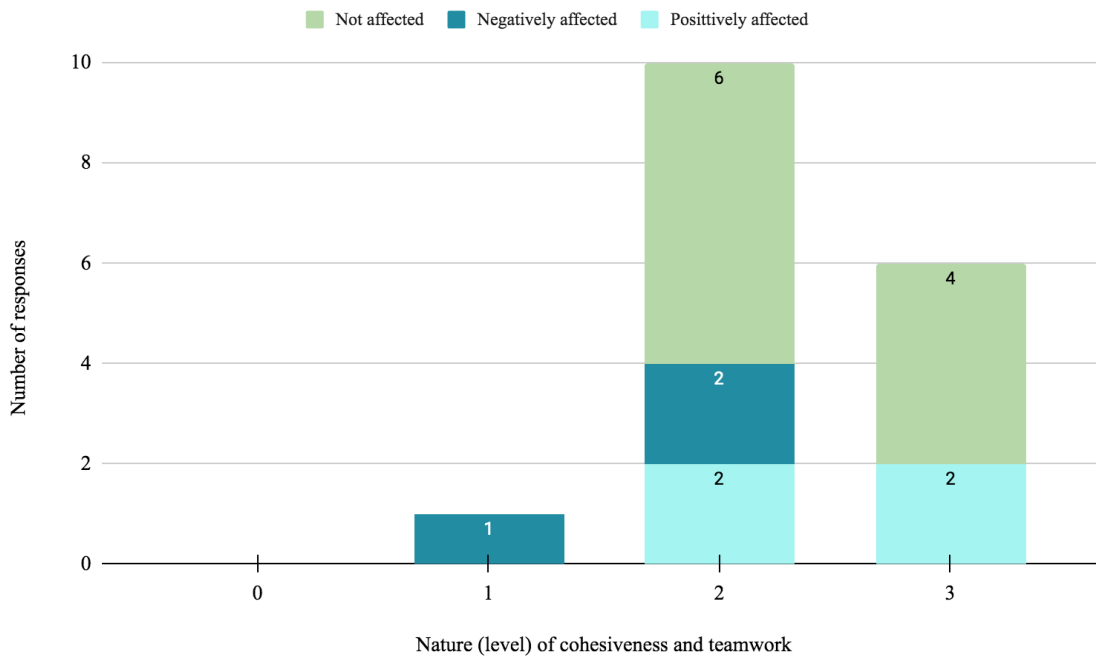


*Source: Own input (data from survey), 2021*

### 4.4.2.4 Conclusion: Cohesiveness, Teamwork

Concluding, the data regarding the nature of cohesiveness and synergy of the assessed team show that the team faced issues of an insufficient teamwork commitment of all team members which is crucial in terms of quality teamwork as each member counts and can make a real difference in the level of synergy, ultimately projecting on end results and performance. Therefore, the findings represent room for improvement in the areas of communication, problem solving and efficiency in the connection to teamwork, however this phenomenon is not a result of the actual move to a distributed space and work in a virtual team. Nonetheless, it can be advised to focus on improving these areas even more thoroughly in the virtual environment as it was found that it can act as a positive but also negative influence on particular team members and this knowledge is to be embraced.

### 4.4.2.5 Trust

Another factor that plays a big role in relationships and therefore in teamwork is the level of trust. Therefore, all respondents were asked to state how much trust they have

towards their team colleagues, whether this trust level has somehow been affected by the COVID-19 restrictions during which all team members were separated and explain why they think that happened. To identify the level of trust, respondents were given a scale of options from 0 to 3:

*0 - I do not trust any of my colleagues at all.*

*1 - I do not trust my colleagues without consulting my supervisor first.*

*2 - I trust my colleagues enough for basic work purposes and operations.*

*3 - I trust my colleagues completely as individuals and as a team.*

The findings show that trust is very well established in the assessed team as 47.1% of respondents have chosen point 2 and 59.9% have chosen point 3 on the scale, meaning that the weighted average of the level of trust within the team equals to 2.5 points. It can be deduced, that this high level of trust also contributes and is one of the main building stones of the strong relationships in the team. Looking at how the pandemic might have affected these levels, 82.4% of respondents have not perceived any change in trust they have towards their colleagues despite working apart and even 17.6% have experienced an increase in their level of trust thanks to the change of environment. Respondents have expressed that their trust has increased specifically due to being separated which brought them even closer and the mutual trust has gotten stronger. Others have also mentioned that thanks to working from home, they have realised that all colleagues take their work very seriously and responsibly and work even harder in the special conditions which made them worship and trust each other more.

4.4.2.6  Conclusion: Trust

Losing trust during working apart did not represent a challenge for this particular team, as the level of trust has not only remained the same for the majority of team members, but has even increased in some cases due to the challenge of being in a virtual team.

### 4.4.3 Communication

Firstly, the nature of communication in the conventional, office environment was identified to be able to make a comparison and examine how much the change to a virtual workplace has, or has not affected the overall communication quality of the team. In the usual conditions the team uses a combination of verbal communication with the use of communication technologies such as emails, conference calls, instant chatting and regular calling, however regular weekly face-to-face meetings take place plus extra meetings take place in case of consulting clients or handling specific issues. Additionally to that, 70.6% of team members experience and practice informal communication on a daily basis with their colleagues and the remaining 29.4% experience it as well, only not necessarily on a daily basis, but at least several times a week. This shows that the team is used to having frequent verbal and physical interactions including conversations about non-work-related topics which are crucial for building trust, relationships and an overall smooth, positive and effective communication.

52.9% of respondents have not noticed a change in the quality of communication and have stated that in their opinion it has not improved nor declined in any way, however the team shared more opinions in this case. 23.5% of respondents felt that the communication within the team suffered, due to not having physical contact it was difficult to understand all given tasks clearly, there was less room for questions, it was more difficult to solve problems and the overall productivity had declined. On the contrary, 11.8% of respondents have stated that they found an improvement of the previous communication system, saying that it had gotten more efficient, problems were solved faster and the overall productivity had increased after overcoming the initial difficulties which arose with the sudden change, but then the new communication processes actually lead to an increased productivity. The remaining individuals have expressed difficulty to consult problems and lack of access to needed information.

Furthermore, team members were asked to define based on a scale from 0 to 2, how they perceived working and communicating solely using technology during the first COVID-19 lockdown.

*0 - I did not like communicating only virtually, it made operations and communication more complicated and impersonal, I missed having physical*

*interactions, I do not find technology 100% reliable, I had difficulties with managing everything through technological systems.*

*1 - I did not mind communicating solely through technology, I did not miss verbal interactions too much, I had no difficulties managing the technologies used for the needed communication.*

*2 - I prefer communicating solely virtually because I think it makes all operations faster and more efficient, I did not miss verbal communication at all, I prefer recording and managing everything via technological systems.*

41.2% of members expressed that they did not like communicating only virtually as described in point 0. 52.9% of respondents agreed on point 1 and therefore did not find communicating only virtually inconvenient. Only 1 team member described a solely virtual communication as their preference. The weighted average of the perception of working using only technologies for communicating based on this scale is 0.6 points which strongly suggests that a large part of the team is not comfortable with this approach due to lack of personal interactions which made work processes more complicated for them. The team members also faced several problems connected to the communication style of the virtual team which are depicted in *Graph 6*. The results show that every member faced at least 1 of the mentioned issues. 23.5% members experienced 2 out of the 4 given problems, 11.8% of members experienced 3 out of 4 given problems and 5.9% faced all 4 issues during working in the virtual team.

*Graph 6: Problems faced during working from home and communicating solely virtually*
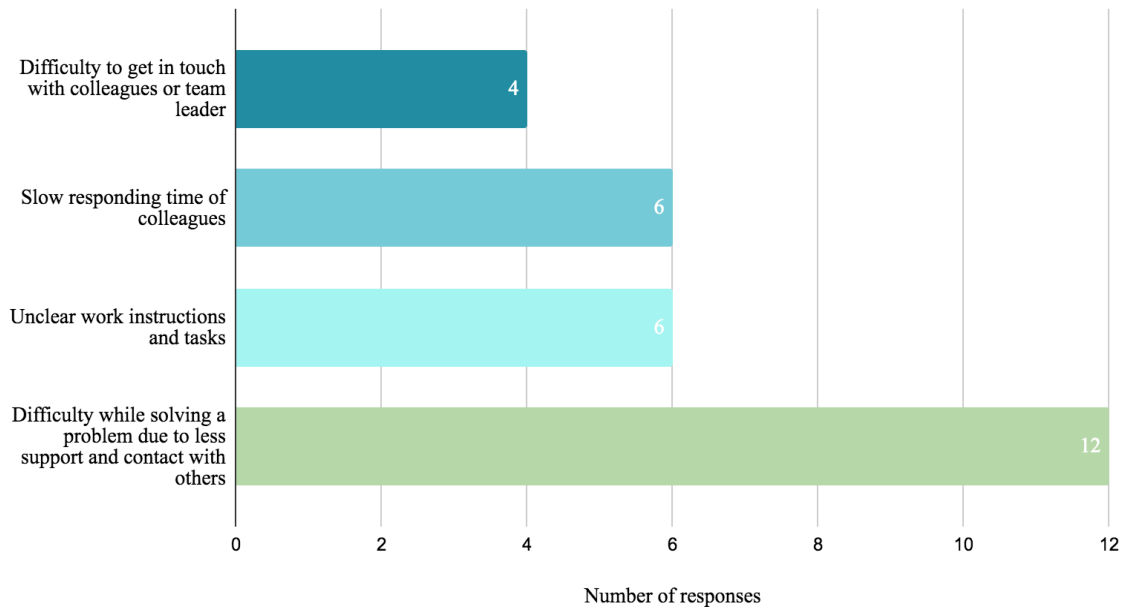
4.4.3.1 Conclusion

Based on these results it can be suggested that communication entirely via technological means represents a challenge for the team affecting at least 41.2% which can result in affecting other team members and the overall performance of the team. Furthermore, all team members experienced issues including difficulty to get in touch with colleagues or the team leader, unclear assignment of tasks and transmission of information, slow responding times of colleagues limiting members to work effectively and struggle while solving problems.

### 4.4.4 Motivation, Support

4.4.4.1 Motivation

In *Graph 7* the level of motivation of all respondents can be observed. The graph compares two time periods, firstly before the first COVID-19 lockdown when the team worked in the usual office conditions and secondly during the actual lockdown, when the team was forced to work from home as a virtual team. The chart depicts weighted averages which represent the overall level of motivation of the team based on a scale from 0 (not motivated at all) to 5 (highly motivated).

*Graph 7: Weighted averages of the level of motivation before and during the lockdown*
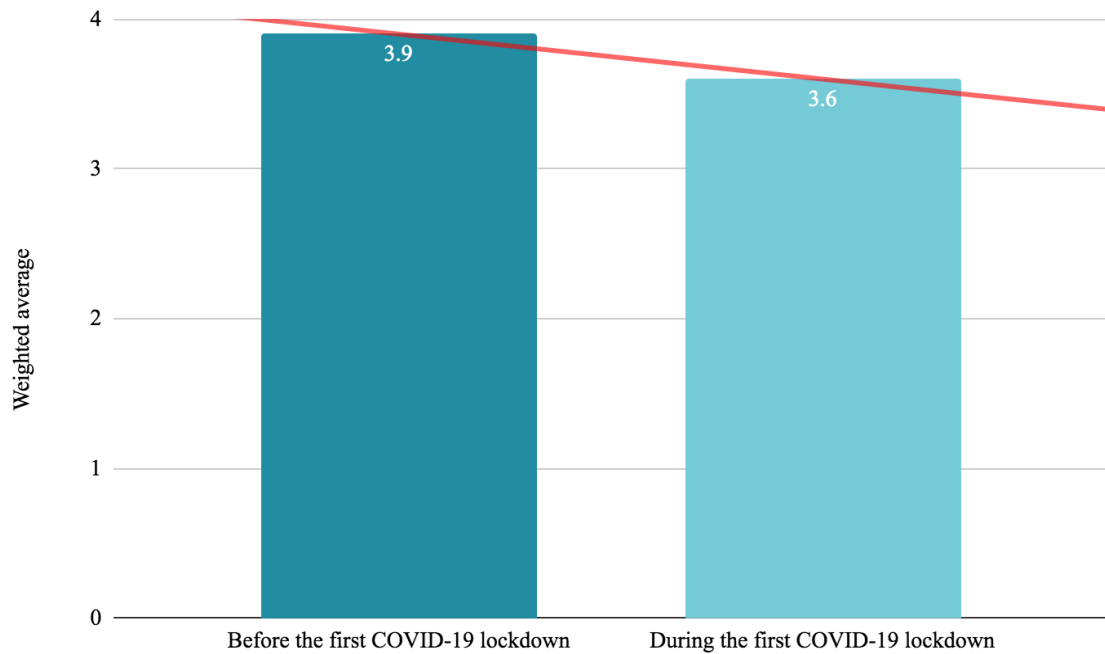


*Source: Own input (data from survey), 2021*

*Graph 7* shows that the overall degree of motivation of the team has decreased by 0.3 points during working from home and being separated from team colleagues. 29.4% of respondents felt an increase in motivation, 35.3% of respondents on the other hand experienced a downfall of their motivation during the home office period and the remaining 35.3% did not observe any change. Reasons for the increase and decrease of individual motivation levels are mentioned in *Table 2* which respondents stated to justify the changes they experienced.

*Table 2: Reasons of change of motivation level*

| Reasons for increased motivation | Reasons for decreased motivation |
|---|---|
| The uncertain and new environment created concern about the stability of employment for several members which increased their motivation to show the management that they are valuable and needed members of the team | Motivation decreased due to lack of inspiration due to no ability to travel, meet and interact with people and generally being limited to manage all matters from home |
| The need to prove to others and oneself that one can be productive in the home environment | Homely environment is discouraging and hard to keep discipline in, many distractions, lack of focus, environment stereotype |
| Increased motivation resulted from realising that results can be delivered while working from home as well as in the conventional office environment | Decrease of feedback and interactions with colleagues and supervisor |
| | Demotivating pressure from the management on delivering results, rather than receiving needed support |
| | Questioning and overly monitoring of the team members' reliability and productivity by the management |

*Source: Own input (data from survey), 2021*

All respondents were additionally asked to specify who or what their greatest motivator was and helped them to stay motivated and keep up the work during the home office period, independently of the fact whether their motivation had or had not increased with the aim to determine simply which factor was the most motivating to the team members. Or on the other hand if they felt specifically demotivated by a certain factor or person. The most mentioned motivators were the respondents themselves, 47% of respondents said that they had to motivate themselves by striving for best possible results, adapting to the new environment and focusing on following a certain work structure, staying positive, learning new things, being independent and proving to themselves that they can do it and handle the situation on their own. The second most common motivator was the team as a unit which offered motivation and support among individuals through communicating and sharing efforts but also insecurities with each other and also having the knowledge that one is not alone in the situation. On the other hand, the most dominant demotivating factor mentioned by 23.5% of respondents was the highest management of the company. According to the employees, the management, specifically the

executives/founders transmitted a feeling of mistrust by too frequent and aggressive check-ups, new monitoring systems and pressuring employees into working harder rather than doing it in a supportive way.

### 4.4.4.2 Conclusion: Motivation

The overall motivation level of employees had decreased during the home office period which suggests that this area is something that the management and leader should focus on more in possible future scenarios. The weighted average decrease was only by 0.3 points which is rather insignificant, nonetheless 35.3% of team members experienced a decrease and 35.3% have not experienced any change in their motivation level which shows that in at least 70.6% of cases there is room for improvement to increase the motivation of these employees. What was also found is that the biggest motivators had to be the employees themselves and the management was actually the biggest demotivating factor which represents a failure of the management to motivate its employees. On one hand it is positive that some employees had the strength to motivate themselves but the people in charge should be the driving factor to ensure motivation of their employees and not to expect they will do that themselves. Therefore, motivation can be determined as a challenge for the assessed team, particularly for the management including the leader who should focus on motivating their subordinates and also teach them how they can help themselves if some members are not able to do so.

### 4.4.4.3 Support

Regarding support, the respondents were asked to specify who their greatest support was in times of being separated from their work team and leader. 45% of respondents said that they felt the greatest support from their family members, as second placed team colleagues with 30% of responses, the team leader was mentioned only by 20% of respondents as their main supporting anchor and the remaining 5% expressed that they did not feel supported by anyone during the working-from-home period.

### 4.4.4.4 Conclusion: Support

Looking at the answers regarding support, it becomes clear that most employees had to turn to people outside of their workspace to receive the needed support, which can seem quite common, considering that their families and loved ones were people who they spent

the most time with in the home office environment, however the leader would be expected to place higher in the ideally working workplace where the leader should be the main supporting person alongside of the team members themselves considering his role and level of experience. Therefore, this area can be interpreted as another challenge which was not handled sufficiently and the leader is to be advised to focus more on representing the main supporting point and making sure that all employees are aware and comfortable with that.

### 4.4.5  Productivity

To examine the effect of the home office environment and conditions of working from home on the employees' productivity, the respondents were again asked to rate their productivity level on a scale from 0 (not productive at all) to 5 (the most productive possible within given circumstances) firstly in the usual office environment before the first COVID-19 lockdown and then during the lockdown period in the remote environment. The overall level of productivity perceived and experienced by all employees of the team is depicted in *Graph 8* using weighted averages.

*Graph 8: Weighted averages of the level of productivity before and during the lockdown*
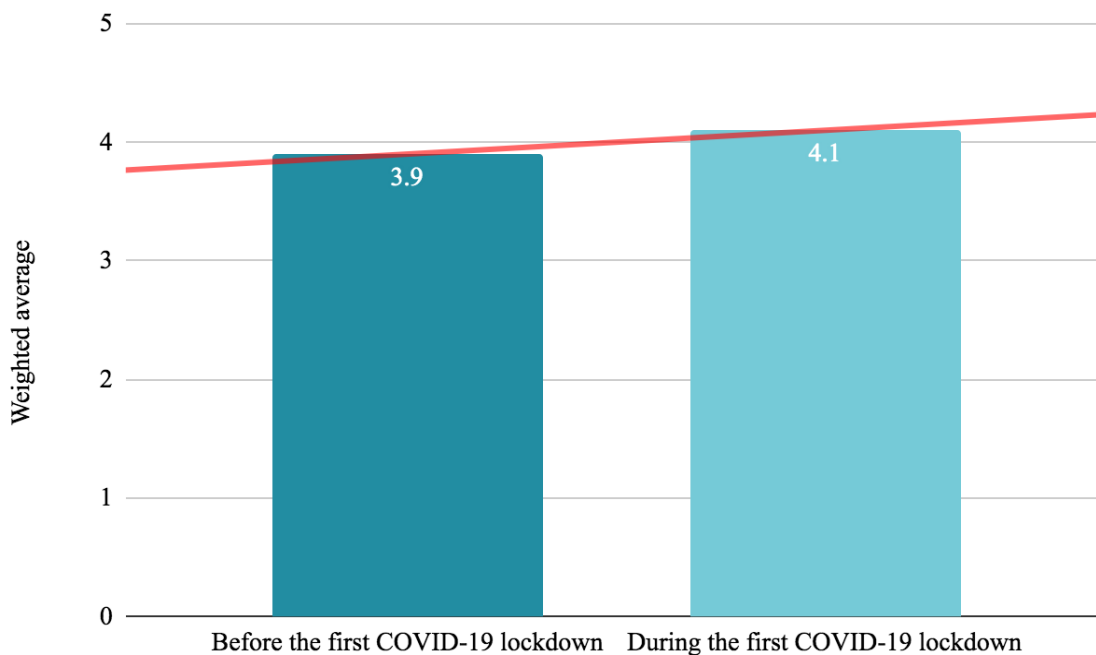


Source: Own input (data from survey), 2021

Results show that the overall productivity of the team increased during the working-from-home period by 0.2 points which might not seem as a lot but it represents a positive improvement. Looking at individual responses, before the first COVID-19 lockdown, the range of productivity levels that respondents used to identify their choice was 3, whereas during the COVID-19 lockdown it was 2, which means that it decreased as employees have in average rated higher levels on the scale. The lowest chosen point for the usual office environment was 2 which was not chosen at all in the context of the virtual environment showing that the minimum level of productivity in the remote environment was 3 compared to the physical environment where the minimum was 2. In summary 29.4% of respondents experienced a decrease in productivity, 35.3% experienced an increase and 35.3% did not experience any change in their productivity level during working from home.

The main reasons for an increase in productivity included the following:

- Bigger focus on individual tasks and their fulfilment
- Time usually spent on coffee breaks and chatting with colleagues was used more effectively on finishing more work assignments

The decrease was justified by too many distractions in the homely environment.

4.4.5.1  Conclusion

The conclusion that can be drawn from the results shows that even though 29.4% of team members experienced a decrease in productivity which shows room for improvement, the majority of 70.6% was at least able to maintain the same level of productivity and the half of that was even able to increase it which shows that the team dealt with this challenge very well.

**4.4.6  Management of Social Distance and Mental Health**

Social distancing can besides the already commented on areas also affect the mental wellbeing of individuals which is crucial not only in the personal life but in all aspects of how a person behaves and ultimately how that reflects on work performance which is the main focus of this study. Respondents were therefore also asked about how social distancing influenced their stress level and whether it caused other negative emotions that were a result from working in a virtual team separated from the outside world. Particularly

the stress level had changed in 41.2% of cases. The rest has stated that their stress level in the virtual team compared to the face-to-face team has not changed or that they usually do not experience any stress not in the usual nor in the distributed workspace. While 5.9% of respondents have experienced a decrease in stress, 35.3% of team members experienced higher stress levels.

The increases were explained by these statements of respondents:

- Stress resulted from change of work processes and operations and the fact that newly all activities needed to be recorded.

- Difficulty to separate work from leisure, whether physically or mentally, therefore constant thinking about work caused more stress and not being able to fully relax.

- Increased amount of tasks including recording of all activities and tasks connected to doing most of the work individually with less help from others.

- Overall uncertainty, lack of consultations with others which was challenging in situations where an issue could not be solved by one person alone such as technical issues etc.

- Longer responding times of colleagues prolonged most of work processes therefore delay in fulfilment of tasks resulting in having the feeling of not getting things done in time, feeling of time and performance pressure.


Apart from the stress factor, the survey also aimed to find out whether any of the respondents experienced emotions like sadness, demotivation, loneliness, uncertainty or possibly other negative emotions due to being separated from all work colleagues and having minimal social and physical interactions. *Graph 9* illustrates the responses.

*Graph 9: Experienced emotions as a result of social distance*
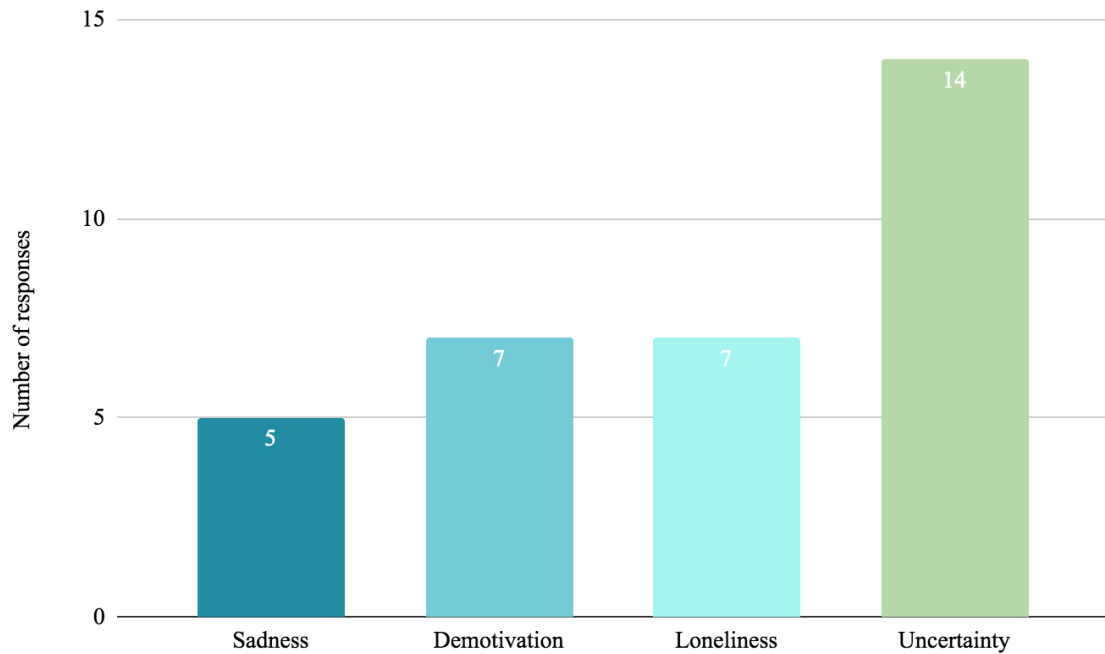


*Source: Own input (data from survey), 2021*

After gathering all results, it was found that all team members have experienced at least one of the mentioned emotions in *Graph 9*. 53% of respondents experienced one of the stated emotions, 17.6% have encountered 2 out of the 4 given feelings, 11.8% of respondents have felt 3 emotions and 17.6% of team members have experienced all 4 mental states. Looking at individual emotions, 15.2% felt sadness, 21.2% felt loneliness, 21.2% felt demotivated and 42.4% perceived uncertainty due to being socially isolated. These results appear to be quite alarming as all team members had found themselves in certain mental states which are all of negative nature.

4.4.6.1 Conclusion

Considering the examined stress levels and emotions resulting from being in the virtual environment, the outcomes strongly suggest that the mental health and well-being of all employees was at a certain risk, for some at a lower, for some at a higher risk and therefore social distancing and mental health issues are considered to identify as a challenge for the team. Social distance is one of the main disadvantages of virtual teams and it should be aimed at compensating and preventing negative emotions accordingly. Employees should not be left alone to deal with these issues and it is the role of the team

leader to step in and find out who might be struggling and give sufficient support to their subordinates.

**4.4.7   Perception of Team leader**

4.4.7.1  Relationships

*Graph 10: Relationships with team leader*



● Very positive - with trust, good communication and support, could be compared to a friendship-like relationship

● Neutral - no special relationship, not extraordinarily positive nor negative, communication is good, basic level of trust and support is there

47.1%

52.9%
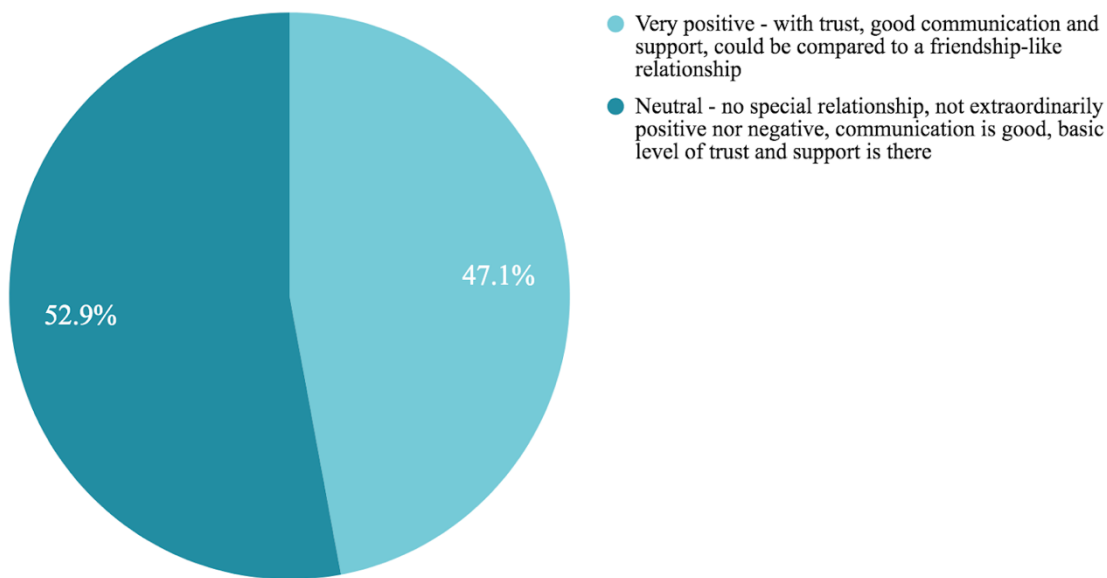
*Source: Own input (data from survey), 2021*

*Graph 10* shows how respondents described their relationship with their team leader. The majority (52.9%) of team members described it as neutral without any extraordinarily positive nor negative features, however the relationship is built on solid communication, a basic level of trust and support from the leader. The other 47.1% described the relationship as very positive with a good level of trust, quality communication and support which nature could be compared to a friendship-like bond. The survey also offered a third option describing the relationship as rather negative with a low level of trust and support and poor communication, but this option was not chosen by any employee. These figures dominantly suggest that all team members have a solid relationship with the team leader, even a very positive one including all needed aspects which a quality relationship should consist of.

### 4.4.7.2 Support

Furthermore, team members were asked to rate on a scale from 0 (not supported at all) to 5 (perfectly supported) how supported they felt during working from home by the team leader to find out whether or not the leader fulfilled important aspects of his role in the team especially during the challenging times. The results brought a weighted average of 3.6 points. Considering that no respondents ranked the support a 0 or a 1 shows that all team members were supported at least on a basic level. Still, there is room for improvement as only 11.8% of respondents identified themselves as fully supported by their leader and ranked the highest value on the scale.

### 4.4.7.3 Motivation

The next aspect that was of interest of the study was how much the team leader motivated their employees and so respondents were asked to name at least one thing which the leader did to motivate them while being separated from the rest of the team. While 35.3% of respondents expressed, that the team leader did nothing that motivated them, the remaining 64.7% mentioned the following actions the leader took to motivate them:

- The leader was open to deal with every situation that required help.
- The leader took time to thank for and praise well done work and fulfilled tasks.
- The leader had put faith and trust in their members.
- The leader made him/herself available at any time in need of consultation.
- The leader made the effort to answer all questions.
- The leader was very patient, he/she did not pressure the employees when they were behind on reporting their activities.
- The leader made sure to give his employees constructive feedback.

However, the respondents were also asked to specify what possible actions of the leader had demotivated them:

- Effort of motivational emails which however projected as rather demotivating and counterproductive in practise due to putting high pressure on accelerating

work processes and constantly reaching better results, sometimes use of threats.

- Showing distrust of the efficiency and productivity of the team.
- Putting high pressure on end results.
- Constructing a detailed manual describing and setting how team members should work, leaving little room for independence and creativity to organise work for oneself.
- Practicing discontinuity of decisions.
- Pressure due to an increased monitoring system and obligation to report all daily activities also projecting as low trust from the leader.

### 4.4.7.4 Conclusion

The overall impression of the leader and his role in the team is fairly positive. The leader has predominantly established positive relationships with all of his employees, they offered more than an average support and the greater half of team members felt motivated by him/her during the times of being separated from all team colleagues and working from home. Nonetheless, the level of support still shows room for improvement and 35.3% of respondents have expressed significant actions of his/hers that lead to their demotivation which are advised to be avoided. The virtual environment in this case can be seen as a challenge for this team leader as nonverbal communication might have led to misinterpretations of motivational speeches or necessary actions that would not have occurred if the leader had the time and space to talk all employees through it face to face.

### 4.4.8   Lessons learned

Finally, respondents were asked to summarize what they have learned through the experience of working in a virtual team and all aspects connected to it.

Firstly, they were asked to state whether they have improved any of their skills in the following areas thanks to the challenging and different work environment depicted in *Table 3* including results:

*Table 3: Improvement of skills resulting from working in a virtual team*

| Skill | Number of responses | Share (%) |
|---|---|---|
| Handling more responsibility on your own | 13 | 76.5% |
| Being more independent (workwise) | 8 | 47.1% |
| Work discipline | 7 | 41.2% |
| Problem solving | 6 | 35.3% |
| Organising work tasks | 6 | 35.3% |
| Productivity | 5 | 29.4% |
| Communication | 4 | 23.5% |
| Time management | 4 | 23.5% |
| Handling stress | 4 | 23.5% |
| Other | 0 | 0.0% |
| My level of the mentioned skills has remained the same | 0 | 0.0% |

*Source: Own input (data from survey), 2021*

As *Table 3* shows, all members had improved at least one skill as no one has stated that the level of their skills had remained the same as in the face-to-face environment. The most mentioned competence that improved for the majority of employees is handling more responsibility by themselves which they have learned while working alone and needing to rely on themselves more without the comfort of close and quick possibility of consultations or discussions with others. The least stated skills that were improved were communication, time management and handling of stress which all were indicated by 23.5% of the respondents. Looking at how many skills each member has seen progress in, it was found that 2 out of 17 (11.8%) team members further developed only in 1 skill, 4 out of 17 (23.6%) have improved in 2 of the mentioned skills, 3 out of 17 (17.6%) progressed in 3 competencies, 6 out of 17 (35.2%) advanced in a total of 4 abilities, one individual stated that his skills grew in 6 areas and one person felt an improvement in 8 out of 9 mentioned skills. These data are interesting to see how individual members have progressed, however seemingly low improvements can also suggest that individuals already had a high level of the given abilities. Overall it can be determined, that the virtual environment had many

positive effects on the skill set of all employees and that the new experience benefited them in many areas which are important for the quality functioning of any team and especially a virtual one.

Respondents were also asked to summarize in own words what the biggest lesson learned that arose from the unusual experience while working in a remote team were and they agreed on the following:

- The key to productivity in the home office is an organised and clean workspace.
- Learning to be fully responsible for own work and results and being able to be an independent unit.
- Training of new employees or of current employees for new skills and know-how has best results when done face to face.
- Face-to-face interactions are hardly replaceable.
- The management needs to work on motivating its employees and having a positive approach which will not discourage anyone.
- Not receiving sufficient space and independence from the management is demotivating and decreases efficiency.
- Treating employees as individuals, not treating every member the same way is important.
- Learning how to be the most effective, getting to know oneself better in these terms, learning to manage time effectively and setting boundaries between work and leisure.
- Realisation that it is important to have colleagues around, in physical proximity for efficiency and a positive environment.
- Learning how and where to find solutions for given problems.
- Physical activity helps with overall productivity and energy levels.
- People are not replaceable with machines or computers, interactions and social ties are crucial for a healthy functioning team.

Finally, respondents were asked which work environment they prefer now, that they have experienced working in a face-to-face team and also in a solely virtual team, whether

they would like to continue working in a virtual team or if they are happier going back to the usual conditions of a co-located team. 70.6% of respondents prefer working in a face-to-face team having participated in the virtual team and 29.4% would like to continue working from home in a distributed team.

### 4.4.8.1 Conclusion

Based on all outcomes it becomes clear that the whole experience was beneficial for the employees as they have improved some of their skills and have learned valuable lessons for their future work purposes and in the case that the virtual-team-scenario would repeat itself. The most important lessons learned are the realisation of the actual importance of social and physical interactions, being able to rely on oneself without the help of anyone else, but also the importance of the managements' and the team leader's role which should be motivating and supporting its employees. Despite the benefits that were pointed out, the virtual environment also brought some challenges and the great majority of the team would after all choose the previous, face-to-face environment as their ideal preference of a workplace.

## 4.5 Analysis of Qualitative Research: Interview

The next chapter aims at analysing the outcomes of the second research method used in this study which is the structured interview. The interview was conducted with the team leader in charge of the team of Affiliate Managers. The aim of this research method is to evaluate the leader's point of view on the same topics that team members were asked about and later on make a comparison of both, using the comparison to deduce an objective conclusion of which challenges the team faced and which lessons it learned. The leader was asked 20 questions from the areas of in-team relationships, communication, motivation, productivity and lessons learned while managing a virtual team during the period 16.3.2020 - 15.6.2020 of facing the COVID-19 pandemic. Additionally, the team leader was also asked to provide yearly turnover data from 2018 to 2020 for the particular months that were affected (in 2020) by the pandemic: March until June, to show how the unusual conditions of working from home might or might not have affected the company's overall performance resulting mainly from the work of the team.

At the beginning of the interview the team leader was asked some general questions in order to establish a basic identification of the person. The team leader is a 30-year-old

female, who has been working for the company VIVnetworks.com s.r.o. for 7 years, starting as one of the first employees and has been representing the position of the Affiliate Manager team leader for 3.5 years which shows that the leader has been a part of the firm the longest of all employees and therefore it can be assumed that she has gained a fair amount of experience throughout the years. The female also has several years of experience of leading a team and supervising it, suggesting that her leadership style has so far been satisfying to the company and its members as the firm never attempted to replace her and quite the opposite, has been assigning more and more individuals and tasks to her responsibility.

### 4.5.1  Management and Leadership

The leader described her leadership style as democratic. She prioritises giving employees sufficient space for developing independence as she respects that each individual has an own work style and preferences that allow them to be their most effective selves. Instead of outlining strict approaches that need to be followed step by step, the leader views her role rather as leading team members the right way and offering support along the way with constructive feedback and tips for more effective adjustments. The leader was then asked whether her leadership or management style have changed as a result of the first COVID-19 lockdown during the time period 16.3.2020 - 15.6.2020 when she was challenged to move the team to a virtual environment and manage it from a distance without physical contact to the team members. The team leader explained that the first thing she established was a straightforward online meeting schedule which consisted of a weekly team meeting and one-on-one meetings. At first the individual sessions took place on a more frequent basis (2 - 3 times a week) to make sure that all members got the support they needed during the adaptation to working in a distributed team. The main aspect that the leader focused on and consciously adjusted within her leadership style was the aspect of contact and communication as she identified it as the most lacking factor due to working apart and communicating solely virtually and therefore this presented one of the main challenges for her. Of course, other changes took place as well, but these developed naturally in the words of the leader, but mainly she focused on being more available for her team even in terms of management of daily tasks because she realised that adapting to the home office conditions can be difficult for some individuals. Since the home office became the new normal and no major issues occurred, the virtual meetings

went back to the usual scheme of once a week with the option to book extra calls in the case of need.

The leader also stated that she has ever had a previous experience with managing a team during very extraordinary conditions similar to those in the context of the COVID-19 pandemic and that it was her first challenge of such character. The leader also faced the challenge of having to train new employees that had joined the team quite recently which was more difficult not having the ability to teach and explain work processes face to face and not being able to interact physically. This was one of the main stress factors for the leader. Due to having to spend extra time with new team members, it was time challenging to consult all other team members and still have time to handle her own agenda. What mentally helped her was the fact that the company as a whole was not struggling with the COVID-19 outbreak performance-wise due to the nature of the online market the company operates in.

### 4.5.2 Relationships and Teamwork

In the second part of the interview, the leader was asked to describe how she perceived the relationships within the team and whether they had been affected by the COVID-19 lockdown in her opinion. The leader explained that because she herself was in regular contact with all team members, she did not feel that her relationships changed anyhow, however she could imagine that some relationships could have "cooled down" due to having little contact between individual team members. Regarding the overall atmosphere within the team and the team spirit and mood, the leader mentioned, that at the beginning of working apart she could sense a feeling of uncertainty among the team members and a slightly tense mood as employees were not sure and a little nervous about what was going to happen and which changes they would have to face. Over time the situation had however calmed down as everyone got used to the new working conditions and no further changes were observed by the leader since then. The leader was also asked if she noticed any changes in the quality of team work after moving to a distributed environment and she answered that she was positively surprised that it had not changed which could had been expected due to the difficult work conditions and the fact of having no physical interactions, but in the eyes of the leader the level of team work remained the same.

### 4.5.3 Communication

The leader stated that communication represented a challenge for her in terms of new employees who needed more explaining and sometimes lack of verbal communication would lead to misunderstandings. She did not observe any other communication-related problems among the team. Nonetheless, the leader really focused on making sure that after any meeting or call, everyone clearly understood the new task or information and what exactly was expected of them and how they should proceed with their work to prevent misunderstandings and confusion. At the same time the leader made sure to let all employees know that she is always available for needed extra consultations in case that someone was not sure how to carry on with a task or did not understand the assignment.

### 4.5.4 Motivation, Support

Furthermore, the team leader was asked how she motivated her employees while working from home and whether she focused more or less on motivating and supporting the team members. The leader's main focus was on ensuring mental wellbeing of the team, mainly through letting everyone know and reminding them on a frequent basis that she is available to all team members in the case of need or unsureness or in any case really, as she was aware that fulfilling regular tasks in a different work environment could be difficult for some members and just by letting them know they have someone to help them and that they are not alone was a priority. For motivational purposes the management had established some KPIs which were meant to keep employees motivated and focused already before the virtual-team-period, no further specific steps were taken in order to increase motivation levels.

### 4.5.5 Productivity

The last main aspect that the leader was asked about was the productivity of the team and whether it had changed in any way in the leader's opinion after the move to a virtual environment. The leader described that at first, at the beginning of the first lockdown, the team productivity declined, however after a while it went back to the same level as in the previous, face-to-face workplace and finally, it had even increased. According to the leader, after managing the initial adaptation to the new work conditions and work processes and new setting up of priorities, the team was able to maintain its usual efficiency and even increase it. The leader was also asked if she put any special measures

in place to be able to monitor how her team was doing in terms of task fulfillment during working apart. The leader explained that at first, she recorded all assigned tasks and checked up on their progress on a daily basis by asking employees to give a daily report of things that they had done. After the team's productivity went back to the previous level, these activities went back to the known scheme.

The leader was also able to provide some figures that show the year on year growth of the company's revenue which can be seen in *Table 4*.

*Table 4: Year on year revenue growth of VIVnetworks.com s.r.o.*

| Time period | Year on year revenue growth in % |
|:---:|:---:|
| 2018 vs. 2017 | 7% |
| 2019 vs. 2018 | 25% |
| 2020 vs. 2019 | 214% |

*Source: Own input (data from interview), 2021*

The leader commented on these figures which show that the yearly growth in 2020 was the biggest yet, that this growth had for certain been affected by the fact, that the majority of the Czech population switched from shopping in stores to shopping online due to all shops being closed, therefore the e-commerce industry experienced quite a boom, however the leader specified that in her eyes the market situation and external factors had contributed to about ⅔ of the growth and ⅓ of the growth was a result of the increased productivity of the team during the first lockdown.

### 4.5.6   Main Challenges & Lessons Learned

4.5.6.1  Challenges

Finally, the leader was asked to summarize the main challenges faced and lessons learned by her individually and by the team as a whole. Individually she recognized that the main challenges included more difficult communication with certain team members, the need for more thorough explanations of new tasks and new information, more frequent monitoring of employees' activities which were all together much more time consuming than in the usual co-located work space. Compared to the usual office conditions, the

leader admitted that handling some issues and work processes was harder, doing it from home.

In terms of the whole team, the leader identified these main areas which were the most challenged by the extraordinary situation:

- Mental wellbeing, Stress - Team members faced feelings of uncertainty at first and the whole situation was very stressful for everyone due to the very unusual circumstances. Many employees including the team leader had trouble to separate their private life from the work as both took place in the same environment which increased stress levels.

- Trust - The sudden change and move to a virtual environment caused a lot of uncertainty among employees but also within the management which had difficulties to trust employees to maintain full focus and dedication to the work at home, as if they were in the office.

- Productivity - At the first stage of working from home the productivity of the team decreased due to the changes, stress factors and new work conditions that required getting used to. After overcoming the first stage the productivity however increased.

- Teamwork & cohesiveness - This area was also finally described as disadvantage rather than a challenge due to the team working apart. Members tended to focus more on their own individual efforts than on team efforts. Team interactions decreased during the home office period, however the team has maintained its ability to achieve results as one unit.

- Social distance - This was identified as the main challenge by the leader as she was aware that the team members missed the regular physical contact with colleagues and having face-to-face interactions. The team was looking forward the most to seeing one another again in the office.

## 4.5.6.2 Lessons learned

The leader identified these main takeaways as lessons learned from the experience of managing and working in a virtual team:

- The importance of setting up a clear regime and work scheme from the very beginning and making sure that all team members know and understand what

is expected of them and how to approach work tasks which helps to lower the uncertainty as employees are more confident about what they are doing.

- Increasing the intensity of communication is crucial to overcome uncertainties and individual concerns and also the feeling of detachment.

- Creating and organising more room for questions, discussions, consultations and also informal communication is very helpful and crucial while working apart. These aspects are a common part of the office life but not so easy to maintain in the virtual space and therefore they should be more focused on.

- Making sure that employees understand the given situation well and are aware of what is happening in the company as a whole and do not feel left out. The importance of preventing internal confusion and lack of information which can result in stress, distrust or doubt within the team. Tools for achieving this are regular meetings and updates of current ongoing issues and recent developments and encouraging team members to also share news with the rest of the team.

- Initiating in-team communication in order to maintain good teamwork and cohesiveness as it might be difficult for team members to do that by themselves. The leader should be the guiding person to help individuals get in better and more often (also informal) touch with colleagues to overcome social distance, lack of contact and enhance synergy. Keeping up and taking care of social ties and relationships within the team is key for all processes and communication to be efficient.

- Keeping in mind that adjustments to change take time and that with the right guidance without negative pressure they can be easily overcome and the situation can be even used to the team's advantage to improve certain skills and reach better results.

- Creating a space to meet (virtually) and have non-work-related interactions and conversations to strengthen the team spirit and relationships and take the "edge off" of the work.

## 4.6 Comparison of Quantitative and Qualitative Research Outcomes

This chapter focuses on comparing the challenges that were identified by the team itself and its team leader to find out whether both sides of the employee-supervisor

relationship experienced similar issues, to see how well the leader knows her team and whether she was able to recognize all issues that her employees faced and finally, to summarize the main objective challenges that were faced by the team as a whole.

*Table 5* summarizes the main issues which were identified as challenges by team members compared to the ones recognised by the team leader, resulting from forming and working as a virtual team due to the first COVID-19 lockdown in the period from 16/3/2020 until 15/6/2020.

*Table 5: Challenges identified by the team and team leader*

| | Main challenges identified by the team | Main challenges identified by the team leader |
|---|---|---|
| Time management | x | x |
| Communication only via technology | x | |
| Motivation, support | x | |
| Mental wellbeing, Stress | x | x |
| Social distance | x | x |
| Trust | | x |

*Source: Own input (data from survey and interview), 2021*

As can be seen in *Table 5*, the leader identified 4 issues opposed to the team which identified 5 challenges in total. The two parties did not specifically agree on the topics of communication and motivation and support. Results from the survey showed that at least 41.2% of team members identified the area of communication as a big challenge due to lack of personal interactions which made work processes more complicated for them and all members of the team admitted facing issues from difficulties to get in touch with colleagues, slow responding times and therefore slow work progress, unclear work tasks all the way to problematic problem solving. On the other hand, the team leader did not see communication as a challenge other than with more recent employees who had bigger adjustments to overcome. This difference can be explained by the fact that as the leader herself explained, she made the effort to be available to her employees for needed communication purposes, but this did not necessarily affect the way how individual

colleagues communicated with each other so two different perceptions were created. Moving on to motivation and support, based on the findings, which revealed that the overall motivation level of the team decreased during the home office period and also the fact that only 20% of team members felt fully supported by their team leader it becomes clear that the leader underestimated the importance of actively motivating and supporting her employees. Although she focused on reminding all members that she was happy to offer needed support at any time, active action and direct engagement would have been more suitable rather than just informing them. For motivational purposes set up KPIs were used but no explicit other action was taken by the leader to ensure motivation which reflected on the team's response. The last discrepancy in the two statements of the team compared to the leader was regarding trust, as the leader expressed that at the beginning of being separated and working from home, she had difficulty to trust her employees to work as disciplined at home as they did at the office, however after initiating more frequent activity reports, she realised that she could rely on her team.

The main lesson learned that the team and its leader shared is that social interactions are crucial for all operations inside and outside of the team and that it is essential to compensate for the lack of them when working in a distributed team.

## 4.7 Results and Recommendations

### 4.7.1 Challenges faced

Based on the research and comparison of the team members' and team leader's perceptions the following 4 areas were determined as the main challenges for the team of Affiliate Managers in VIVnetworks.com s.r.o. due to the sudden and unexpected transition from a co-located to a distributed team described in the following sub-chapters.

#### 4.7.1.1 Time management

One of the challenges that was identified after reviewing the team's responses was time management. Team members and the team leader both found it difficult to stick to the usual eight-hour working schedule as they were used to in the conventional office space. The issue was not that they would have the tendency to work less hours a day, on the contrary, they struggled with working late and over time. The struggle was mostly caused by the difficulty of keeping the work separated from the private life since the office was moved into the homes of all team members which made it hard to put a stop to working at

the end of the day. Also, other aspects like having to watch the children or taking care of chores disturbed the usual work schedule and many workers ended up dedicating most of their days to the work. This challenge was specifically identified by 58.8% of the employees including the team leader. This presents a challenge as the fact of an irregular and spontaneous time schedule can ultimately affect the productivity and efficiency of the team, as the availability of all members at the same time is limited which can slow down work processes, communication and results.

### 4.7.1.2 Recommendations

On one hand the team viewed the more benevolent work schedule as a benefit, but at the same time its members ended up struggling with it. As results showed, the team's productivity was not affected by this challenge therefore the recommendation states that the leader should decide for herself whether to set up stricter rules for following a given timetable which would result in a more organised schedule and availability of the team as a whole, but since no other aspects showed negative consequences of this fact it is not seen an a necessary measure and the leader is rather advised to help employees in managing their time more wisely but still leaving the decision on them and allowing them have an own preference.

### 4.7.1.3 Communication

Communication within the team was determined to be another challenge that the team had to face during working apart. 41.2% of team members stated that they did not like communicating solely through technology and the overall result suggested that a large part of the team found communication in the virtual team challenging due to lack of face-to-face interactions. 23.5% of respondents even experienced a decline in the quality and efficiency of communication compared to the traditional co-located environment. Additionally, all team members faced at least one issue regarding communication including difficulty to get in touch with colleagues or the team leader, slow responding time of co-workers, unclear assignment of tasks and instructions or complication while solving problems. Some members even faced all of the mentioned issues which clearly suggests that communication was one of the main challenges for the team. On the other hand, the team leader herself did not perceive this aspect as a challenge as she lined up a regular meeting schedule with each of her employees, therefore she did not have any issues

in that area, nonetheless she was not able to detect this issue within her team which implies that she neglected the supervision of the in-team levels of communication properly. Concluding, it was found that for the assessed team physical interactions are crucial for ensuring quality communication which was also based on the fact that over 70% of team members usually experience and practice informal communication on a daily basis which is known to be essential for efficient communication.

### 4.7.1.4 Recommendations

In this case it is recommended to focus more on ensuring more regular contact, possibly suggesting increased usage of video calls for the team members with each other to prevent issues or misunderstandings due to lack of contact which can slow down processes and the team as a whole. The supervisor is recommended to see to that members do not face communication issues and encourage them to keep up regular interactions and feedback on ongoing topics with their team colleagues. The leader should also make sure that employees report to her frequently and give updates on their communication with co-members in case of colleagues not responding but also in seemingly problem-free cases to allow the leader to prevent possible issues and have an overview of the current happenings. This way the leader will be able to step in to resolve possible responding issues or miscommunications to ensure a smooth and fast continuity of work processes. Not only should the leader encourage more often collegial updates but also non-work-related get-togethers to fuel social interactions of a friendly and bonding character to make up for the lack of face-to-face contact and informal communication.

### 4.7.1.5 Motivation, Support

Other aspects that were negatively affected by the nature of working in a virtual team were motivation levels and the feeling of support. Results showed that the overall level of motivation of the team had decreased during the first COVID-19 lockdown. Specifically, 35.3% of respondents felt a decrease of their motivation and 35.3% did not perceive any change of their motivation level which indicates that in 70.6% of cases no encouragement from the leader's side took place which would aim at motivating the employees and increasing their motivation levels or it was not successful as some have actually experienced a decrease. The respondents stated that through the challenging times of being separated from the team they had to mostly motivate themselves because they did not

perceive any effective motivation from the leader nor the management of the company. In fact, some employees stated that they were actually demotivated by the management due to high pressure on delivering results even during the uncertain times when they needed a different kind of attention. Other than the set up KPIs which were already in place, the management nor the leader did not take any particular steps in order to motivate the team even though some members identified several aspects that had a motivating nature and intent based on the leader's behaviour, but none of them were powerful enough to cause a significant change and even the leader herself did not mention any extra efforts to ensure motivation during the interview. Similarly, the majority of workers did not feel strong support from the company and their leader as only 20% of the employees described that they felt supported by their team leader and the rest had to turn to their families or themselves. Even though the leader stated that she made sure to let the team know regularly that she is always available for any support, this message was clearly not communicated well based on the employees' statements. This can be summarized as a challenge for the leader resulting in a challenge for the team which did not receive the needed attention allowing them to use their full potential of being motivated and supported.

### 4.7.1.6 Recommendations

Even though some efforts were made, the outcomes suggest that motivation of the team is something the team leader should definitely focus on more as it is not acceptable to expect employees to simply motivate themselves, especially in such extraordinary circumstances. Demotivation can play a crucial role in declining productivity and an overall negative outcome on relationships, communication and involvement of employees and is therefore of significance to pay attention to. The leader must not necessarily use other extrinsic motivation tools but it could be helpful to focus more on helping employees finding positive things about the given situation and motivating them by friendly attention and shared team activities. It is also advised to choose a more straightforward approach in finding out where support is needed and how to administer it and not wait for employees to ask for it.

### 4.7.1.7  Social Distance, Mental Well-Being

Social distancing is one of the main disadvantages of working in a virtual team which can reflect on many areas of operations and their quality. Lack of social encounters was explicitly mentioned by the respondents throughout all topics of the survey and pointed out as having a negative effect on building quality relationships, good communication and teamwork and the overall wellbeing. The majority of respondents have expressed that physical interactions are one of the things they miss the most since working apart. Mental health is another aspect that is particularly vulnerable in virtual teams as team members have to face feelings of detachment and separation. The findings revealed that this area represented another main challenge for the examined team. Precisely, 35.3% of team members experienced higher stress levels which were justified as a result of changed work processes and an increased attention to daily fulfilled activities by the management which caused uncertainty, the feeling of not being trusted and ultimately, stress among employees. Other stress factors were also not being able to separate work from leisure and not being able to relax physically nor mentally, general uncertainty about the new situation and more difficult work conditions due to no face-to-face contact. Besides elevated stress levels, all team members had experienced at least one negative emotion as a result from being separated from the rest of the team and experiencing lack of social contact including uncertainty, loneliness, demotivation and sadness. 17.6% of respondents actually experienced all of the mentioned mental states. Due to mental health being of high importance in all aspects of the working and private life, the results have been used to determine the conclusion that the mental well-being during the participation in a virtual team represented a challenge for the assessed team.

### 4.7.1.8  Recommendations

Due to the mental health being at a higher risk when lacking physical and social interactions it is recommended to devote more time to solving and talking about these issues. Again, the leader of the team is expected to be the person to address this topic and create a safe space for employees to express their thoughts. It is advised to schedule a regular team meeting where employees can participate in informal conversations and share their emotions or perhaps provide a professional for the team who can be of assistance to individuals that do not feel comfortable with sharing their struggles with colleagues or the supervisor to make sure all employees get the needed mental support. In general, it is

advised to organise regular weekly get togethers within the given possibilities and encourage non-work-related activities, discussions and events to compensate for the lack of face-to-face interactions which are so very crucial for the team's overall functionality and wellness.

What it concerns the areas of trust, teamwork and cohesiveness, relationships within the team and towards the leader and productivity, these were not affected by the time of working from home to classify as a challenge and the team showed that it was with the help of the team leader able to face all of the potential threats that could have led to a worsening of in-team relations, decrease in trust, insufficient teamwork or low productivity, altogether possibly leading to a decline of the overall performance.

### 4.7.2 The Team leader

The team leader herself also faced some individual challenges including difficulties of communication with certain team members, efficient time management due to more time-consuming activities of spending more time on offering support and ensuring increased frequency of meetings, monitoring individual employees and in general managing the team from a distance as this was her first experience of such emergency measures that resulted in moving the team into a completely new work environment. Additionally, she also experienced increased stress and distrust of the employees' competencies and discipline which reflected negatively on the team as it perceived this mistrust and reacted with uncertainty and demotivation. Nonetheless, the leader did a very good job at managing the team on the overall during such challenging conditions which she had not experienced before. Some lacks concerning mainly motivation and a supervision to ensure smooth communication and interactions for several purposes including mental health, although not between herself and her employees but rather within the team itself which required a better insight into the ongoing matters of the team which was understandably very challenging due to having the virtual barrier, were determined. The leader has very good prerequisites inclusive of very positive relationships with employees, an open and empathetic management style and human approach and also a positive feedback from her employees themselves as the survey showed, who all point the leader out as a suitable fit for the assessed team with a few improvements to focus on for the future.

### 4.7.3 Lessons Learned

The main lessons learned by the team included the following:

- Learning to carry greater responsibility and being independent.
- Face-to-face interactions are crucial and irreplaceable.
- Lack of motivation can result in low productivity, unwillingness, indifference and overall decrease in well-being.
- The importance of mutual trust and constructive feedback in the employee-employer relationship.
- Too high and unsensitive pressure on results and overly monitoring causes discouragement and demotivation.
- Getting to know oneself better and learning how to embrace positives and improve insufficiencies.
- Increasing the intensity of communication is crucial to overcome uncertainties, individual concerns and also feelings of detachment.
- Keeping in mind that adjustments to change take time and making the effort to keep a positive mind makes a difference.
- Keeping work apart from leisure and having an organised work schedule can relieve stress.
- Learning to solve problems and find solutions by oneself is motivating and encouraging.
- The importance of keeping the whole team clearly informed at all times.
- Physical activity helps with overall productivity and energy levels.
- Interactions and social ties are crucial for a healthy functioning team.

Apart from learning valuable lessons that will prepare the team for future emergencies and widen the team's knowledge and experience, each team member was able to improve some of their skills thanks to experiencing the work in a virtual team such as handling more responsibility on their own, being more independent, being disciplined, solving problems, organising work tasks, being productive, using communication skills, managing time and handling stress. *(also shown in Table 3)*

At the end of the study it was very interesting to see that even though the involvement in a virtual team has brought many new experiences, skills and impulses, still 70.6% of all team members prefer working in a face-to-face team.

# 5 Conclusion

The main aim was to identify and outline major challenges which the small sized company VIVnetworks.com s.r.o. was confronted with during the first COVID-19 lockdown in the period 16.3.2020 - 15.6.2020. The assessed team usually operates in an office environment where co-workers are in close proximity and have frequent face-to-face interactions and meetings, however due to the unexpected government restrictions limiting free movement of people and the intensity of socializing in order to prevent the spread of the ongoing pandemic, the company was forced to relocate all employees and activities to a distributed environment and therefore a virtual team was created. The objective hence aimed at determining which specific areas including the work environment, in-team relationships, teamwork, communication, trust, motivation, productivity and other were affected by the new work conditions to result in a challenge for the team and its leader. Finally, pointing out lessons learned from this experience represent the second half of the main objective of this study concluding with recommendations on which areas show improvement opportunities for the future.

The main objective was fulfilled by collecting answers from all team members using a quantitative approach in the form of a survey which was combined with a qualitative analysis of their opinions and impressions and a second research method was used to conduct an interview with the team leader to create an objective overview of main challenges and lessons learned. The achievement of the objectives was furthermore reached by answering 4 research questions:

> a. *Which challenges were faced by the team and its members during the adaptation of virtual teaming conditions during the first COVID-19 outbreak?*

The main challenges faced by the team were determined to be in the area of time management where employees struggled to follow a strict and efficient work schedule while working from home. The second major challenge concerned the communication within the team which suffered a decline of efficiency due to no physical interactions. Team members also experienced decreased levels of motivation as the management failed to motivate its employees sufficiently during times of uncertainty and lastly the team faced

issues in overcoming the social distance which had a negative effect on several aspects however the main consequence was the worsening of the mental state of employees who all experienced at least one negative emotion due to the virtual barrier.

> b. *How did the team leader handle the management and leadership of his team after the company and its employees were forced to work from home and communicate solely virtually without any notice?*

Overall the leader handled the situation very well. According to the respondents the actual move to the new environment was well organised and the leader made an effort to support her team and took several optimizing steps including an increase in the frequency of communication to compensate for the physical distance, emphasizing her availability for support and providing more detailed instructions and task assignments. However, there were certain aspects which caused negative feedback such as lack of effort to motivate the team, demotivating actions including overly and insensitive monitoring of employees' daily activities and high pressure on final results rather than focusing more on helping the employees to get used to the new work environment and also not having a clear overview of the in-team interactions resulting in low ability to intervene in case of needed support. Considering that this was the leader's first experience of such nature the overall result was classified as good as the quality of teamwork and productivity of the team were not negatively affected and the team was able to learn from the drawbacks.

> c. *How were the overall levels and quality in the areas of motivation, communication, collaboration, synergy, productivity and leadership affected by the separation of all team members and lack of physical interactions due to social distancing?*

This question was thoroughly answered in the research analysis which showed that the levels and quality of motivation and communication faced a decline however the team was able to maintain good teamwork and productivity with the help of their leader which suggested that the team has a strong bond and has the ability to react to sudden changes and face several challenges.

*d. Which were the lessons learned after going through the experience of working in a virtual team due to emergency measures?*

The main lessons learned were learning about the value, power and importance of quality relationships which was determined as a key building stone which helped the team to face and overcome difficult situations together and also of physical and social interactions which in the case of the assessed team was the most missed aspect during working apart and the most crucial factor in all team operations which in case of lack was the most common cause of the mentioned challenges. Other lessons learned included learning to be independent and handle more responsibility, separating work from leisure and acquiring discipline, the benefit of embracing changes and learning out of them and trying to use as many experiences as an advantage and possibility to improve skills and knowledge. The leader's most valuable lessons included that she can trust her team fully, the importance of providing motivation and support to team members without unnecessary pressure and the essentiality of regular informal interactions and general socializing.

Solutions and recommendations lie mostly within the leader's guidance who should take more time and make the effort to understand all team members better and hence be able to offer the needed support and motivation even if employees are not able to ask for it themselves but also teach them and encourage them to find solutions by themselves. By getting more insight into the internal team communications and interactions, all processes can be optimized preventing miscommunications, disinformation, confusion and uncertainty. The leader is advised to focus more on giving and receiving constructive feedback from all team members and thus being able to connect the dots to solve potential issues efficiently or completely prevent them from escalating. The leader can provide further support by providing the means to learn from specialists and workshops how to handle stressful and mentally challenging situations. Last, but not least the leader and the team are recommended to value and maintain positive relationships within the team and encourage common activities and interactions as they have been found as the best prevention of many challenges and support of the overall positive and efficient functioning of the team. The costs of the recommendations include time and willingness.

# 6 References

ARMSTRONG, M., 2010. *Armstrong's essential human resource management practice: a guide to people management*. London UK: Kogan Page. ISBN 978-0-7494-5989-5.

ARMSTRONG, M. a S. TAYLOR, 2014. *Armstrong's Handbook of Human Resource Management Practice*. 13th. London UK: Kogan Page. ISBN 978 0 7494 6964 1.

BERANEK, P. M., MARTZ, B., 2005. Making virtual teams more effective: improving relational links. *Team Performance Management*. 11(5), 200-213. ISSN 1352-7592.

BERGIEL, B. J., BERGIEL, E. B., BALSMEIER, P. W., 2008. Nature of Virtual Teams: a summary of their advantages and disadvantages. *Management Research News*. 31(2), 99-110. ISSN 0140-9174.

COLLINS DICTIONARIES, 2014. *Collins English Dictionary*. 12th ed. London: Harper Collins Publishers. ISBN 9780007522743.

COLLINS, J., 2001. *Good to Great*. NY: Harper Collins Publishers. ISBN 978-0-06-662099-2.

DAY, D. V., ZACCARO, S. J., HALPIN, S. M., 2004. *Leader Development for Transforming Organizations: Growing Leaders for Tomorrow*. NY: Lawrence Erlbaun Associates. ISBN 13: 978-0-805-84585-3.

EBRAHIM, N. A., SHAMSUDDIN, A., ZAHARI, T., 2009. Virtual Teams: a Literature Review. *Australian Journal of Basic and Applied Sciences*. 3(3), 2653-2669. ISSN 1991-8178.

EVANGELU, J. E., GRUNDEL, D., 2011. *Virtuální tým: Efektivní řízení týmu na dálku*. Brno: Computer Press. ISBN 978-80-251-2877-0.

JONES, R., OYUNG, R., PACE, L., 2005. *Working Virtually: Challenges of Virtual Teams*. USA: CyberTech Publishing. ISBN 1-59140-585-8.

KAUSHIK, M., GULERIA, N., 2020. The Impact of Pandemic COVID-19 in Workplace. *European Journal of Business and Management*. 12(15), 9-18. ISSN ISSN 2222-1905.

KING, J. L., FROST, R. L., 2002. Managing Distance over Time: The Evolution of Technologies of Dis/Ambiguation. HINDS, Pamela, KIESLER, Sarah. *Distributed Work*. London: the MIT Press, s. 3-26. ISBN 0-262-08305-1.

KURTZBERG, T.R., 2014. *Virtual Teams: Mastering Communication and Collaboration in the Digital Age*. California: ABC-CLIO. ISBN 978-1-4408_2837-9.

LIPNACK, J., STAMPS, J., 2008. *Virtual Teams: People Working Across Boundaries with Technology*. 2nd. NY, USA: John Wiley. ISBN 0-471-38825-4.

MELLO, J. A., 2015. *Strategic Human Resource Management*. 4th. Stramford, USA: Cengage Learning. ISBN 13: 978-1-285-42679-2.

MORLEY, S., CORMICAN, K., FOLAN, P., 2015. An Analysis of Virtual Team Characteristics: A Model for Virtual Project Managers. *Journal of Technology Management & Innovation*. Santiago, 10(1). ISSN 0718-2724.

MORTENSEN, M., HINDS, P., 2001. Conflict and Shared Identity in Geographically Distributed Teams. *International Journal of Conflict Management*. 12(1), 212–238. ISSN 1044-4068.

PANTELI, N., DUNCAN, E., 2004. Trust and temporary virtual teams: alternative explanations and dramaturgical relationships. *Information Technology & People*. 17(4), 423-441. ISSN 0959-3845.

POWERS, T., 2018. *Virtual Teams for Dummies*. New Jersey: John Wiley. ISBN 9781119453802.

RENTZ, K., LENTZ, P., 2013. *Lesikar's Business Communication: Connecting in a Digital World*. NY, USA: McGraw-Hill. ISBN 13: 978-0073403212.

ROSEN, B., FURST, S., BLACKBURN, R., 2007. Overcoming Barriers to Knowledge Sharing in Virtual Teams. *Organizational Dynamics*. 36(3), 259–273. ISSN 0090-2616.

## 6.1 Electronic References

ANDERSON, A. H., MCEWAN, R., BAL, J., CARLETTA, J., 2007. "Virtual team meetings: an analysis of communication and context", Computers in human behavior. *Elsevier* [online]. 23(5), 2558-80 [cit. 2021-03-08]. Available at https://www.sciencedirect.com/science/article/abs/pii/S0747563207000027

BAKKEN, R., 2018. Challenges to Managing Virtual Teams and How to Overcome Them. *Harvard Devision of Continuing Education* [online]. Cambridge: DCE [cit. 2021-03-08]. Available at: https://blog.dce.harvard.edu/professional-development/challenges-managing-virtual-teams-and-how-overcome-them

BELL, B. S., KOZLOWSKI, S. W. J., 2002. A Typology of Virtual Teams: Implications for Effective Leadership. *Group & Organization Management* [online]. Sage Publications, 27(1), 14-49 [cit. 2020-12-28]. Available at: https://www.researchgate.net/publication/37152419_A_Typology_of_Virtual_Teams_Implications_for_Effective_Leadership

BERRY, G. R., 2011. Enhancing effectiveness on virtual teams: understanding why traditional team skills are insufficient. *Journal of Business Communication* [online]. 48(2), 186–206 [cit. 2021-03-09]. Available at: https://www.academia.edu/7935980/Team_Skills_Are_Insufficient_Enhancing_Effectiveness_on_Virtual_Teams_Understanding_Why_Traditional_On_behalf_of_Association_for_Business_Communication

CASCIO, W. F., 2000. Managing a virtual workplace. *Academy of Management* [online]. 14(3), 81-90 [cit. 2021-03-09]. Available at: https://journals.aom.org/doi/abs/10.5465/ame.2000.4468068

CICEI, C. C., 2012. Assessing Member's Satisfaction in Virtual and Face-to-Face Learning Teams. *Procedia - Social and Behavioral Sciences* [online]. 46(1), 4466-4470 [cit. 2021-03-08]. Available at: https://www.researchgate.net/publication/275220261_Assessing_Member's_Satisfaction_in_Virtual_and_Face-to-Face_Learning_Teams

CLEAR, T., MACDONELL, S. G., 2011. Understanding technology use in global virtual teams: Research methodologies and methods. *Elsevier* [online]. 53(9), 994-1011 [cit. 2021-03-08]. Available at: https://www.sciencedirect.com/science/article/abs/pii/S0950584911000395?via%3Dihub

CORDERY, J. L., KIRKMAN, B. L., ROSEN, B., SOO, CH., 2009. Leading Parallel Global Virtual Teams. *Organizational Dynamics* [online]. 38(3), 204-216 [cit. 2021-03-09]. Available at: https://www.researchgate.net/publication/241280320_Leading_Parallel_Global_Virtual_Teams

DAY, D. V., GRONN, P., SALAS, E., 2004. Leadership capacity in teams. *The Leadership Quarterly* [online]. 15(6), 857-880 [cit. 2021-03-09]. Available at: https://www.researchgate.net/publication/222056563_Leadership_capacity_in_teams

EISENBERG, J., POST, C., DITOMASI, N., 2019. Team Dispersion and Performance: The Role of Team Communication and Transformational Leadership. *Small Group Research* [online]. 50(3), 348-380 [cit. 2021-03-09]. Available at: https://journals.sagepub.com/doi/full/10.1177/1046496419827376

GERMAIN, M. L., MCGUIRE, D., 2014. The role of swift trust in virtual teams and implications for human resource development. *Advances in Developing Human Resources*

[online]. 16(3), 356-370 [cit. 2021-3-5]. Available at: https://doi.org/10.1177/1523422314532097

GRESSGÅRD, L. J., 2011. Virtual team collaboration and innovation in organizations. *Team Performance Management* [online]. 17(1), 102-119 [cit. 2021-03-08]. Available at: www.emeraldinsight.com/1352-7592.htm

GRIFFITH, T.L., SAWYER, J., NEALE, M., 2003. Virtualness and knowledge in teams: managing the love triangle of organizations, individuals, and information technology. *MIS Quarterly* [online]. 27(2), 265-87 [cit. 2021-03-08]. Available at: https://www.jstor.org/stable/30036531?origin=JSTOR-pdf&seq=1

GROSSE, CH. U., 2002. Managing Communication within Virtual Intercultural Teams. *Business Communication Quarterly* [online]. 65(4), 22-38 [cit. 2021-03-09]. Available at: https://journals.sagepub.com/doi/abs/10.1177/108056990206500404

HANDY, CH., 1995. Trust and the Virtual Organization. *Harvard Business Review* [online]. 73(9), 40-48 [cit. 2021-03-09]. Available at: https://hbr.org/1995/05/trust-and-the-virtual-organization

HAYES, S., PRIESTLEY, J., ISHMAKHAMETOV, N., RAY, H., 2020. *"I'm not Working from Home, I'm Living at Work": Perceived Stress and Work-Related Burnout before and during COVID-19* [online]. Kennesaw [cit. 2021-03-08]. Available at: https://psyarxiv.com/vnkwa/. Study. Kennesaw State University,

HERBSLEB, J. D., 2003. An empirical study of speed and communication in globally distributed software development. *IEEE Transactions on Software Engineering* [online]. 29(6), 481- 494 [cit. 2021-03-09]. Available at: https://www.researchgate.net/publication/3188333_Mockus_A_An_empirical_study_of_speed_and_communication_in_globally_distributed_software_development_IEEE_Transactions_on_Software_Engineering_299_481-494

HERTEL, G., GEISTER, S., KONRADT, U., 2005. Managing virtual teams: A review of current empirical research. *Human Resource Management Review* [online]. Elsevier, 15(1), 69-95 [cit. 2020-12-28]. ISSN 1053-4822. Available at: https://www.sciencedirect.com/science/article/pii/S1053482205000033

HILL, N., BARTOLB, K., TESLUKB, P., LANGA, G., 2009. Organizational context and face-to-face interaction: Influences on the development of trust and collaborative behaviors in computer-mediated groups. *Organizational Behavior and Human Decision Processes* [online]. 108(2), 187-201 [cit. 2021-03-08]. ISSN 0749-5978. Available at: https://www.sciencedirect.com/science/article/abs/pii/S0749597808001076

JARVENPAA, S., LEIDNER, D. E., 1998. Communication and Trust in Global Virtual Teams. *Journal of Computer-Mediated Communication* [online]. 3(6), 791-815 [cit. 2021-03-09]. Available at: https://www.researchgate.net/publication/220437995_Communication_and_Trust_in_Global_Virtual_Teams

JUNEJA, P., 2015. Virtual Team - Origin, Definition and its Scope. *Management Study guide* [online]. New Delhi: Management Study Guide [cit. 2020-12-28]. Available at: https://www.managementstudyguide.com/virtual-team.htm

KIMBLE, C., 2011. Building effective virtual teams: How to overcome the problems of trust and identity in virtual teams. *Global Business and Organizational Excellence* [online]. 30(2), 6-15 [cit. 2021-03-08]. Available at: https://www.researchgate.net/publication/49135624_Building_effective_virtual_teams_How_to_overcome_the_problems_of_trust_and_identity_in_virtual_teams

KIRKMAN, B. L., ROSEN, B., GIBSON, C. B., TESLUK, P. E., 2004. The impact of team empowerment on virtual team performance: The moderating role of face-to-face interaction, *Academy of Management Journal* [online]. 47(2), 175-192 [cit. 2021-03-08]. Available at: https://journals.aom.org/doi/abs/10.5465/20159571

KIRKMAN, B. L., ROSEN, B., GIBSON, C. B., TESLUK, P. E., MCPHERSON, S. O., 2002. Five challenges to virtual team success: Lessons from Sabre, Inc. *Academy of Management Perspectives* [online]. 16(3), 67-79 [cit. 2021-03-08]. Available at: https://doi.org/10.5465/ame.2002.8540322

LIU, Y., LUO, M., WEI, X., 2008. *The Effects of Cultural Diversity, Conflict and Conflict Management on Performance in Global Virtual Teams* [online]. Hunan, China [cit. 2021-03-08]. Available at: https://www.researchgate.net/profile/Xuhua-Wei-2/publication/224351020_The_Effects_of_Cultural_Diversity_Conflict_and_Conflict_Management_on_Performance_in_Global_Virtual_Teams/links/55c4d28d08aeb9756741ea83/The-Effects-of-Cultural-Diversity-Conflict-and-Conflict-Management-on-Performance-in-Global-Virtual-Teams.pdf. Study. Central South University.

MALHOTRA, A., MAJCHRZAK, A., ROSEN, B., 2007. Leading Virtual Teams. *Academy of Management Perspectives* [online]. 21(1), 60-70 [cit. 2021-03-08]. Available at: doi: 10.5465/AMP.2007.24286164

MUKHERJEE, D., LAHIRI, S., BILLING, T., 2012. Leading virtual teams: How do social, cognitive, and behavioral capabilities matter? *Management Decision* [online]. 50(2), 273 - 290 [cit. 2021-03-08]. Available at: https://www.emerald.com/insight/content/doi/10.1108/00251741211203560/full/html

*Ministerstvo Zdravotnictví České Republiky* [online], 2021. [cit. 2021-03-09]. Available at: https://www.mzcr.cz/

NYDEGGER, R., NYDEGGER, L., 2010. Challenges In Managing Virtual Teams. *Journal of Business & Economics Research* [online]. 8(3), 69-82 [cit. 2021-03-09]. Available at: https://www.researchgate.net/publication/261722709_Challenges_In_Managing_Virtual_Teams

OLEARY, M., CUMMINGS, J., 2007. The Spatial, Temporal, and Configurational Characteristics of Geographic Dispersion in Teams. *MIS Quarterly* [online]. 31(3), 433-452 [cit. 2021-3-5]. Available at: doi: 10.2307/25148802

SERRAT, O., 2009. Managing Virtual Teams. *Knowledge Solutions* [online]. 55(1), 1-5 [cit. 2021-03-08]. Available at: https://www.researchgate.net/publication/281750803_Managing_Virtual_Teams

SHEN, Z., LYYTINEN, K., YOO, Y., 2014. Time and information technology in teams: a review of empirical research and future research directions. *European Journal of Information Systems* [online]. 24(5), 1-27 [cit. 2020-12-28]. Available at: https://www.academia.edu/31886136/Time_and_information_technology_in_teams_a_review_of_empirical_research_and_future_research_directions

SCHULZE, J., KRUMM, S., 2016. The "virtual team player": A review and initial model of knowledge, skills, abilities, and other characteristics for virtual collaboration. *Sage Journals* [online]. 7(1), 66-95 [cit. 2021-03-08]. Available at: https://doi.org/10.1177/2041386616675522

SNELLMAN, C. L., 2014. Virtual Teams: Opportunities and Challenges for e-Leaders. *Elsevier* [online]. 110, 1251-1261 [cit. 2021-03-09]. Available at: https://www.sciencedirect.com/science/article/pii/S1877042813056127

SNYDER, B., 2003. Teams that span time zones face new work rules. *Stanford Business Magazine* [online]. 30(5), 725-44 [cit. 2021-03-08]. Available at: https://www.coursehero.com/file/p3ckin7/Snyder-B-2003-May-Teams-that-span-time-zones-face-new-work-rules-Stanford/

SOUZA, C. D., COLARELLI, S. M., 2010. Team member selection decisions for virtual versus face-to-face teams. *Elsevier* [online]. 26(4), 630-635 [cit. 2021-03-09]. Available at: https://www.sciencedirect.com/science/article/abs/pii/S0747563209002076

STAPLES, D. S., ZHAO, L., 2006. "The Effects of Cultural Diversity in Virtual Teams versus Face-to-Face Teams," Group Decision and Negotiation. *Springer* [online]. 15(4), 389-406 [cit. 2021-03-08]. Available at: https://ideas.repec.org/a/spr/grdene/v15y2006i4d10.1007_s10726-006-9042-x.html

TUCKMAN, B. W., 1965. Developmental sequence in small groups. *Psychological Bulletin* [online]. 63(6), 384–399 [cit. 2021-03-09]. Available at: https://content.apa.org/record/1965-12187-001

*VIVnetworks.com s.r.o.* [online], 2021. [cit. 2021-03-09]. Available at: https://www.vivnetworks.com/

WARKENTIN, M., SAYEED, L., HIGHTOWER, R. T.,1997. Virtual Teams versus Face-to-Face Teams: An Exploratory Study of a Web-based Conference System. *Decision Sciences* [online]. 28(4), 975-996 [cit. 2021-03-09]. Available at: https://www.researchgate.net/publication/227699517_Virtual_Teams_versus_Face-to-Face_Teams_An_Exploratory_Study_of_a_Web-based_Conference_System

WEBSTER, J., WONG, W. W. P., 2008. Comparing traditional and virtual group forms: identity, communication and trust in naturally occurring project teams. *The International Journal of Human Resource Management* [online]. 19(1), 41-62 [cit. 2020-12-28]. Available at: https://doi.org/10.1080/09585190701763883

WONG, S. S., BURTON, R. M., 2000. Virtual Teams: What are their Characteristics, and Impact on Team Performance? *Computational & Mathematical Organization Theory* [online]. 6, 339–360 [cit. 2021-03-09]. Available at: https://link.springer.com/article/10.1023/A:1009654229352#citeas

*World Health Organisation* [online], 2021. [cit. 2021-03-09]. Available at: https://www.who.int/

# 7 Appendix

## 7.1 APPENDIX A: Survey Form

1. Gender
Male
Female


2. Age
Please state your age:


_____.


3. How long have you been working for the company VIVnetworks.com s.r.o.?


_____.


4. Since your joining of the team, have you established relationships with your team colleagues?

   a. Yes, I have established mainly positive relationships, I have found friends among many of my colleagues.
   b. I have not built any relationships, positive, nor negative, I wouldn't meet my colleagues outside of work.
   c. I have built rather negative relationships, I do not socialize with my colleagues personally in- or outside the office.
   d. None of the above


5. On a scale from 0-3 how would you describe the overall spirit and relationships within your work team?

   0 - only formal - all matters discussed are mainly work related, socializing does not take place in- or outside of the workplace

1 - the relationships and the overall mood of the team is rather negative, no team-bond or spirit was established

2 - the overall relationships of the team are rather positive, but the team-bond is not the strongest, socializing takes place only within the workplace out of politeness

3 - the team has a very strong team spirit, even friendships were established and the team takes part in activities also outside of the workplace

6. Did the move to a remote workplace during the first COVID-19 outbreak somehow affect your relationships to your colleagues and within the whole team and can you specify why or how?

    a.  My relationships to my colleagues have gotten stronger.

    b.  My relationships to my colleagues have suffered from the change of environment.

    c.  My relationships to my colleagues have not changed since we had worked apart.

7. Please specify if your relationships have improved or suffered and why:

_____.

8. On a scale from 0 to 3, how much trust do you feel towards your team colleagues?

    0 - I do not trust any of my colleagues at all

    1 - I do not trust my colleagues without consulting my supervisor first

    2 - I trust my colleagues enough for basic work purposes and operations

    3 - I trust my colleagues completely as individuals and as a team

9. Did your level of trust towards your colleagues change during the first lockdown period (16/3/2020 - 15/6/2020)?

    a.  It has increased.

    b.  It has decreased.

    c.  It has not changed.

10. If it has increased/decreased, please specify why: _____.

11. How would you describe your relationship with your team leader?

   a.  very positive - with trust, good communication and support, could be compared to a friendship-like relationship
   b.  neutral - no special relationship, not extraordinarily positive nor negative, communication is good, basic level of trust and support is there
   c.  rather negative - low level of trust and support, poor communication

12. On a scale from 0 to 3 what best describes the nature of your team in terms of cohesiveness and teamwork?

   0 - The team does not work together at all, each member is focused only on own individual achievements.
   1 - The quality of team work is very poor, the communication lacks efficiency, problems are solved very slowly and only a few members make an effort to work together as a team.
   2 - The team work is fairly good, but there is room for improvements in terms of communication, mutual support and synergy.
   3 - All, or the majority of members take an active part in working together to achieve common goals, support each other and the communication is very clear which enables the team to work efficiently, the team work is supported by the fact that the team socializes and takes part in team activities also outside of the work environment.

13. In your opinion, did the change to a virtual environment somehow affect the synergy of your team?

   a.  Yes, the team was positively affected.
   b.  Yes, the team was negatively affected.
   c.  The team and its synergy was not affected at all.

14. If it was affected, please explain how: _____.

15. Which kind of work environment do you prefer more?

    a. an office environment in close and physical proximity of other colleagues

    b. a more quiet environment such as a "home office" without colleagues and other people around

16. Please explain your preference: _____.

17. Have you ever worked in a home-office environment before?
Yes
No

18. How did you perceive the sudden change from the physical to virtual environment in terms of organisation?

    a. very well and clearly organised

    b. fairly well organised, however there was some uncertainty about the new regime

    c. poorly organised/chaotic

    d. not organised at all

19. On a scale from 0 to 3 how easy or hard did you find it to keep your focus on the work in the home office environment?

    0 - I could not focus at all in the home office environment, there were too many distractions.

    1 - I could focus fairly good although compared to the usual office conditions I felt slightly distracted.

    2 - My focus was on the same level as in the face-to-face environment, I didn't feel any difference.

3 - The home office environment is the ideal workplace for me where I can focus on my work the best, it was easier for me to focus on my work here than in the normal face-to-face work conditions.

20. How did you manage the working hours during the home office period?

   a. Very well, I kept the same working schedule as I used to in the physical environment.
   b. Due to saving the time for travelling to work etc. I was able to start and finish work earlier than in the office.
   c. I found it more difficult to manage my time and spread the work all over the day, I tended to work until later and longer hours - sometimes overtimes.

21. Did you maintain any habits as in the previous - physical environment to help make you feel more like being at work in order to stay focused and productive? (such as: getting dressed every morning as if going to work etc.) and can you name what it was exactly?

   a. _____.
   b. I did not maintain any special habits.

22. What did you enjoy the most about the home office conditions? Please write down others if needed: (you can select more answers at once).

   • less social contact, working alone
   • a more flexible time schedule
   • being at home
   • not having to travel to work every morning
   • not having to dress for work every morning
   • Communicating solely through technology, not having any physical interactions and meetings
   • other: _____

23. What did you enjoy the least about the home office conditions? Please write down others if needed: (you can select more answers at once).

- less social contact, working alone
- a more flexible time schedule
- being at home
- not having to travel to work every morning
- not having to dress for work every morning
- communicating solely through technology, not having any physical interactions and meetings
- other: _____

24. Did you experience any increase or decrease in levels of stress during being separated from the rest of the team and working from home?

a. My stress level increased while working from home.
b. My stress level decreased while working from home.
c. My stress level has remained the same.
d. I don't experience any stress in the usual office conditions, nor in the home office conditions.

25. If yes, can you explain why?

My stress level has increased/decreased because _____.

26. Did you experience any of the mentioned emotions as a result of social distance and no social interactions with your colleagues during the first wave of COVID-19? You can choose more than one answer.

- loneliness
- demotivation
- uncertainty
- sadness

- none of the above
- other: _____

27. On a scale from 0 (not motivated at all) to 5 (highly motivated) how motivated did you feel in the usual face-to face environment before the first COVID-19 lock-down?

      0     1     2     3     4     5

28. On a scale from 0 (not motivated at all) to 5 (highly motivated) how motivated did you feel in the virtual/home-office environment during the first COVID-19 wave (during the time period (16/3/2020 - 15/6/2020)?

      0     1     2     3     4     5

29. Can you briefly explain why your motivation had increased or decreased during the lockdown period?

_____.

30. Can you specify what or who was your greatest motivator/helped you to stay motivated to keep up the work during the home office period? If you experienced demotivation, please specify what or who demotivated you the most.

_____.

31. Can you specify who was your greatest support in the times of being separated from your work team and leader? (you can choose more than one answer).

a.     team leader
b.     colleagues
c.     family members
d.     none of the above - I did not feel supported by anyone

32. Under usual circumstances (in an office environment), how do you usually communicate within your team?

    a. Mainly verbally, communication technology is used very rarely.

    b. Verbally combined with the use of communication technologies such as emails, regular face-to-face meetings take place to give and receive updates.

    c. Solely through virtually - through technology, verbal communication occurs only very rarely in special situations, face-to-face meeting don't take place frequently.

33. How often do you experience informal communication in your face-to-face work environment? (Informal communication: none work related communication/small talk/speaking to a colleague about the weather, personal events etc).

    a. very often - on a daily basis

    b. once in a while - not daily

    c. not at all or very rarely

34. In your opinion, did the communication within your work team change after being separated by distance and communicating only through technological means and how?

    a. Yes, the communication had improved while being separated, it had gotten more efficient, problems were solved faster and the overall productivity had increased.

    b. Yes, the communication suffered, due to not having physical contact it was difficult to understand all given tasks clearly, there was less room for questions, it was more difficult to solve problems, the overall productivity had declined.

    c. In my opinion the communication had not improved or declined in any way.

    d. Yes, the communication changed it another way than mentioned above:

    _____.

35. On a scale from 0-2 how did you find working and communicating solely through technological means?

0 - I did not like communicating only virtually, it made operations and communication more complicated and impersonal, I missed having physical interactions, I don't find technology 100% reliable, I had difficulties with managing everything through technological systems.

1 - I didn't mind communicating solely through technology, I did not miss verbal interactions too much, I had no difficulties managing the technologies used for the needed communication.

2 - I prefer communicating solely virtually because I think it makes all operations faster and more efficient, I did not miss verbal communication at all, I prefer recording and managing everything via technological systems.

36. Which of the mentioned problems have you faced while working in a distributed team in terms of communication? (You can choose more answers than one).

- unclear work instructions, tasks
- slow responding time of colleagues
- difficulty to get in touch with colleagues or team leader
- difficulty while solving a problem (due to less support and contact)

37. On a scale from 0 (not productive at all) to 5 (the most productive possible within given circumstances) how productive did you feel in the usual office environment before the first COVID-19 lockdown?

    0    1    2    3    4    5

38. On a scale from 0 (not productive at all) to 5 (the most productive possible within given circumstances) how productive did you feel in the remote environment during the first COVID-19 lockdown (16/3/2020 - 15/6/2020)?

    0    1    2    3    4    5

39. If your productivity has increased or decreased during the lockdown period (16/3/2020 - 15/6/2020), can you briefly explain why you think that was?

My productivity increased/decreased because _____.

40. In times of working from home, on a scale from 0 (not supported at all) to 5 (perfectly supported) how supported did you feel by your team leader?

       0     1     2     3     4     5

41. Can you name at least one thing the leader did to motivate you during the times of being separated from you team?

a.       _____.
b.       The leader/management did nothing to motivate me.

42. If the leader or management did something to demotivate you, can you specify what it was?

a.       _____.
b.       The leader/management did nothing to demotivate me.

43. Have you improved at any of these skills thanks to working in a remote team? (You can choose more options than one).

- communication
- problem solving
- handling more responsibility on your own
- work discipline
- time management
- productivity
- being more independent (workwise)

- organising work tasks
- handling stress
- other: _____
- my level of the mentioned skills has remained the same

44. Can you briefly summarize what was the biggest lesson learned for you during these unusual and special circumstances while working in a remote team?

_____.

45. After this experience would you rather continue working in a remote team or do you prefer the usual, face-to-face regime?

a.    I would rather continue in a remote team.
b.    I prefer the face-to-face team.

## 7.2   APPENDIX B: Interview Questions

1. Please state your age.

2. How long have you been working for the company VIVnetworks.com s.r.o.?

3. How long have you been representing the position of the Affiliate Manager team leader?

4. How would you describe your leadership and management style? Would you say it is rather democratic or autocratic, or different?

5. Did your management approach towards your team change in any way as a result of the COVID-19 lockdown that forced you and your team to move to a distributed environment and communicate solely via technology? Have you purposely chosen to apply a different approach, or did it shift naturally during the adaptation to the new work conditions?

6. Have you ever experienced a situation in which you had to manage a team through an emergency situation with unusual conditions before or was the first COVID-19 lock-down (16/3/2020 - 15/6/2020) your first experience of crisis management of such nature?

7. How have you personally perceived all changes connected to the workplace change into a virtual space? Was the situation stressful for you? What eventually helped you to keep calm during the ongoing crisis?

8. Would you say that the fact that you and your team were forced to work from home and be separated from each other somehow affected your relationships with individual team members?

9. Have you observed any changes in the overall team spirit, synergy or mood of the team as a result of working apart and being a virtual team?

10. Have you seen any changes in the quality of teamwork after the move to a distributed workspace (home office)?

11. How did you ensure motivation of your employees considering the difficult conditions? Did you put more or less emphasis on motivating the team during the period of the virtual team existence in comparison with the usual work conditions?

12. How important was it for you to support your team in times of working from home? Did you make sure that all team members understand their responsibilities and what is expected of them and did you make yourself sufficiently available for needed support? What exactly did you do to increase the support of the team for more effective operations during the new situation of being a virtual team?

13. Was the quality of communication somehow affected due to no face-to-face interactions, physical communication and no meetings? Have you observed any particular issues such as unclear transmission of information, slow problem solving,

slow responding times, difficulty to get in touch with employees compared to the standards in the usual co-located work environment?

14. Have you adjusted the conditions and team operations somehow in order to compensate for the lack of verbal communication and social interactions to make the overall communication more efficient?

15. During the lock-down and management of the virtual team, have you observed changes in productivity of individuals and the team as a whole? If yes, are you aware of what might have caused these changes?

16. In case you have seen an increase or decrease of the turnover during the first COVID-19 outbreak, can you estimate which part of that change was a result of the team and its productivity or which other factors played a role in causing these changes?

17. How did you succeed to monitor the team's performance and results and the activity of individual team members for the duration of the virtual team?

18. Did you personally experience any particular issues while working from home and in the context of managing a virtual team?

19. Which challenges (if there were any) did you and your team have to face during working as a virtual team? Which were the most frequent and significant issues and how did you handle them? Did the challenges occur in any of the below mentioned areas? Please fill in and specify which main challenges you observed.

- motivation
- communication
- trust
- mental Health, stress
- productivity
- teamwork and cohesiveness
- the work environment

- social distancing

- other

20. Which were the main lessons that you learned from the experience of working in and managing a virtual team? What have you gained through this experience and is there anything you would do differently in possible future scenarios?