Czech University of Life Sciences Prague

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Diploma Thesis

Challenges in the Workspace: Managing a Virtual Team

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DIPLOMA THESIS ASSIGNMENT

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Thesis title

Challenges in the workplace: Managing a virtual team

Objectives of thesis

The objective of this thesis is to identify key skills that enable effective management in virtual teams, compare them to that of the teams that work mainly face-to-face, and examine if there are significant differences. Research the advantages and disadvantages of virtual teams. Identify factors that contribute to building a successful virtual team. Analyze the management style and define issues that the manager may face working with distributed teams.
Likewise, the objective of this thesis is to recommend the ways of building a successful virtual team based on the results of the conducted research and reviewed literature.

Methodology

The thesis consists of two parts. The first part is a literature overview. It provides the result of study and analysis of business books, journals articles, web resources and materials on the relevant topics, such as management, virtual teams, face-to-face teams, and leadership. The second part of the thesis is own re- search based on questionnaires provided to managers and members of virtual teams.

The proposed extent of the thesis

Approx 60 – 70 pages

Keywords

Virtual team, Distributed teams, Cross-cultural management, Management, Leadership, Teamwork, Cross- cultural communications, Online communications, Questionnaire, International environment, Teambuild- ing

Recommended information sources

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Declaration

I declare that I have worked on my diploma thesis titled "Challenges in the Workspace: Managing a Virtual Team" 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 copyright.

In Prague on 30.11.2020   Nadezhda Ermakova

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Challenges on Workspace: Managing a Virtual Team

Abstract

Numerous companies are confronting the task of shifting to virtual work due to the coronavirus (COVID-19) pandemic outbreak. Suddenly teams have to become fully digital. Yet, moving to virtual teamwork is not only a challenge for team members, but also for the team's leadership.

The main aim of this thesis is to identify factors contributing to building a successful virtual team and determine issues that a manager may face when working with distributed teams. Additionally, by a comparison between face-to-face teams and remote teams, any significant differences will be identified. Likewise, the objective of this thesis is to recommend ways of building a successful virtual team based on the results of the conducted research and reviewed literature.

First part of this thesis, literature review, presents the result of study and analysis of books, journal articles, web resources, and materials on the relevant topics, such as virtual teams, traditional teams, and leadership. The second part of the thesis is own research based on surveys provided to remote employees of two international companies and interviews with team leaders. Based on the results of conducted research, solutions on how to overcome challenges of virtual teams were proposed.

Keywords: Virtual team, Distributed teams, Cross-cultural management, Management, Leadership, Teamwork, Cross-cultural communications, Online communications, Questionnaire, International environment, Teambuilding

Výzvy na pracovišti: správa virtuálního týmu

Abstrakt

Řada společností čelí úkolu přechodu na virtuální práci kvůli propuknutí pandemie koronavirů (COVID-19). Týmy musí najednou pracovat digitálně. Přechod na virtuální týmovou práci však není jen výzvou pro členy týmu, ale také pro vedení týmu.

Hlavním cílem této práce je identifikovat faktory přispívající k budování úspěšného virtuálního týmu a určit problémy, kterým může manažer při práci s distribuovanými týmy čelit. Navíc, pokud bude srovnání mezi face-to-face týmy a vzdálenými týmy, budou identifikovány všechny významné rozdíly. Stejně tak je cílem této práce doporučit způsoby budování úspěšného virtuálního týmu na základě výsledků provedeného výzkumu a recenzované literatury.

První část této práce, literární rešerše, představuje výsledky studia a analýzy knih, článků v časopisech, webových zdrojů a materiálů o příslušných tématech, jako jsou virtuální týmy, tradiční týmy a vedení. Druhou částí práce je vlastní výzkum založený na průzkumech poskytovaných vzdáleným zaměstnancům dvou mezinárodních společností a rozhovorech s vedoucími týmů. Na základě výsledků provedeného výzkumu byla rozpoznána řešení, jak překonat výzvy virtuálních týmů.

Klíčová slova: Virtuální tým, Distribuované týmy, Mezikulturní management, Management, Vedení, Týmová práce, Mezikulturní komunikace, Online komunikace, Dotazník, Mezinárodní prostředí, Teambuilding

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1 Introduction

For decades evolving technologies have been pushing remarkable changes in the way people work, leading to remote employment when staff do not need to physically be in the office to complete their tasks. Moreover, 2020 has changed a lot of things. After the first case of COVID-19 in December 2019, through 2020 more than 61,5 million people fell ill all around the world (World Health Organization, 2020), companies, schools, and universities have been closing, and in numerous countries the health system has been overloaded. The global pandemic pushed most of the world to alter various areas of life. Yet, the crisis poses a lot of opportunities.

Many companies have shifted to virtual work due to this pandemic outbreak. The dramatic increase in virtual work boosted organizational capacity for virtual employment and most likely will result in an enduring growth in the number of employees working remotely. Thus, research on virtual teams is needed because it is highly likely that the future will continue to be shaped by them. For this reason, the topic was selected to help identify effective tools and methodologies to ease companies transition to a more virtual teams' environment.

Virtual teams have been already considered in research, but a comprehensive overview of the current situation is missing. Furthermore, although virtual work has obvious advantages, it comes with many challenges. Numerous studies explore the difficulties faced by virtual teams' members that are influenced by use of technology and lack of interaction (Morrison-Smith and Ruiz, 2020). However, virtual teamwork is not only a challenge for team members, but also for the team's leadership. Even with huge efforts to study virtual leadership, research still lacks an overview of the challenges of virtual work and the role of leadership in combatting them. This is why "Challenges in the workspace: Managing a virtual team" is chosen as a topic for this thesis.

To address this subject, a literature review was conducted to highlight the factors affecting virtual teams, challenges experienced by them from organizational leadership perspective, and existing strategies to overcome these challenges. To back the theoretical research, two international companies with offices in Prague were selected to participate in the survey and interviews. Lastly, findings from the literature review and results of the research were used to discuss possible tools and strategies that can be used by leaders of virtual teams in helping their team members to combat the challenges of remote work.

2 Objectives and Methodology

2.1.1 Objectives

The main aim of this thesis is to identify factors contributing to building a successful virtual team and determine issues that a manager may face when working with distributed teams. Additionally, using a comparison between face-to-face teams and remote teams, any significant differences will be identified. Likewise, the objective of this thesis is to recommend ways of building a successful virtual team based on the results of the conducted research and reviewed literature.

To achieve the aim of this thesis the following research questions were formulated:

1. What are the differences between virtual teams and traditional teams from an organizational leadership perspective?
2. What are the factors that impact distributed teams?
3. What are the challenges that virtual employees and their managers are facing?
4. What are the main solutions for building a successful virtual team suggested by team leaders?

To answer these questions, the following objectives were defined:

- to identify what a team is;
- to specify elements that make team effective;
- to define what a virtual team is;
- to highlight differences between virtual teams and traditional teams;
- to research advantages and disadvantages of virtual team compared to face-to-face teams;
- to analyze literature about factors affecting virtual teams;
- to study challenges that a manager may face in virtual team and possible solutions;
- to select organizations to test listed hypothesis comparing challenges in virtual and traditional teams;
- to generate a list of questions for own research;
- to conduct a survey using Survey Monkey and interviews with team leaders;
- to analyze the results of the conducted research;
- to make a conclusion.

2.1.2 Methodology

To meet objectives this thesis consists of two parts - literature review and a practical part.

First part provides the result of study and analysis of books, journal articles, web resources, and materials on the relevant topics, such as virtual teams, traditional teams, and leadership.

Literature review contains main concept definitions such as team and virtual team, as well as provides an overview of the current state of research on challenges of virtual teams and role of leadership. Furthermore, it describes the benefits and downsides of virtual teams, highlights the differences between virtual and face-to-face teams, and identifies factors that affecting virtual teams.

The second part of the thesis is own research based on surveys provided to remote employees and interviews with team leaders. This part is dedicated to own research on factors affecting virtual teams and differences in challenges between virtual teams and face-to-face teams.

The research conducted for this thesis focused on employees of two companies Clearstream Operations Prague, s.r.o. and ADP Employer Services Česká republika, a.s. The teams are physically located in Czech Republic, Germany, France, Spain, Portugal, Italy, Russia, and Turkey.

Employees were asked to fill out the questionnaire which was created using an online tool – Survey Monkey. The questionnaire contains 19 multiple choice questions and, additionally, one open question where the respondents were able to leave a comment. The total number of respondents is 156, of which 26 have left a comment. Furthermore, interviews were conducted with team leaders via video conferencing tool – Skype. During the interview team leaders were asked 5 questions about their experience and suggestions on what challenges in virtual teams are and how to deal with them, as well as strategies they apply in everyday working life.

3 Literature Review

3.1 Teams in Organization

3.1.1 Definition

In human society it is essential to cooperate with others in order to work, play, and live. Baumeister and Leary (1995) noted that throughout history humans have lived, raised their young, and worked together in groups. West (2012) added that people have learned that working in groups and teams is beneficial for a wide variety of things, from finding food to developing the next big application.

Research on topics like teams and teamwork is nothing new. Through the years various researchers have explored how to empower people to merge their efforts to work on the achievement of mutual goals. Coutu (2009) indicated that a cult has grown around teams over the last couple of decades and the idea that working in teams makes people more productive and more creative gained popularity. This reaffirmed the assumption of many leaders that the best approach to get the work done is team.

There is a broad consensus in literature about the defining features of teams. Thamhain (1988) and later Robinson and Robinson (1994), defined a team as a group of people who are dedicated to mutual objectives, operate interdependently, and deliver high quality results. Sequentially, Katzenbach and Smith (1994) noted that a team is a small group of people who have corresponding skills, devotion to a shared aim, performance targets, and joint approach for which they hold themselves equally responsible.

According to Woods and West (2010) a team is a fairly small group of individuals who:

- work on a challenging, well-defined task or tasks that can be most efficiently accomplished by working together rather than individually;
- have team level objectives derived from the task;
- have to work interdependently to reach these objectives;
- have distinct roles within the group (these roles may be repeated);
- have the required resources, autonomy, and authority to assist them to meet the goals.

3.1.2 Characteristics of an Effective Team

Teams have become a part of today's world but getting a group of highly skilled people together is not enough for a team to be effective. As the topic of this diploma thesis is managing virtual teams, it is essential to define characteristics of an effective team.

Teamwork may be organized in many ways. Bratman (1992) characterizes teamwork by the criteria of mutual responsiveness, commitment to mutual support, dedication to shared activity, and development of subplans that interconnect with one another.

Along with these characteristics, Dunnin-Keplicz et al. (2010) underlined the importance of the following features:

- working collectively to reach a shared goal;
- coordinating individual actions, thus they do not interfere with one another;
- constantly monitoring the progress of the team effort as a whole;
- assisting each other if needed;
- no competition among team members with respect to achieving the shared goal;
- communicating successes and failures.

In turn, Salas et al. (2009) suggest that there are five fundamental elements of effective teamwork:

- leadership puts together management of team members, management of resources, the search for and structuring of information to help the team perform its task, and the use of information to solve problems;
- mutual performance monitoring between members of the team to ensure teamwork is heading in the right direction;
- backup behavior which suggests that team members help one another when they have a workload problem;
- adaptability refers to the ability of a team to adjust its performance activities in response to changes in the environment;
- team orientation describes the team's strength to maintain effective teamwork even under stress and pressure.

West (2012) proposes that team effectiveness can be characterized by five main components:

- task effectiveness or the degree to which the team is successful in accomplishing its objectives associated with the tasks;

- team viability or the probability that a team will remain working together and perform effectively;

- team innovation or the degree to which the team develops, improves, and applies new and existing products, procedures, and processes;

- team member well-being includes factors like team members' mental health (e.g., stress), development, and growth;

- inter-team cooperation or the effectiveness of the team in working with other teams within the organization in order to deliver products and services.

3.2 Virtual Teams

3.2.1 Definition

Virtual teams are a key object of this diploma thesis. Thus, the term should be defined as accurate as possible in order to avoid misinterpretation.

Nowadays the character of work is changing. Townsend et al. (1998) explained that business has become progressively more global, competition has grown vividly, and there has been a constant move from production to service and knowledge-based work environments. Moreover, innovations in communication technology have empowered a faster speed of change than in the past and have created more dynamic and complex jobs. Thus, organizations and processes have advanced to become more adaptive and flexible.

New organizational forms, such as virtual teams are becoming more widespread. Stevenson and McGrath (2004) wrote that virtual teams are an emerging organizational form for the 21st century, which is comparatively unstudied. In turn, Chudoba et al. (2005) added that even though virtual teamwork is a resent matter in literature, it has been challenging to describe what 'virtual' means across various backgrounds.

Some authors such as Jarvenpaa et al. (1998) defined the term "virtual" for teams that never meet face-to-face. Malhotra and Majchrzak (2007) specified that teamwork is conducted mainly virtually using electronic media.

Townsend et al. (1998) defined virtual teams as groups of geographically and/or organizationally dispersed coworkers that are assembled using a combination of telecommunications and information technologies to accomplish an organizational task.

Maznevski and Chudoba (2000) described global virtual teams as groups that acquire following elements:

- organization(s) and members of these groups recognize them as a team;
- they mostly use technology-supported communication instead of face-to-face one;
- located in different countries;
- there is a clear responsibility for making decisions that are important to the companies' global strategy.

According to Gibson and Cohen (2003), to be considered virtual, a team must have a clear task that requires members to work independently to accomplish it. Members of the team share responsibility for outcomes, are geographically dispersed, and interact through technology rather than face-to-face.

A study conducted by Ebrahim et al. (2009) offers a literature review with definitions of virtual teams. It identifies and extends key factors that should be considered and describes a methodology that focuses on supporting work in virtual teams. It could be concluded that a team will become virtual if it meets four main common criteria and other characteristics that are summarized in Table 1.

Cascio and Shurygailo (2003) mentioned that virtual teams are frequently created to overcome temporal or geographical separations. They work across time and space boundaries by utilizing modern computer driven technologies. Anderson et al. (2007) attributed that the term "virtual team" is used to cover a broad variety of activities and forms of technology-supported working. Peters and Manz (2007) added that this team feature has encouraged vast use of a variety of forms of computer-mediated communication that allow geographically distributed members of the team to coordinate their individual inputs and efforts.

Even though technology gets most of the credit for the development of virtual teams, effective virtual teams need more than just technology. According to Shockley-Zalabak (2002) the leading factors behind virtual teams are globalization, hyper competition, growing sophistication of technology, move in the direction of more knowledge work, and a potential for cost savings.

Table 1. Common characteristics of virtual teams

Virtual team criteria	Description	Mentions
Common	Geographically distributed	Lipnack and Stamps (1997), Townsend et al. (1998) Maznevski and Chudoba (2000), Gibson and Cohen (2003), Cascio and Shurygailo (2003)
	Motivated by mutual aim	Townsend et al. (1998), Gibson and Cohen (2003), Malhotra and Majchrzak (2004)
	Supported by communication technologies	Hackman (1987), Townsend et al. (1998), Gibson and Cohen (2003), Anderson et al. (2007), Peters and Manz (2007)
	Engaged in cross-boundary cooperation	Gibson and Cohen (2003)
Other	Temporary team	Jarvenpaa et al. (1998), Cascio and Shurygailo (2003)
	Team members may belong to different companies	Dafoulas and Macaulay (2002), Leenders et al. (2003)

Source: Ebrahim et al., 2009

3.2.2 Virtual Team vs. Traditional Team

One of the objectives of this diploma thesis is to highlight differences between virtual teams and traditional teams. Rosen et al. (2006) observed that among numerous organizations it is believed that there are slight differences between virtual and traditional

teams. Nonetheless, Balotsky and Christensen (2004) mentioned that various scholars imply that the differences are significant, requiring different skills and approaches to virtual teams. Robey et al. (2003) added that although virtual teams are noticeably different from traditional teams, virtual work has been always considered simply as an extension of a traditional work.

After conducting a study of virtual and traditional teams, Pawar and Sharifi (1997) classified the differences between traditional and virtual teams in six categories. Table 2 presents these differences.

Table 2. Traditional teams vs. Virtual teams

Activity	Traditional team	Virtual team
Interaction	Chance to share information which is work and non-work-related	Minimal exchange of informal information
Utilization of resources	Increases the opportunity for allocation and sharing of resources	Each of team members will have to have access to similar technical and non-technical infrastructure
Control and accountability	Manager provides the context for ongoing monitoring of activities and thus enhances their ability to respond to requirements	The collaborating bodies are accountable to the task leaders and the project coordinator who has limited authority to enforce any penalties for failure to achieve the task
Working environment	Interacting with the others outside the team withing a company	Sometimes not able to share dilemmas or ideas with the others
Cultural and educational background	Similar and complimentary cultural and educational background	Varied education, expertise, language, culture, and time orientation
Technological compatibility	Operating within single organization, minimal incompatibility of technological systems	Compatibility between different systems should be negotiated at the beginning

Source: Ebrahim et al., 2009

Bell and Kozlowski (2002) have defined the key characteristics of virtual teams that separate them from traditional teams:

- restricted face-to-face communication because of the distance between team members;
- the usage of technological communication to connect team members.

The most significant characteristic of virtual teams is that they cross boundaries of space. Members of traditional teams work in close proximity to each another, while members of virtual teams are often dispersed over many kilometers or continents (Townsend et al., 1996; Pape, 1997). Because of this distance, members of virtual teams hardly ever interact in traditional face-to-face way and instead use a variety of mediating technologies to carry out their work and sustain internal relationships. While many traditional teams also connect through computerized communication media, such technology is usually applied to supplement face-to-face interaction. According to Munkvold and Zigurs (2007), this reliance on computer-mediated communication differentiates virtual teams from traditional teams.

The ability of virtual teams to be dispersed across space is relevant to the other characteristic of virtual teams, technological mediation. In recent years, a variety of sophisticated communication technologies have been introduced into the corporate world. They enable people to share information and communicate no matter what their location is. Moreover, these technologies are the primary ways by which the members of virtual teams interact. In traditional teams, such complex technologies are supplemental and often not necessary because team members primarily communicate face-to-face.

Adler et al. (2003) mentioned that space, boundaries, and dependence on technology add levels of complexity that traditional teams do not have. Communication technologies are absolutely critical and provide the means to link colleagues together, since virtual team members are distributed across space. Communication technologies that a virtual team uses depend on resources of the organization; their choice is defined by the description of the task the team is working on.

3.2.3 Benefits and Downsides of Virtual Teams

In the last decades virtual teams have gotten a great deal of attention in literature (e.g., Davidow and Malone, 1992; Byrne et al., 1993; Dess, Rasheed et al., 1995). Nonetheless, Vaccaro et al. (2008) mentioned that even though words such as "virtual", "virtualized", "virtualization" have been frequently advocated by practitioners and scholars in the conversation about economic and social matters, the benefits and downsides of virtual team are often obscured.

Graves and Karabayeva (2020) stated that virtual work offers clear benefits for companies and workers. It reduces employees commuting costs and time, as well as provides them with flexibility. Virtual work enables organizations to get access to talents around the world, save on travel costs, reduce office space, and decrease their environmental footprints. However, virtual work brings numerous challenges and may generate substantial stress for employees.

The growth of network technologies has made the use of virtual teams possible (Beranek and Martz, 2005). Gassmann and Von Zedtwitz (2003) stated that although virtual team may allow individuals to cooperate more efficiently at a distance, a talk to a trusted colleague across a hallway or next to a coffee corner is still the most effective and reliable approach to review a new idea. Rosen et al. (2006) added that virtual teams are especially susceptible to communication breakdowns, power struggles, mistrust, and conflicts. Anderson et al. (2007) suggested that the effective use of communication plays a crucial role in gaining and maintaining trust in a virtual team.

Another major obstacle to virtual teams' effectiveness are cultural and organizational barriers (Ebrahim et al., 2009). Whereas communication could be viewed as a usual team problem, in virtual teams the issue is exaggerated by distance, language difficulties, and cultural diversity. Managers should help workers deal with the challenges related to virtual work so both companies and employees can leverage the benefits (Graves and Karabayeva, 2020).

After conducting research on virtual teams Ebrahim et al. (2009) summarized some of the main advantages and disadvantages associated with virtual team. The results are shown in the Table 3.

Table 3. Advantages and disadvantages of virtual teams

Advantages	*Disadvantages*
Reducing relocation time and costs, travel costs	Sometimes requires complex technological applications
Most effective and rapid in making decisions	Decrease monitoring and control of activities
Provide organizations with high level of flexibility and responsiveness	Vulnerable to mistrust, conflicts, and communication break down
Greater degree of freedom to individuals involved in project	Challenges to manage conflicts
Generate the greatest competitive advantage from limited resources	Cultural and functional diversity in virtual teams lead to differences in the members' thought processes.
Cultivating and managing creativity	Team members need special training and encouragement
Greater client satisfaction	Employee mobility may negatively impact performance of virtual team

Source: Ebrahim et al., 2009

3.3 Managing a Virtual Team

3.3.1 Factors Affecting Virtual Teams

To understand the challenges that virtual team's members are facing it is important to define factors that affecting virtual team performance and effectiveness.

Virtual teams are crossing boundaries over organizations, groups, functions, locations, and time zones (Adler et. al., 2003). In recent years, the percentage of people

working remotely has grown in most developed countries (International Labour Organization, 2019).

Over the last year even more employees were enabled to work in a virtual teams due to COVID-19 pandemic. This dramatic increase in virtual work pushed for organizational changes to allow virtual work (Graves and Karabayeva, 2020). A lot of workers discovered an affinity for working from home through the mandatory lockdown that was prevalent in many countries. Furthermore, companies have expanded their ability for virtual work as an outcome of the crisis. The likelihood that some of the increase in virtual work will be sustained over the long run is increasing.

Although virtual teams offer various benefits to organizations handling an increasingly demanding work environment, they also present numerous challenges (Bell and Kozlowski, 2002). Virtual teams are facing issues as far as reaching their optimal effectiveness (Cissé and Wyrick, 2010). These issues are attributed to numerous factors such as trust, interaction, communication, geographic distance, and organizational system. Organizational structure, culture, the role of the leader, training, goal setting, and rewards are included in organizational system.

It is agreed in many studies that communication, trust, and interaction must be approached in a different way for virtual teams (Balotsky and Christensen, 2004). According to Novak and Bocarnea (2008) literature accentuated trust as the primary factor in the creation of virtual teams, with communication and interaction following after it. Cissé and Wyrick (2010) stressed that members of a team must develop trust among themselves for a team to function. This will lead to better knowledge sharing and higher team cohesion. The latter, along with shared mental models, will result in high team effectiveness through the mediation of effective communication, as presented in Figure 1.

Figure 1. Group effectiveness begins with trust and shared mental models
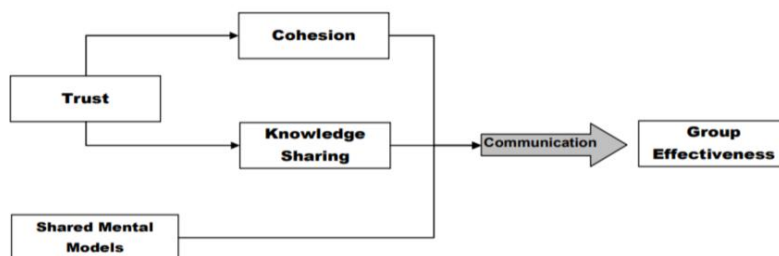
Source: Cissé and Wyrick, 2010

Distance and time boundaries can overexaggerate the lack of timely communications, therefore communication difficulties are more likely to appear in virtual teams (Stevenson and McGrath, 2004). Traditional teams typically have communication norms established and these norms may not fit well to the virtual environment (Shockley-Zalabak, 2002). Virtual team communication has to be more concise, precise, and unambiguous (Bakshi and Krishna S., 2008). This is crucial to avoid misunderstandings, which can arise faster than in face-to-face communication. Thus, it is important to set deadlines and standards and to outline areas of responsibility. Leadership of virtual teams is a decisive factor here (Zeuge et al., 2020). Proactive management will lead to positive experiences for virtual workers, and passive management is likely to result in negative experiences (Graves and Karabayeva, 2020).

3.3.2 Job Demands-Resources (JD-R) Model

Due to COVID-19, many employees have had to work remotely, thus they may face various challenges that boost stress and in due course effect their performance and well-being. Poor work performance and reduced productivity are connected to burned-out employees and poor working conditions, while the opposite is true for employee engagement and good working conditions. Demerouti et al. (2004) stated that employee's well-being translates into financial business outcomes.

Virtual work creates unique challenges for employees. The Job Demands-Resources (JD-R) model can be useful in understanding how these challenges create stress among employees. Van Veldhoven et al. (2020) noted that the JD-R model is useful in understanding how virtual work boosts employee stress and pinpointing potential solutions. In turn, Schaufeli (2017) suggested that this model can be helpful as a conceptual framework for monitoring the workplace in order to avoid burnout and increase work engagement. The JD-R model is suitable for this purpose because:

- it integrates a comprehensive and balanced approach into a positive focus on work engagement and a negative focus on burn-out;
- it includes all relevant job characteristics;
- it can be tailored to the needs of any company;
- it acts as a common communication tool for all stakeholders.

The JD-R is a balance model that suggests that the relative balance of job demands and job resources can be beneficial or harmful (Demerouti and Bakker, 2007; Schaufeli and Bakker, 2004).

Job demands require employees to expend continual emotional, physical, or mental effort (Graves and Karabayeva, 2020). Thus, job demands are linked with certain psychological and/or physiological costs (Demerouti et al., 2003). Time pressure, a high workload, and emotionally demanding interactions are examples of job demands.

Job resources encourage development and learning, as well as allow employees achieve work goals (Graves and Karabayeva, 2020). Resources could be located at various levels: at the job level, work composition, interpersonal relations, and organization (Demerouti et al., 2003). Learning and development opportunities, participation in decision making, proper equipment, control over when and how work is done, and support from managers and coworkers are examples of job resources.

According to the Job Demands-Resources model, job demands are the main motivators of the health impairment process that leads to negative organizational outcomes, whereas job resources are the most crucial predictors of engagement and positive outcomes (Lewig et al., 2007). Excessive job demands create stress, while job resources help employees attain goals and protect them from the damaging effects of excessive work demands (Van Veldhoven et al., 2020). Thus, stress increases when employees do not have sufficient resources or demands are excessive. Continued stress can eventually lead to exhaustion, burnout, and decreased performance.

3.3.3 Role of a Manager: Challenges and Strategies

A number of challenges come with virtual work, such as intense workloads, technological challenges, weakened manager - employee relationships, low degrees of social connection, and the blurring of the boundary between home and work (Graves and Karabayeva, 2020). These challenges boost demands on workers meanwhile removing some of the resources they require to cope with the increased work demands and perform well.

Using JD-R model as a framework, Graves and Karabayeva (2020) summarized the factors affecting virtual work, the challenges that may arise and potential managerial strategies for addressing these challenges. The result is displayed in the Table 4.

Table 4. Overview of Challenges and Solutions

PROBLEM AREA	CHALLENGES	SOLUTIONS
Technology	• Inadequate infrastructure, training, and technical support • Employees must stay up-to-date on technology • Employees struggle to use technology effectively in a virtual setting	• Provide appropriate hardware, software, training, and technical support • Provide training to strengthen employees' ability to use various media effectively in a virtual setting
Workload	• Unrealistic performance expectations • Information overload • Time pressure • Long work hours due to time zone differences and 24/7 availability expectations	• Take into account the demands created by transition to virtual work • Set realistic goals and deadlines • Help employees prioritize projects and keep them informed of shifting priorities • Reconsider need for constant connectivity
Manager-Employee Relationship	• Working virtually impairs the manager-employee bond • Risk of manager being inattentive or overcontrolling	• Clear, regular, and frequent communication • Clarify roles, priorities, goals • Address obstacles to progress • Provide autonomy
Social Connections	• Sense of isolation • Difficulty establishing trust with colleagues • Lack of access to informal information • Lack of social cues increases the potential for personal conflict	• Create explicit opportunities for connection • Include informal conversations • Keep updated on the organizational events and news • Use richer media (e.g., video chat)
Work-Home Boundary	• Work intrudes on family and personal time • Long work hours • Failure to recover from work	• Set reasonable norms regarding availability • Model healthy work-life balance • Provide workshops on work-life balance and recovery from work

Source: Graves and Karabayeva, 2020

Problem area: Technology

Additional job demands are created by a strong reliance on information and communication technologies (ICT) for virtual employees. They have to allocate their time to staying current on increasingly complex and constantly changing technologies (Ragu-Nathan et al., 2008). Furthermore, even if virtual team members have a technical understanding of ICTs, they may not know how to use them efficiently in virtual settings (Wang and Haggerty, 2011).

Managers must ensure that proper software, hardware, and technical support are accessible (Graves and Karabayeva, 2020). Differences in infrastructure across locations and resource constraints may make it difficult.

Furthermore, employees require training to develop virtual competence (Wang and Haggerty, 2011). It includes not only technical knowledge, but an understanding of how and when to use different media, and the pros and cons of them. Providing employees with technical support and proper tools and offering them training to enhance their competence will boost their ability to handle job demands (Graves and Karabayeva, 2020).

Problem area: Workloads

Increased employee workload is one of the challenges that often associated with virtual work. This may happen due to number of reasons:

- employees may feel overloaded managing multiple information streams in order to keep up with incoming information (Ragu-Nathan et al., 2008);

- companies may expand performance goals as they await increased efficiencies and innovation as a result of the use of ICT;
- employees may face time pressure if it is required by ICT to accomplish work faster or under tight time schedules (Tarafdar et al., 2015);
- long work hours are possible due to expectations that virtual employee will be available outside of "normal" work hours or due to time zone differences (Dettmers, 2017).

Literature suggests that managers expectations about virtual employee's productivity should be reasonable. Focus should be spent on accounting for the time needed for employees to become and stay current on ICT, the challenges of understanding and reacting to a flood of information across multiple platforms, and the probability of communication problems (Graves and Karabayeva, 2020). Furthermore, managers should set deadlines and realistic goals to tackle the time pressure associated with using technology that obliges employees to work faster or under tight time schedule (Tarafdar et al., 2015). Unreasonable goals and deadlines put unnecessary pressure on employees, and, in due course, impair performance.

It is assumed in literature that it is important to establish availability time, because as working hours can vary, constant availability may lead to increased stress level (Naik and Kim, 2010). Therefore, managers should reconsider expectations for extended hours availability and constant connectivity. In addition, managers should help employees prioritize projects as well as keep them informed on shifting priorities so that employees can cope with their workloads better (Graves and Karabayeva, 2020).

Problem area: Manager - Employee Relationships

The lack of face-to-face interactions between managers and virtual workers affects trust (Golden, 2006). Likewise, virtual workers may have subpar relations with their managers, which takes away a resource that is crucial to their success (Demerouti and Bakker, 2007).

Managers may react to employees' physical absence by being either overcontrolling or inattentive (Graves and Karabayeva, 2020). Overcontrolling managers may closely watch employees' work, which may lead employees to face lack of autonomy and expanded work pressure. While inattentive managers treat virtual employees as if they are invisible. Managers do not clearly communicate priorities, goals, and performance measurement criteria. Furthermore, managers may fail to recognize workers' efforts and

contributions or express concern for employees' well-being (Raghuram and Wiesenfeld, 2004).

Therefore, managers should be actively creating and sustaining strong relationships when managing virtual team (Raghuram et al., 2001; Golden, 2006). These relationships are one of the most fundamental job resources. For establishing trust between managers and virtual team members it is critical to have open communication. Managers should not underestimate the need to communicate (Neeley, 2020). Regular, frequent conversations using technology that provides social cues are helpful. Examples of such technologies are Skype, Microsoft Teams, Google Meet, etc. Additionally, managers must let employees know that their contributions are appreciated and express concern for their well-being.

It is essential that employees have the equipment, tools, and training necessary to perform their job. In turn, managers should ensure that priorities, roles, and performance criteria are clear, therefore employees know what they should do and how their success will be measured (Raghuram and Wiesenfeld, 2004).

Neeley (2020) stated that managers must withstand the urge to overcontrol virtual employees. Instead, they should focus on whether results are being achieved. Managers should give employees a level of autonomy that is appropriate for their level of competence and experience. It involves giving employees a voice in job assignments and decisions, permitting them to decide how they approach projects, and urging them to solve problems instead of simply imposing solutions. According to Kanat-Maymom and Reizer (2017) autonomy is likely to enhance performance.

Problem area: Social Connection

A vital resource at work is strong social connections. They enable employees to feel connected to the community and bond with others. Social connections may boost employee performance by encouraging collaboration, information exchange, innovation, and creativity (Graves and Karabayeva, 2020).

Often virtual workers encounter a lack of social connection. They have less opportunities to participate in organizational activities and interact with coworkers, which makes it hard to form bonds with coworkers. Virtual employees have less access to the information that is normally shared in informal interactions, which may impact performance. Number of authors, such as Raghuram and Wiesenfeld (2004), Golden (2006), Zhang (2016), agreed that the lack of social cues in their virtual interactions may lead to personal conflicts, miscommunication, and frayed relationships.

Managers should take measures to respond to a sense of isolation built by virtual work. To establish relationships with colleagues and the manager, ideally employees should visit the office of the company before they begin working remotely. The face-to-face interactions that happen during these visits will facilitate interpersonal trust (Golden, 2006). Later on, synchronous video and phone chats are better than asynchronous technologies for sustaining relationships when working virtually. Virtual meetings, coffee hours, or water cooler chats may be a handy approach to keep team members connected with one another. Interactions should also contain informal conversations. Managers should make sure employees know what is going on in the larger organization so that they feel like part of the organizational community. Managers must not underestimate the need for social connection, as it fulfills the employee's essential demand to bond with others.

Problem area: Work-Home Boundary

The traditional office offers a physical boundary between home and work that limits the extent to which employees' family and work lives interfere with one another (Graves and Karabayeva, 2020). When remote work takes place at home, employees may encounter challenges. Certain employees may concentrate on family demands during normal work hours, which may potentially impact performance. Others may find that working from home makes it too comfortable to work long hours. Time zones differences and organizational expectations of after-hours availability and constant connectivity compound the intrusion of work into personal life (Barber et al., 2019). In due course it may compromise the quality of employees' relationships with family and add to employees' stress.

Furthermore, the intervention of work into personal time leaves employees with no chance to relax, disengage from work, and recharge outside of normal work hours (Barber et al., 2019). Failure to recover from work leads to poor sleep, negative feelings, and reduced work engagement the next day. Additionally, when people fail to recover from work on an ongoing basis, their stress compounds over time, which leads to diminished productivity, exhaustion, and burnout (Sonnentag, 2018).

Literature review shows it is critical that managers of virtual teams think about the risks of long work hours. Likewise, managers should take a holistic approach that recognizes the importance of employees' work and personal lives. This approach acknowledges that personal time is important to employees' well-being and success. It

comprises reasonable expectations around connectivity and availability outside of normal work hours, thus employees have time for their personal lives.

As managers are accountable for establishing norms for organizations, they should shape healthy behaviors and start discussions about the importance of work-life balance and job demands (Graves and Karabayeva, 2020). Managers may sponsor workshops to help employees achieve a suitable balance between work and family. These workshops might contain techniques that can be used to manage the boundary between personal time and work and enhance productivity.

Training on recovery from work could be also useful (McMurtrie and Crane, 2017). Employees should recognize the importance of regular recovery from work for well-being and performance. Likewise, they should distinguish the activities for enabling recovery such as mindfulness, exercise, meditation, pursuing personal interests or hobbies, spending time with family or friends, and volunteering in the community (ten Brummelhuis and Bakker, 2012).

4 Practical Part

The main aim of this thesis is to identify factors contributing to building a successful virtual team and determine issues that a manager may face when working with distributed teams. Additionally, by a comparison between face-to-face teams and remote teams, any significant differences will be identified. Likewise, the objective of this thesis is to recommend ways of building a successful virtual team based on the results of the conducted research and reviewed literature.

To achieve the aim of this thesis the following research questions were formulated:

1. What are the differences between virtual teams and traditional teams from an organizational leadership perspective?
2. What are the factors that impact distributed teams?
3. What are the challenges that virtual employees and their managers are facing?
4. What are the main solutions for building a successful virtual team suggested by team leaders?

COVID-19 pandemic created a unique situation that allowed a vast majority of employees to work remotely and gain experience as virtual team's members and/or leaders. As a result, the number of relevant respondents for the research has increased.

In order to respond to the research questions in a best manner it was decided to generate a custom-made survey. To collect the required data 20-question questionnaire and unstructured interviews with managers were used. Then several organizations were contacted and kindly asked to participate in the research.

The companies that decided to take part in the research and were used to gather the data are international companies with worldwide presence. The research for this thesis focuses on employees of two companies such as Clearstream Operations Prague, s.r.o. and ADP Employer Services Česká republika, a.s. The companies are physically located in Czech Republic with teams distributed among Czech Republic, Germany, France, Spain, Portugal, Italy, Russia, and Turkey.

4.1 Questionnaire Design and Distribution

The questionnaire was created exclusively for the purpose of this thesis. The online service Survey Monkey (www.surveymonkey.com) was used. The survey was designed in order to obtain answers to the research questions of this thesis and present the results.

The final version of the survey includes 19 multiple choice questions and 1 open question that allows participants to leave a comment. Multiple choice questions were used to make data figures easier to analyze and present, as well as to reduce the time required to fill in the questionnaire. Open question suggested leaving a comment, but not obliged it. According to Survey Monkey, estimated time to complete the survey was 4 minutes.

The survey starts with a welcome note in which the author describes the aim of the research and guarantees the anonymity, along with the use of provided information only for academic purposes. The note is followed by basic questions about the age, gender, and work experience in virtual teams and a particular company. Literature review revealed that virtual teams' challenges arise from five main problem areas such as technology, workload, manager-employee relationship, social connections, and work-home boundary. Therefore, the rest of multiple choice questions were designed to analyze factors affecting virtual team members by comparing employee's experience in traditional and virtual teams.

After the questionnaire was developed, it was tested on individuals who are not acquainted with the field of study. Furthermore, the questionnaire was reviewed by a native speaker. A number of questions were clarified and simplified, and then the survey was tested again. Before adding the questions to the survey, some questions were changed again in order to avoid pushing respondents to a specific response and instead get an unbiased answer.

After that, questions were added into an online survey using "Design Survey" functionality of Survey Monkey. Two identical surveys were created. That allowed to gather data and analyze statistics for each company, as well as to provide the result of this analyses to company's management upon request. Next, contextual e-mail and the link to one of each survey has been sent to particular company's representative, who then shared both within the company.

Collected data were processed using "Analyze Results" tool of Survey Monkey. Additionally, Microsoft Office, in particular, Excel was used to analyze and to present combined data gathered from both companies.

4.2 Companies' Profile and Respondents

4.2.1 Companies Profile

There are two companies that participated in the survey. They are Clearstream Operations Prague, s.r.o. and ADP Employer Services Česká republika, a.s.

Clearstream Operations Prague, s.r.o. is one of the Deutsche Börse Group companies that located in Prague, Czech Republic. Deutsche Börse Group is an international company with locations in many financial centers around the world with headquarters in Frankfurt/Rhine-Main, Germany. Worldwide presence of the company is shown in Figure 2.

Figure 2. Deutsche Börse Group worldwide

Source: deutsche-boerse.com, 2020

The main focus of Clearstream Operations Prague, s.r.o. is on back office operations for the settlement, clearing, custody, and index areas (within a business scope of Clearstream, Eurex, and STOXX). Furthermore, company's employees provide corporate services for Deutsche Börse Group in HR, financial accounting, compliance, and travel management areas.

ADP Employer Services Česká republika, a.s. is located in Prague, Czech Republic. The company is a part of ADP Global with headquarters in New Jersey, USA. It provides payroll, HR, and outsourcing services in more than 140 countries and markets. Worldwide presence of the company is shown in Figure 3.

Figure 3. ADP worldwide
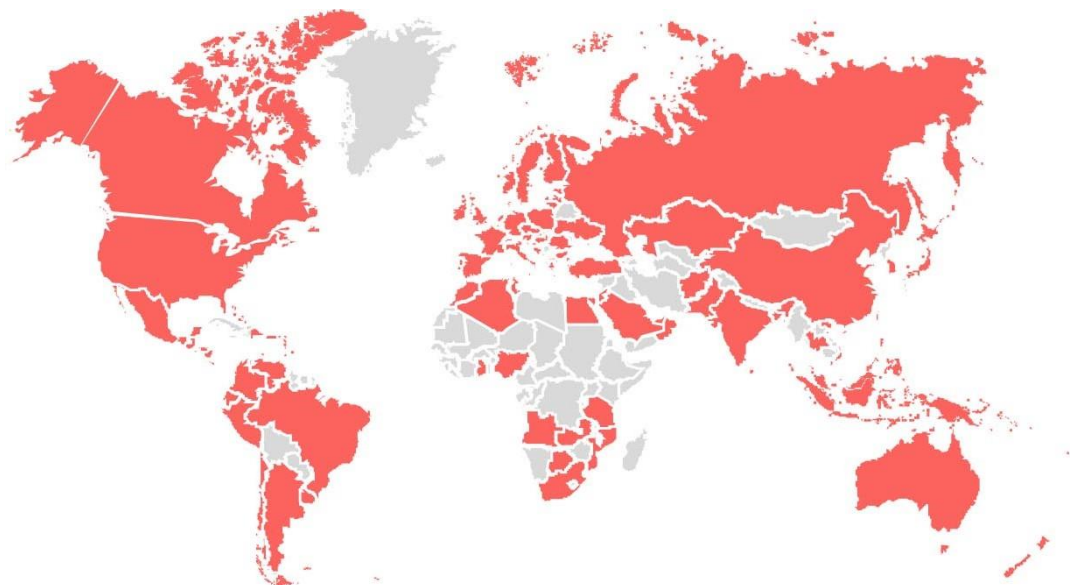
Source: adp.com, 2020

ADP Employer Services Česká republika, a.s. is responsible for payroll solutions for Europe, the Middle East, and Africa (EMEA).

Director of each company was contacted in order to get permission to share the questionnaire within the company. Table 6 represents the numbers of employees in each company that participated in the research.

Table 5. Number of respondents per company

Company	Clearstream Operations Prague, s.r.o.	ADP Employer Services Česká republika, a.s.
Number of participants	85	71

Source: Own Research, 2019-2020

4.2.2 Structure of Respondents

Total number of collected questionnaires is 156. Figure 4 presents the gender distribution among the participants of the research: female employees are represented by 51% and male employees – by 49%.

Figure 4. Gender Distribution, %
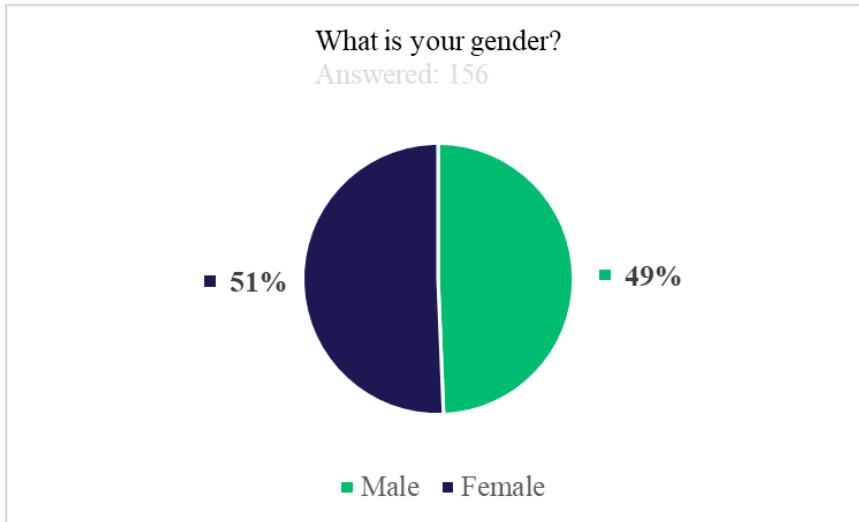
Source: Own Research, 2019-2020

Age distribution is illustrated in Figure 5 and shows that the majority of respondents are in the 31-40 age group (46% of respondents), people whose age is 21-30 are in the second most common (32% of respondents), employees whose age is 41-50 are the third most common (14% of respondents), followed by people who are older than 51(8% of respondents) and younger than 20 (1% of respondents).

Figure 5. Age distribution of the respondents, %
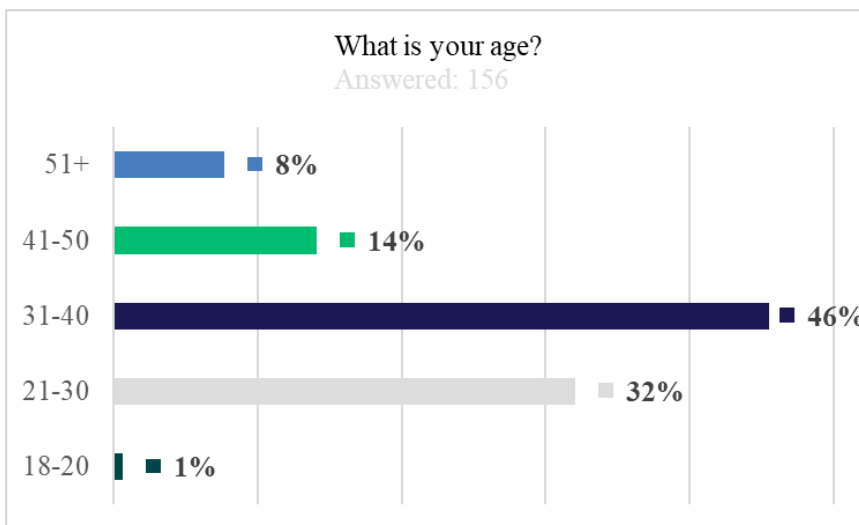
Source: Own Research, 2019-2020

The next question in the survey was about working experience in the current company. The answers were divided into 4 categories: less than 1 year, 1-3 years, 4-6 years, and more than 7 years. The results are shown in Figure 6. 35% of respondents are working in the current company for more than 7 years and 31% of respondents are working in the current company 1-3 years. In the third most common group are employees with 4-6 years in the company (27% of respondents). Only 7% of respondents are in the current company for less than a year.

Figure 6. Work experience in a company, %
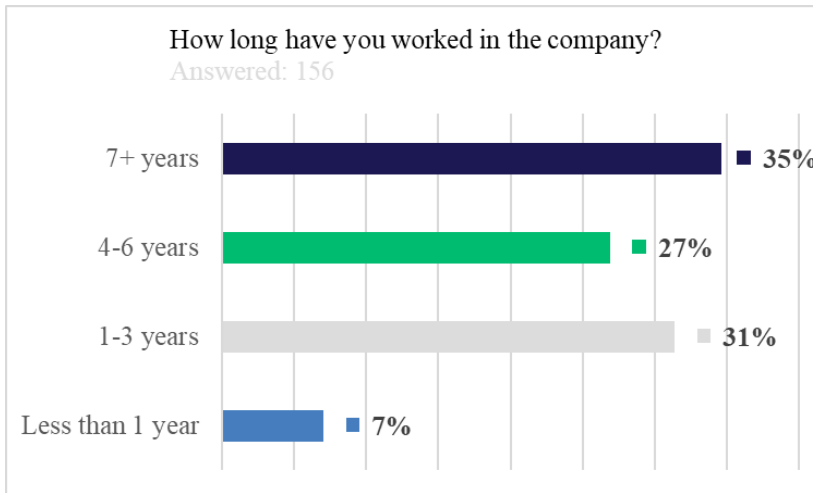
Source: Own Research, 2019-2020

As the COVID-19 pandemic enabled a lot of employees to work remotely, it was decided to ask questions about experience in virtual work before 2020. The results are illustrated in Figure 7 and Figure 8.

Figure 7. Work experience in virtual teams before COVID-19, %
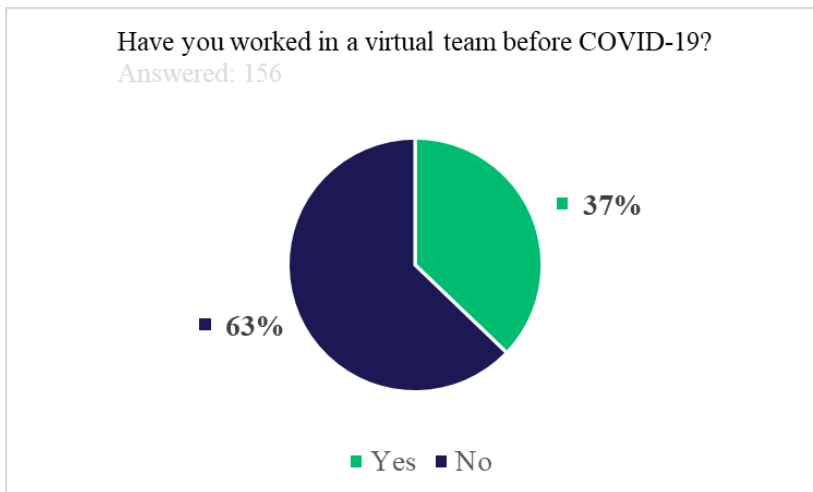
Source: Own Research, 2019-2020

Figure 7 shows that only 37% of respondents have worked in virtual teams before 2020. According to the results showed in Figure 8, among the 58 respondents with experience in working in virtual teams, 59% of respondents have had experience of more than 3 years, workers with 1-2 years in virtual teams constitute 41% of respondents.

Figure 8. Work experience in virtual teams, %

(If yes in Q.4) How long have you worked in a virtual team?
Answered: 58

41%
59%

■ 1-2 years   ■ 3+ years
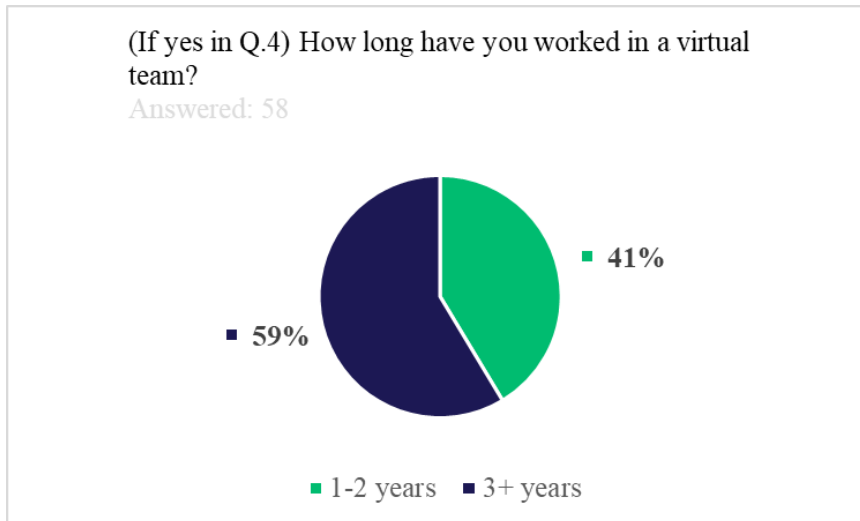
Source: Own Research, 2019-2020

4.3   Analysis of the Survey Results

The literature review defined factors affecting virtual teams and challenges of virtual work occurring in five main areas: technology, workload, manager-employee relationship, social connections, and work-home boundary. The central part of the survey is dedicated to questions that allow to understand how factors like trust, communication, interaction, distance, and organizational structure influence employee's well-being and as a result, virtual team outcomes.

This section of the survey starts with the question "How would you assess the impact of working in a virtual team on your everyday life compared to working in a face-to-face team?" (Question 6). It is important to understand how working in a virtual team compared to working from the office effects employee's stress level, communication, and workload. Therefore, question 6 has been divided into three sub-questions and the outcomes of the respondents' answers are shown in Figures 9 - 11.

Figure 9 illustrates the impact of working remotely on participant's stress level compared to working in face-to-face team. It can be seen that 37% of respondents answered that their stress level is the same, on the second place with 27% are participants

whose stress level has increased, followed by those who face less stress (22% of respondents). Furthermore, 11% of participants stated that they encounter much less stress working remotely compared to working in a traditional team. Only 3% of respondents noticed that they experience much more stress working virtually.

Figure 9. An impact of working in a virtual team on everyday life: Stress Level, %
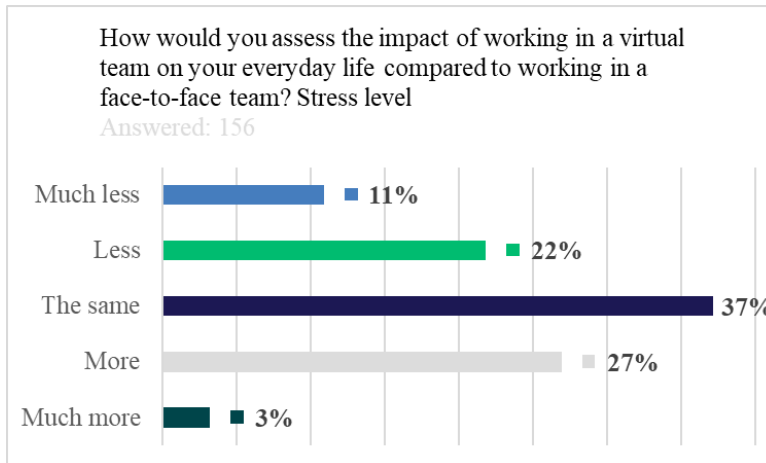
Source: Own Research, 2019-2020

Figure 10 shows the impact of working remotely on a participant's communication compared to working in face-to-face team. The majority of contributors noted that they communicate less when working remotely compared to working from physical office with 44% of answers "Less" and 13% - "Much less". At the same time, 21% of respondents stated that they communicate with the same frequency. Moreover, 22% of respondents indicated that they communicate even more in virtual teams compared to the time they worked face-to-face with 14% of answers "More" and 8% - "Much more".

Figure 10. An impact of working in a virtual team on everyday life: Communication, %
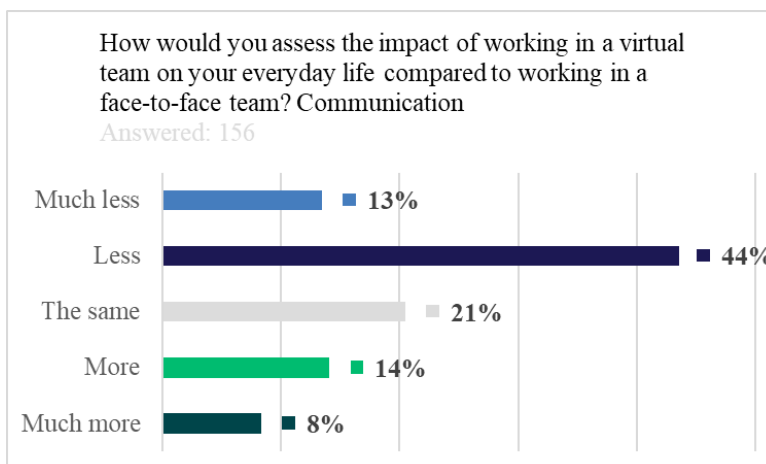
Source: Own Research, 2019-2020

Figure 11 presents the impact of working remotely on participant's workload compared to working in a face-to-face team. As can be noticed that 58% of respondents see no difference in their workload. Yet, 36% of representatives have answered that their workload has increased, including 27% - "More" and 9% - "Much more". Less workload is experienced only by 6% of participants of the survey.

Figure 11. An impact of working in a virtual team on everyday life: Workload, %

How would you assess the impact of working in a virtual team on your everyday life compared to working in a face-to-face team? Workload
Answered: 156

Much less	0%
Less	6%
The same	58%
More	27%
Much more	9%
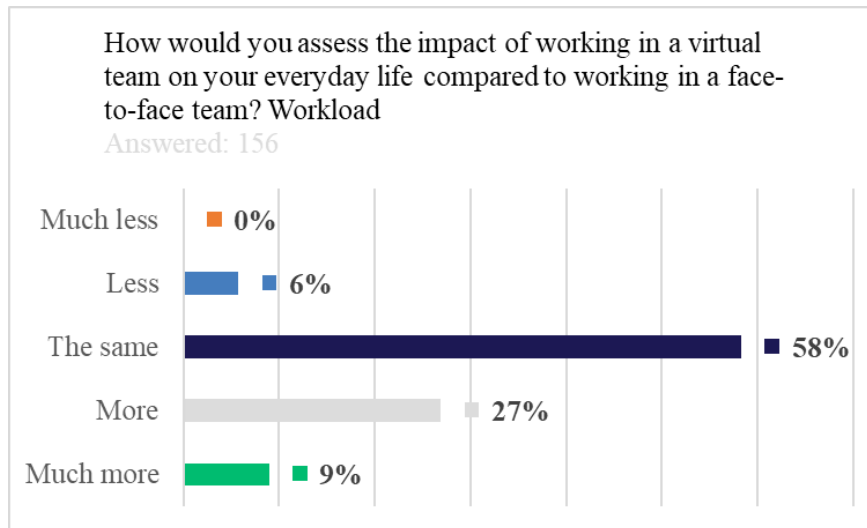
Source: Own Research, 2019-2020

In order to perform a deeper analysis of the data, it is necessary to analyze who exactly are the respondents to the question 6. Analysis included respondents' gender, age, working period, both in virtual teams and a company. Answers to each sub-question were studied and the results are presented in the Tables 6-8.

Table 6 presents the results of the analysis for stress level part of the question 6. It can be determined that the respondents who experience much higher level of stress working in virtual teams are male in the age groups 21-30 (25% of respondents) and 31-40 (75% of respondents) who work in a current company for more than 4 years and joined virtual teams less than a year ago as a result of the COVID-19 pandemic outbreak.

Gender distribution in the categories "The same" and "Less" is the same, the majority of respondents are in the age group 31-40 (59% and 47% respectively) with less than a year work experience in virtual teams (60% and 53% respectively). Meanwhile, in the category "Much less" female respondents have a higher percentage (65% of responses) with work experience of more than 4 years in the majority of respondents (82% - 4+ years). Furthermore, it can be observed that results in all categories are affected by the majority of respondents being a part of virtual team for less than a year.

Table 6. Analysis of the respondents to question 6, Stress level

	Gender	*Age*	*Working repiod in the company*	*Working period in vitual teams*
Much less	35% Male **65%** Female	33% - 21-30 age group, **47%** - 31-40 age group, 20% - 41-50 age group	18% - 1-3 years, **41%** - 4-6 years, **41%** - 7+ years	**59%** - <1 year, 12% - 1-2 years, 29% - 3+ years
Less	50% Male 50% Female	40% - 21-30 age group, **47%** - 31-40 age group, 13% - 41-50 age group	9% - < 1 year, **41%** - 1-3 years, 21% - 4-6 years, 29% - 7+ years	**53%** - <1 year, 18% - 1-2 years, 29% - 3+ years
The same	50% Male 50% Female	22% - 21-30 age group, **59%** - 31-40 age group, 17% - 41-50 age group, 2% - 51+ age group	3% - < 1 year, 28% - 1-3 years, 29% - 4-6 years, **40%** - 7+ years	**60%** - <1 year, 16% - 1-2 years, 24% - 3+ years
More	48% Male **52%** Female	2% - 18-20 age group, **46%** - 21-30 age group, 35% - 31-40 age group, 15% - 41-50 age group, 2% - 51+ age group	14% - < 1 year, **38%** - 1-3 years, 19% - 4-6 years, 29% - 7+ years	**71%** - <1 year, 17% - 1-2 years, 12% - 3+ years
Much More	**100%** Male	25% - 21-30 age group, **75%** - 31-40 age group	**60%** - 4-6 years, 40% - 7+ years	**100%** - <1 year,

Source: Own Research, 2019-2020

Results of the analysis for the communication part in question 6 is shown in Table 7. It can be seen that in three leading categories "Less" (44% of respondents), "The same" (21% of respondents), and "More" (14% of respondents) the majority of responses come from female responders – 59%, 56%, and 59% respectively, included in the 21-30 and 31-40 age groups. On the other hand, male respondents are show a majority in the two opposite categories - "Much less" (86% of respondents) and "Much more" (62% of respondents).

Table 7. Analysis of the respondents to question 6, Communication

	Gender	Age	Working repiod in the company	Working period in vitual teams
Much less	**86%** Male, 14% Female	30% - 21-30 age group, **45%** - 31-40 age group, 20% - 41-50 age group 5% - 51+ age group	5% - < 1 year, 29% - 1-3 years, **38%** - 4-6 years, 29% - 7+ years	**62%** - <1 year, 14% - 1-2 years, 24% - 3+ years
Less	41% Male, **59%** Female	2% - 18-20 age group, 28% - 21-30 age group, **61%** - 31-40 age group, 9% - 41-50 age group	9% - < 1 year, 34% - 1-3 years, 19% - 4-6 years, **38%** - 7+ years	**68%** - <1 year, 12% - 1-2 years, 20% - 3+ years
The same	44% Male, **56%** Female	**43%** - 21-30 age group, 37% - 31-40 age group, 20% - 41-50 age group	6% - < 1 year, 31% - 1-3 years, **34%** - 4-6 years, 28% - 7+ years	**56%** - <1 year, 31% - 1-2 years, 13% - 3+ years
More	41% Male, **59%** Female	33% - 21-30 age group, **48%** - 31-40 age group, 14% - 41-50 age group, 5% - 51+ age group	9% - < 1 year, **32%** - 1-3 years, 27% - 4-6 years, **32%** - 7+ years	**54%** - <1 year, 14% - 1-2 years, 32% - 3+ years
Much More	**62%** Male, 38% Female	**55%** - 21-30 age group, 18% - 31-40 age group, 27% - 41-50 age group	23% - 1-3 years, 31% - 4-6 years, **46%** - 7+ years	**69%** - <1 year, 31% - 3+ years

Source: Own Research, 2019-2020

Table 8 presents results of the analysis of the workload part of question 6. It can be seen that male respondents represent a majority in most of the categories. The only category where female respondents outweigh male respondents is "The same", where female representatives are accountable for 55% of the answers. Also, it can be seen that the age group responsible for the majority of answers in each category is 31-40 age group.

Table 8. Analysis of the respondents to question 6, Workload

	Gender	Age	Working repiod in the company	Working period in vitual teams
Less	**67%** Male, 33% Female	11% - 18-20 age group, 11% - 21-30 age group, **56%** - 31-40 age group, 22% - 41-50 age group	22% - < 1 year, 11% - 1-3 years, **44%** - 4-6 years, 22% - 7+ years	**56%** - <1 year, 11% - 1-2 years, 33% - 3+ years
The same	45% Male, **55%** Female	42% - 21-30 age group, **45%** - 31-40 age group, 13% - 41-50 age group	5% - < 1 year, **37%** - 1-3 years, 27% - 4-6 years, 30% - 7+ years	**67%** - <1 year, 14% - 1-2 years, 19% - 3+ years
More	**52%** Male, 48% Female	30% - 21-30 age group, **50%** - 31-40 age group, 18% - 41-50 age group, 3% - 51+ age group	7% - < 1 year, 31% - 1-3 years, 21% - 4-6 years, **40%** - 7+ years	**52%** - <1 year, 17% - 1-2 years, 31% - 3+ years
Much More	**57%** Male, 43% Female	15% - 21-30 age group, **62%** - 31-40 age group, 15% - 41-50 age group, 8% - 51+ age group	7% - < 1 year, 7% - 1-3 years, 29% - 4-6 years, **57%** - 7+ years	**71%** - <1 year, 22% - 3+ years 7% - 3+ years

Source: Own Research, 2019-2020

It is known that working in virtual team can be challenging. The next question in the survey is: "Is working in a virtual team more challenging than working in a traditional team (in the office)?" (Question 7). It was designed with the purpose of perceiving the view of the employees regarding the challenges they face working virtually compared to face-to-face work. The responses to this question will help to weigh the influence of challenges on participant's everyday work. The results are shown in the Figure 12.

In order to perform a deeper analysis of the data, it is necessary to analyze the responses by respondents' gender, age, working period both in virtual teams and in the company. The results are presented in the Tables 9.

Figure 12 illustrates that 57% of respondents noticed that it is more challenging to work in virtual team compared to working face-to-face. Further analysis shows that 64% of

those who answered "Yes" and 61% of those who answered "No", have been working in virtual teams for less than a year.

Figure 12. Challenge level in virtual team vs traditional team, %
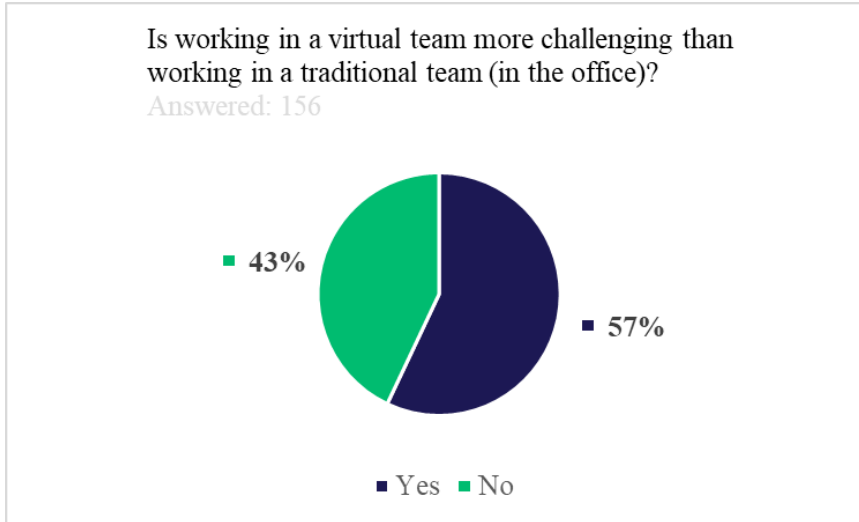
Source: Own Research, 2019-2020

It can be observed in the Table 9 that results in all categories are affected by the majority of respondents being a part of virtual team for less than a year. Therefore, a further analysis was conducted. It can be concluded that employees who have more than 1 year experience in virtual teams have been working in their current company as follows: 47% of participants are working for more than 7 years in their current company, 24% of participants - 4-6 years, 21% - 1-3 years, and 9% are accountable for employees with less than a year experience in the current company.

Table 9. Analysis of the respondents to question 7

	Gender	Age	Working repiod in the company	Working period in vitual teams
Yes	52% Male, 48% Female	1% - 18-20 age group, 34% - 21-30 age group, **44%** - 31-40 age group, 12% - 41-50 age group, 9% - 51+ age group	10% - < 1 year, 32% - 1-3 years, 23% - 4-6 years, **35%** - 7+ years	**64%** - <1 year, 14% - 3+ years 22% - 3+ years
No	45% Male, 55% Female	30% - 21-30 age group, **46%** - 31-40 age group, 18% - 41-50 age group, 6% - 51+ age group	3% - < 1 year, 31% - 1-3 years, 31% - 4-6 years, **35%** - 7+ years	**61%** - <1 year, 18% - 3+ years 21% - 3+ years

Source: Own Research, 2019-2020

The next two questions are related to communication tools used by employees and the feeling of connection. It is important to understand not only the frequency of communication between the team members, but also communication tools used. Therefore, the following question was created "How often do you interact with team members working remotely?" (Question 8). The results are shown in the Table 10. It can be seen that the majority of respondents (72%) for daily communication with team members use E-mail/Phone, followed by Skype (41%), Webex (40%), Microsoft Teams (31%), Slack (4), and Zoom (1%). Furthermore, 96% of respondents do not use Zoom and 97% do not use Google Meet as communication tool at all. This could be due to company's policies and restrictions.

Table 10. Interaction among team members via different communication tools, %

Communication tool	Daily	Every Few Days	Weekly	Monthly	Almost no interaction	No Interaction
E-mail/Phone	72	19	8	-	1	-
Skype	41	11	1	1	4	42
Microsoft Teams	33	11	10	1	1	44
Zoom	1	-	1	-	2	96
Google Meet	-	-	-	-	3	97
Slack	4	2	2	1	7	84
Webex	40	5	1	1	3	50

Source: Own Research, 2019-2020

It was stated earlier in literature review that one of the challenges for virtual teams' members is the feeling of disconnection from their team members and managers. The following question was created to get insights on a participant's thoughts about relation with their team members. The question is "Do you feel connected to your team members working remotely?" (Question 9).

The results are illustrated in the Figure 13. It can be seen, that 71% of respondents answered that they feel connected with their team members despite the distance, time, and boundaries. Further analysis showed that participants who answered that they feel connected with their team members use the following communication tools on a daily basis: 39% of respondents - E-mail/Phone, Skype – 22% of respondents, Webex – 20% of respondents, Microsoft Teams - 17% of respondents, and 2% of respondents use Slack.

Among those who feel disconnected to their team members there is the following representation: 31% with work experience in the current company 1-3 years, and 31% with work experience of more than 7 years. 29% - 4-6 years, and 9% with less than a year. Furthermore, 53% of them belong to 31-40 age group, followed by 33% 21-30 age group, the rest age groups are accountable for less than 15%.

Figure 13. Feeling of connection with team members, %

Source: Own Research, 2019-2020

Additionally, several comments were received:

"*It is a challenge, more and more I miss the social contact, chatting, rumoring, having fun and coffee together. Even though I have a great team and manager, same as family and friends, I fell more and more alone :(*".

"*Workwise there is no issue to work remotely, the big advantage is the flexibility where you can start earlier and arrange other things in between... But what I mainly miss is the social contact with colleagues...*".

"*The only issue with home office is related with human interactions. I could notice more passive aggressive communication between the team which wouldn't occur if we were at the office face to face*".

Next area that can experience some challenges is manager-employee relationships. A part of the survey was dedicated to pinpointing the issues that an employee can face in this area. It starts with the question "How often do you communicate with your manager one-to-one?" (Question 10). This question was created to see the frequency of communication between an employee and the manager. The results are shown in Figure 14. As it can be seen, 29% of respondents have their one-on-one's every week, 27% - monthly. The third

most common are those who have One-On-One's every few days (21%), followed by 13% with almost no interaction between them and their team leader. Only 10% of respondents have their daily One-On-One's with the manager.

Figure 14. Frequency of One-On-One's with the manager, %
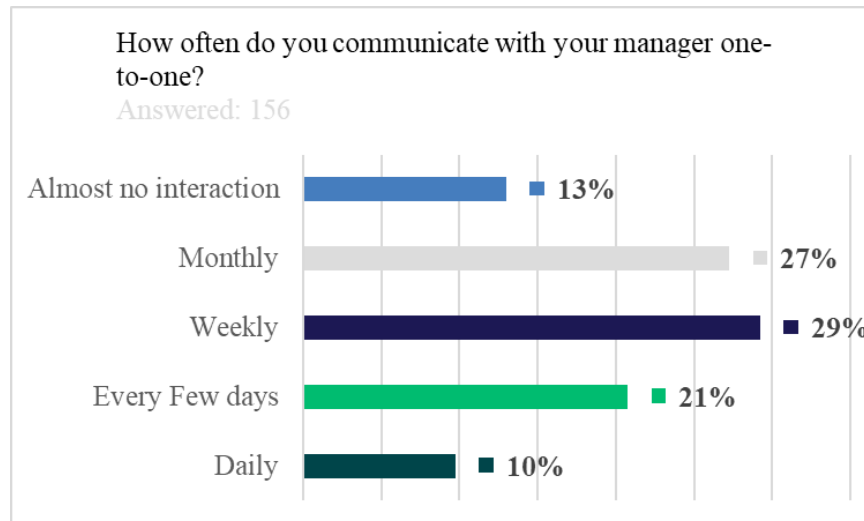
Source: Own Research, 2019-2020

The results of the analysis of respondents with „Almost no interaction" are presented in the Table 11. Female respondents have the highest representation in this category with being accountable for 55% of responses. Furthermore, 65% of all respondents here are in 31-40 age group.

Table 11. Analysis of participants to question 10, category "Almost no interactions"

	Gender	Age	Working repiod in the company	Working period in vitual teams
Almost no interaction	45% Male, **55%** Female	30% - 21-30 age group, **65%** - 31-40 age group, 5% - 41-50 age group	5% - < 1 year, 35% - 1-3 years, 15% - 4-6 years, **45%** - 7+ years	**55%** - <1 year, 25% - 3+ years 20% - 3+ years

Source: Own Research, 2019-2020

It is important to analyze not only how many One-On-One's the manager and their team members have, but also the quality of these interactions. Thus, the next question was designed. This question is "Do you feel that your manager is concern about your well-being and recognizes your efforts and contributions?" (Question 11).

Figure 15 shows that the majority of respondents (79%) felt that their manager is concerned about their well-being. Though, 14% of respondents feel that the manager should pay more attention to their well-being. In the third most common response, with 7%, are those who feel that their manager is not concerned about their well-being at all.

Figure 15. Concern about employee's well-being, %
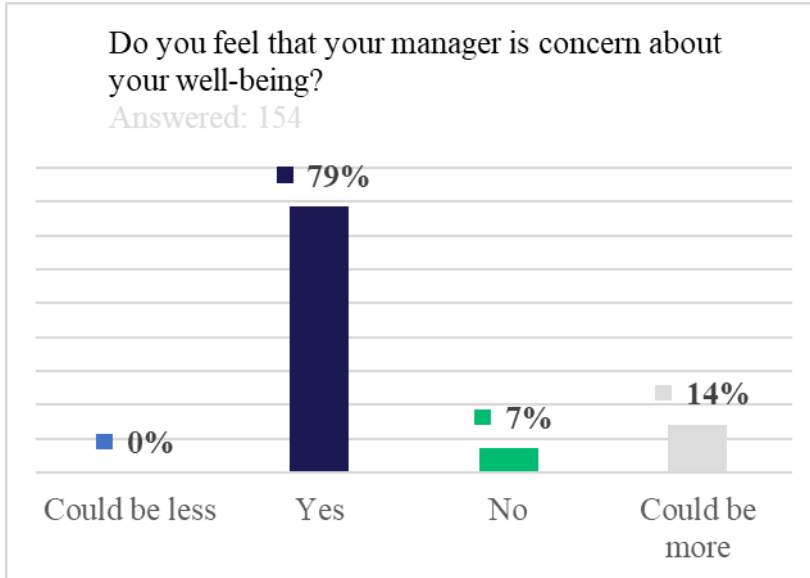
Source: Own Research, 2019-2020

It was decided to look into the structure of respondents who replied "Yes" and "No" to this question. The results of this analysis presented in the Table 12.

Table 12. Analysis of participants to question 11, well-being

	Gender	Age	Working repiod in the company	Working period in vitual teams
Yes	49% Male, **51%** Female	33% - 21-30 age group, **42%** - 31-40 age group, 16% - 41-50 age group 9% - 51+ age group	8% - <1 year, 32% - 1-3 years, 27% - 4-6 years, **33%** - 7+ years	**62%** - <1 year, 16% - 3+ years 22% - 3+ years
No	36% Male, **64%** Female	36% - 21-30 age group, **55%** - 31-40 age group, 9% - 41-50 age group	**36%** - 1-3 years, **36%** - 4-6 years, 28% - 7+ years	**55%** - <1 year, 18% - 3+ years 27% - 3+ years

Source: Own Research, 2019-2020

Furthermore, to find out if the frequency of One-On-One's with the manager influences an employee's feelings it was decided to analyze the relationship between

responses to questions 10 and 11. The results are shown in the Table 13. It can be noticed that participants from the category "Almost no interaction" are accountable only for 5% of "Yes". Most answers in this category are divided between those who have One-On-One's with the manager weekly, every few days, or monthly. As to the category "No" – most of the answers are divided between weekly, monthly, and almost no interaction.

Table 13. Relations between questions 10 and 11, well-being, %

	Daily	Every few days	Weekly	Monthly	Almost no interaction
Yes	11	23	31	28	7
No	-	9	19	36	36
Could be more	9	14	23	18	36

Source: Own Research, 2019-2020

It can be seen the rarer the One-On-One's with one's manager the more an employee feels that the manager is not concern about their well-being. The additional analysis showed that answers of participants who replied "Almost no interaction" to question 10, in results of question 11 are distributed the following way: 40% - Yes, 40% - could be more, and 20% - No. The answers of participants who replied "Monthly" to question 10, in results of question 11 are distributed the following way: 81% - Yes, 10% - could be more, and 10% - No.

Figure 16. Recognition of employee's efforts and contributions, %
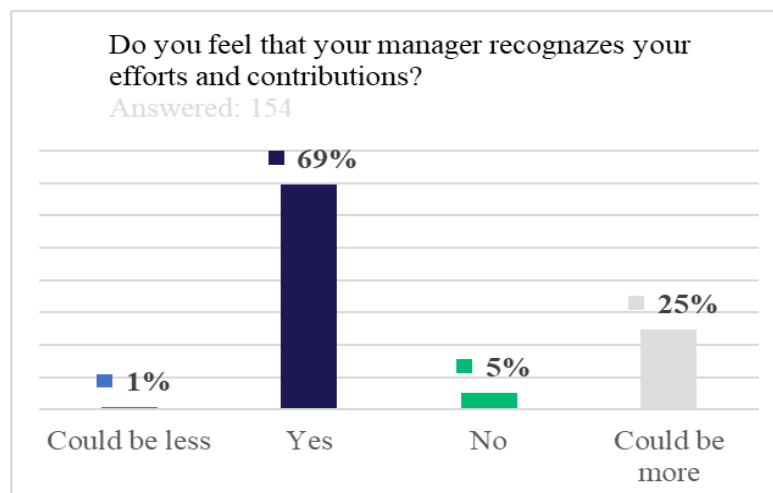
Source: Own Research, 2019-2020

Figure 16 illustrates that 95% of respondents feel that their manager recognizes their efforts and contributions, including 1% who noted that their manager should pay less attention to their efforts and contributions. Only 5% of respondents do not feel that their manager acknowledges their efforts and contributions.

It is important to look into the structure of respondents who replied "Yes" and "No" to this question. The results of this analysis are presented in the Table 14.

Table 14 Analysis of participants to question 11, efforts and contributions

	Gender	Age	Working repiod in the company	Working period in vitual teams
Yes	49% Male, **51%** Female	1% - 18-20 age group, 32% - 21-30 age group, **45%** - 31-40 age group, 14% - 41-50 age group 8% - 51+ age group	8% - <1 year, **33%** - 1-3 years, 28% - 4-6 years, 31% - 7+ years	**62%** - <1 year, 16% - 3+ years 22% - 3+ years
No	**50%** Male, **50%** Female	25% - 21-30 age group, **63%** - 31-40 age group, 12% - 41-50 age group	**37%** - 1-3 years, 13% - 4-6 years, 50% - 7+ years	**50%** - <1 year, 37% - 3+ years 13% - 3+ years

Source: Own Research, 2019-2020

To find out if the frequency of One-On-One's with the manager influences on employee's feelings it was decided to analyze the relationship between responses to questions 10 and 11. The results are shown in the Table 15.

Table 15. Relations between questions 10 and 11, efforts and contributions, %

	Daily	Every few days	Weekly	Monthly	Almost no interaction
Yes	11	24	26	30	9
No		13	13	24	50
Could be more	8	13	40	21	18
Could be less			100		

Source: Own Research, 2019-2020

An additional analysis showed that answers of participants who replied "Almost no interaction" to question 10, in results of question 11 are distributed the following way: 45% - Yes, 35% - could be more, and 20% - No. Answers of participants who replied "Monthly" to question 10, in results of question 11 are distributed the following way: 76% - Yes, 19% - could be more, and 5% - No.

In the time that almost everyone is working from home, it is particularly important to understand how comfortable an employee feels about contacting their manager. Question "How comfortable do you feel contacting your manager about topic or issue?" (Question 12) was created. The results are shown in the Figure 17. The majority of respondents stated that they are "Comfortable" (40% of respondents) and "Very comfortable" (36% of respondents) with contacting their manager about the topic or issue. 19% of respondents stated "Neutral", 4% are "Not comfortable", and 1% does not contact their manager and instead waits when (s)he contacts them.

Figure 17. Assessment of comfort to contact the manager about topic or issue, %
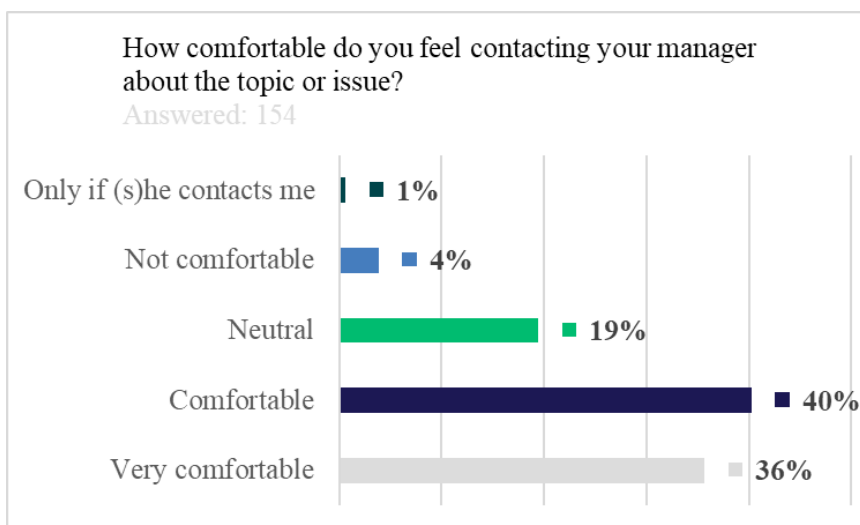
Source: Own Research, 2019-2020

Being far from the office may leave an employee with the feeling that decisions are made slower or that they cannot influence the way decisions are made. Respondents' answers to the question "Do you feel that decisions are made quicker or slower when working remote?" (Question 13) are shown in Figure 18. 31% of respondents noticed that the decisions are made slower now, including 25% with answer "Slower" and 3% - "Much Slower". The majority of respondents did not notice any difference in the speed of decision-making process (58% of respondents) between working face-to-face and virtually.

Lastly, 12% of respondents stated that working remotely sped up the decision-making process (8% - "Quicker", 4% - "Much quicker").

Figure 18. Assessment of longevity of decision-making process, %
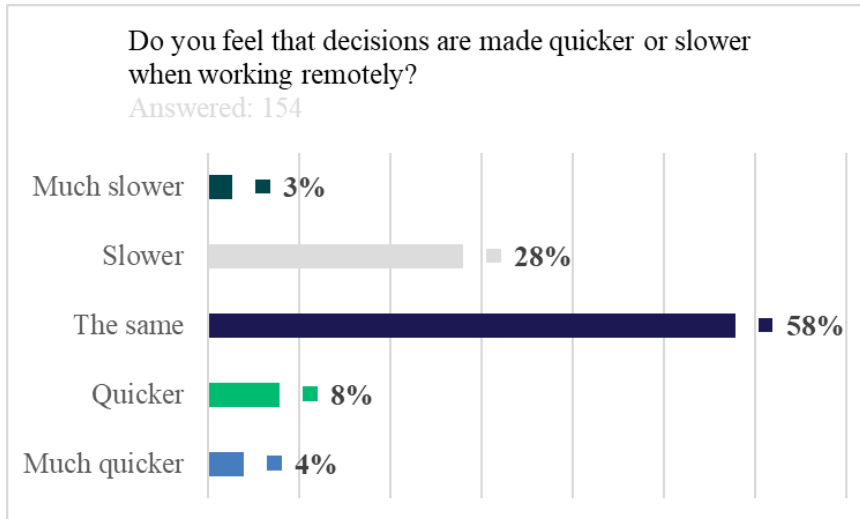
Source: Own Research, 2019-2020

The next question is assessing how easy is to get answers working remotely compared to working face-to-face (Question 14). The results are shown in the Figure 19. The majority of respondents did not notice any difference (49% of respondents), followed by those who said that it is harder to get an answer with 40% of participants - "Harder" and 3% of participants - "Much harder".

Figure 19. Impact on getting answers, %
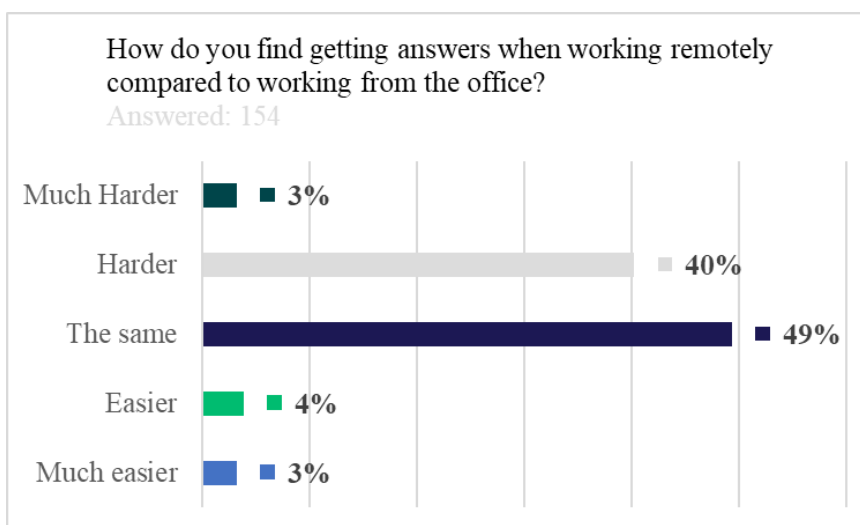
Source: Own Research, 2019-2020

It is important to analyze the relations between the answers on two previous questions. The results are shown in the Table 17. It can be seen that those participants who belong to categories "Much Harder" and "Harder" (question 14) have responded to question 13 as follows: 54% of respondents – "Much slower" and "Slower", 42% of respondents – "The same", and 4% - "Much quicker" and "Quicker". 74% of respondents from the category "The same" (question 14) responded that decision-making process working remotely is the same as working from the office and that they did not notice any difference.

Table 16. Relationship between decision-making and getting answers, %

Getting answers	Decision-making		
	Much quicker, Quicker	The same	Much slower, Slower
Much Harder, Harder	4	42	54
The same	14	75	12
Much Easier, Easier	8	51	40

Source: Own Research, 2019-2020

Interesting results are in the categories "Much Easier" and "Easier" on getting answers when 40% of respondents from these categories noted that the decision-making process is slower and much slower. One of the reasons for such results might be that employees are not sure which communication tool to use to get an answer or to obtain the decision quicker. There are at least 6 communication tools that are used on a daily basis, as it can be seen from the answers on question 8 of the survey. One of respondent indicated another reason for the obtained results of this analysis: "*Online meetings are fine, but it will never replace face to face communication. Some information can get misunderstood in written form".* As a result of a broad variety of communication channels, the information necessary for the decision or an answer can be missed when switching from one channel to the other channel. Therefore, trainings are necessary to teach people how to use the communication tools and when they are appropriate to be used.

According to some authors (Barber et al., 2019; Sonnentag, 2018) one of the challenges that an employee can face working remotely is an imbalanced work-life

boundary with the employee working more hours. This is why the next question was included in the survey. This question was formulated as: "Do you work more hours per day when working remotely compared to working from the office?" (Question 15).

Figure 20 illustrates the answers on this question. 49% of respondents stated they work more hours per day working remotely, including 44% - "More" and 5% - "Much more". 44% of respondents said they work the same number of hours per day. Followed by, 5% - "Less" and 1% - "Much less".

Figure 20. Impact on working hours, %
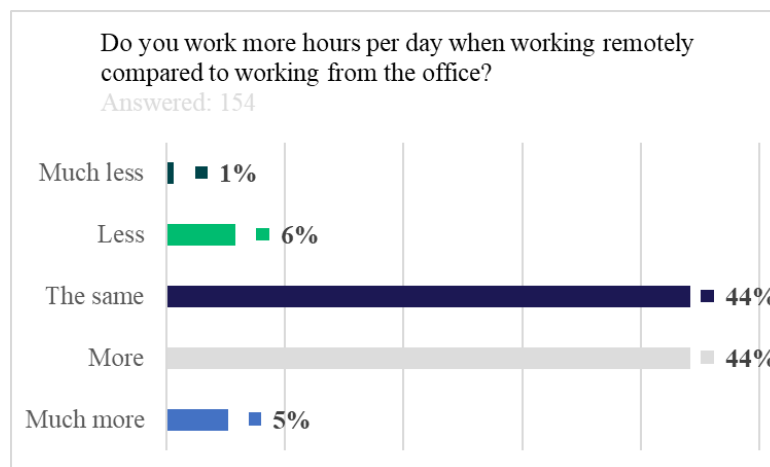
Source: Own Research, 2019-2020

It was decided to check if there are relationships between how many hours per day employee works and their working experience in the company and in virtual teams. The results are presented in the table 17.

Table 17. Working hours and working period in virtual teams/company

Working hours per day	*Working repiod in the company*	*Working period in vitual teams*
Much less	**100%** - 4-6 years	**100%** - <1 year
Less	12% - 1-3 years, **44%** - 4-6 years, **44%** - 7+ years	33% - <1 year, **67%** - 3+ years
The same	10% - <1 year, **41%** - 1-3 years, 25% - 4-6 years, 24% - 7+ years	**67%** - <1 year, 15% - 3+ years 18% - 3+ years
More	6% - <1 year, 28% - 1-3 years, 22% - 4-6 years, **44%** - 7+ years	**56%** - <1 year, 21% - 3+ years 24% - 3+ years
Much More	50% - 4-6 years, 50% - 7+ years	**100%** - <1 year

Source: Own Research, 2019-2020

100% of respondents of category "Much less" are male in the age group 31-40. Category "Much more": 63% - female and 38% - male in the age groups 21-30 (25%), 31-40 (50%), 41-50 (13%), and 51+ (13%).

Productivity is one of outcomes that can be also affected. The question "How productive are you working remotely compared to working in the office?" (Question 16) was created to see if the productivity is influenced by moving to virtual work.

The results are presented in Figure 21. It can be seen that 27% of participants noticed that their productivity has increased, including 32% of respondents answering, "More productive" and 15% - "Much more productive". 31% of participants did not notice any change in their productivity. On the other hand, 22% of respondents stated that their productivity has decreased, comprised of 20% - "Less productive" and 2% "Much less productive".

Figure 21. Impact on productivity, %
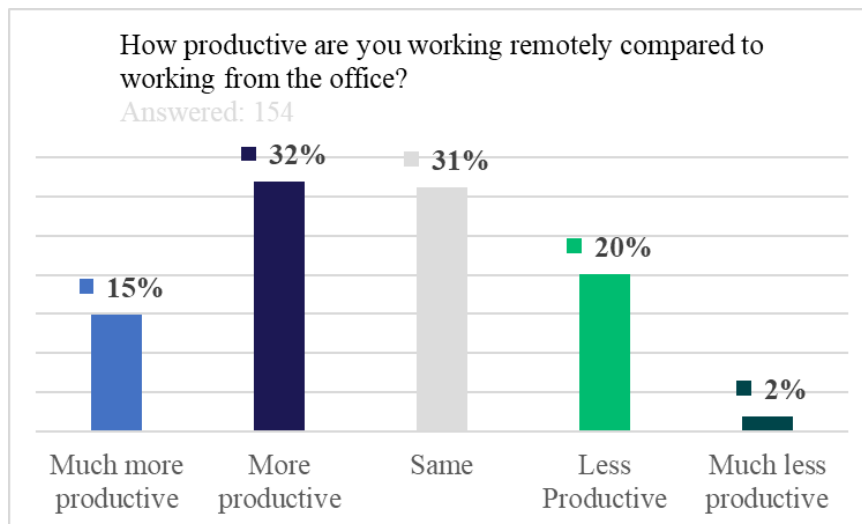
Source: Own Research, 2019-2020

Additionally, several comments have been received concerning productivity when working remotely:

"I am definitelly more productive at home because of lack of social interaction and chatting with my colleagues about non-working things..."

"...Productivity can be can issue specially for those with kids in school age..."

"Home Office is not for all people. The person should have the responsibility and do the work that is needed and find mostly self-motivation."

For a deeper analysis of the answers it was decided to look into relationships between productivity and working hours per day, as well as getting answers and the decision-making process. The results are presented in the Tables 18-20.

Table 18 illustrates that respondents who replied that they are more productive or much more productive on average work more hours per day. In the category "More productive" is 53% of respondents work more hours per day accounting for 47% - "More" and 6% - "Much more". The distribution of replies in category "Much more productive" is as follows 48% of respondents work more hours per day, on the second most common are those whose working hours did not change (26% of respondents). And third most common is divided between those who work much more hours per day and those who work less hour per day.

Table 18. Relations between productivity and working hours, %

Productivity	Working hours per day				
	Much more	More	Same	Less	Much less
Much less productive			100		
Less productive	4	32	58	6	
Same	2	50	46	2	
More productive	6	47	39	6	2
Much more productive	13	48	26	13	

Source: Own Research, 2019-2020

In the category "Less productive" the majority of respondents work the same hours per day (58% of respondents), followed by 36% of respondents who work more (32% - "More" and 4% "Much more"). The decrease of productivity and increase in working hours could happen due to several reasons, for example inability of employee to self-motivate, lack of concentration when working from home, more time spent to find the answers or make decisions, etc.

Table 19 illustrates how time spent on getting answers influence on employee's productivity. It shows that the harder it is to get an answer the less productive the employee feels. The respondents in the category "Less productive" are divided as follows: 61% are those who find it harder to find an answer to their questions, followed by those who noticed no difference (26% of respondents), and 10% of respondents who stated that it is much harder to get an answer on their question when working remotely compared to working in a face-to-face team.

Table 19. Productivity and getting answers, %

Productivity	Getting answer				
	Much easier	*Easier*	*Same*	*Harder*	*Much harder*
Much less productive			67		33
Less productive		3	26	61	10
Same	2	2	44	52	
More productive	4	4	61	31	
Much more productive	9	9	65	13	4

Source: Own Research, 2019-2020

Table 20 illustrates how the decision-making process impacts an employee's productivity. It can be seen that majority of participants who replied that they are less productive also noticed that the decisions are made slower (including "Slower" - 52% and "Much slower" - 3%) when working remotely. On the other hand, 69% of those who stated that they are much more productive, noted that decisions are made much quicker working in virtual teams.

Table 20. Productivity and decesion-making, %

Productivity	Decision-making process				
	Much quicker	*Quicker*	*Same*	*Slower*	*Much slower*
Much less productive		33	67		
Less productive			45	52	3
Same	2	2	69	23	4
More productive	2	14	57	27	
Much more productive	69	5	19	5	2

Source: Own Research, 2019-2020

Information technology (IT) as part of organizational infrastructure was left out of the survey. But it is important to mention that limited access to technology can be one of the factors contributing to decrease in productivity when working remotely. This is supported by several comments left by the respondents:

"I find working from home a bit harder because I don't have a second screen there which is essential and also can't even connect a mouse to my tablet (unfortunately it's not a laptop)".

"Could have been more productive if the servers weren't slow".

The next question of the survey was designed to see how working virtually influenced an employee's feeling about the time they need to accomplish a task. This question is "Do you feel pressure to accomplish work faster or under tight schedule when working remotely?" (Question 17).

The results are illustrated in Figure 22. The majority of participants stated that this area did not change for them with 66% of respondents answered - "The same". 23% of respondents noted that they feel more pressure, comprised of 21% - "More" and 2% - "Much more". 10% of employees answered that they feel less pressure working remotely compared to working from the office, comprised of 8% - "Less" and 2% - "Much less".

Figure 22. Assessment of preassure to accomplish work faster, %
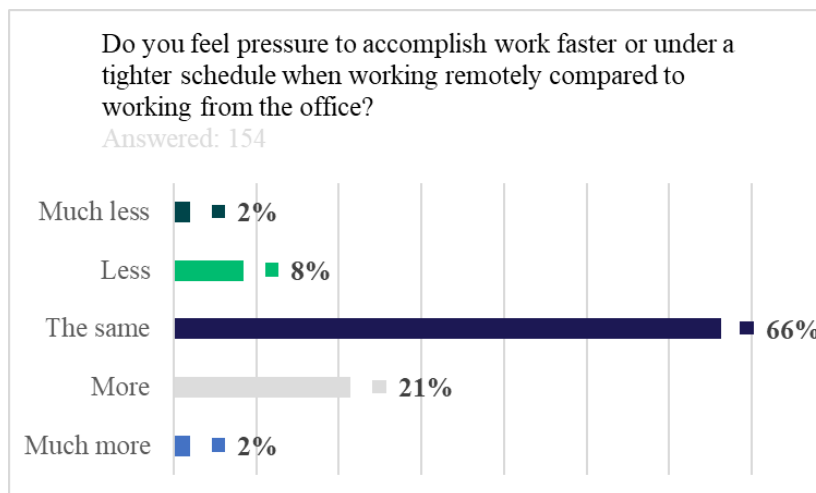
Source: Own Research, 2019-2020

The question is "How do you find working remotely compared to working from the office?" (Question 18). The results are shown in the Figure 23. 36% of respondents stated that they do not see any difference in working remotely and from the office, 29% stated that it is harder to work remotely. On the other hand, 36% are saying that it is easier for them to work remotely, comprised of 22% - "Easier" and 14% - "Much easier".

Figure 23. Comparison of working remotely and from the office, %

How do you find working remotely compared to working from the office?
Answered: 154

Category	%
Much Harder	0%
Harder	29%
The same	36%
Easier	22%
Much easier	14%
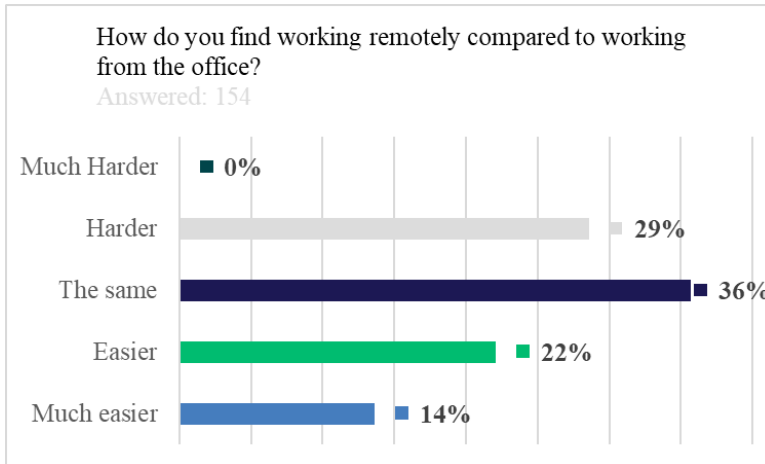
Source: Own Research, 2019-2020

The last multiple choice question of the survey is: "Do you feel that working from home compromises the quality time that you can spend with family and friends?" (Question 19). The results are in the Figure 24. 56% of respondents feel that working from home compromises the time they can spend with family and friends, including 31% - "Partially" and 25% - "Yes. 44% of respondents stated that working remotely did not affected their time with family and friends.

Figure 24. Impact of working from home on quality time with family and friends, %

Do you feel that working from home compromises the quality time that you can spend with your family and friends?
Answered: 154

Category	%
No	44%
Partially	31%
Yes	25%
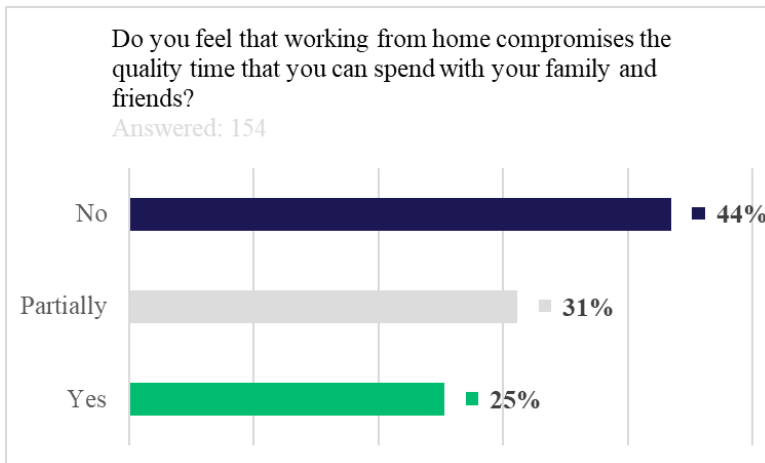
Source: Own Research, 2019-2020

It was decided to analyze the respondents to this question base on their replies to questions 6 and 15. The results of this analysis is shown in the Tables 21-22.

Table 21 shows how working hours per day influence an employee's work-life balance. It can be seen that the more an employee works the more time with family and friends is compromised. Among those who noted that their quality time with friends and family is compromised 62% stated they work more hours per day, including 51% of replies

"More" and 11% - "Much more". The category "Partially" is distributed as: 54% of respondents are working more with 48% answers – "More" and 6% - "Much more".

Table 21. Working from home and time spent with family and friends, %

Time with family and friends	Working hours per day			
	Much more	More	Same	Less
Yes	11	51	33	5
Partially	6	48	44	2
No	1	25	52	20

Source: Own Research, 2019-2020

Table 22 shows how stress level impacts time employee spends with family and friends. Category "Yes" is represented by 31% respondents who experience no difference in their stress level working remotely compared working from the office, "More" and "Less" are accountable for the same number of respondents (28%). The third place is taken by respondents who experience much more stress compared to working face-to-face, followed by 5% of those who experience much less stress working from home.

Respondents whose time with family and friends is not compromised by working from home are represented by 29% respondents who noted the same level of stress, followed by those who experience less stress with 23% - "Less" and 18% - "Much less".

Table 22. Time spent with family and friends and stress level, %

Time with family and friends	Stress level				
	Much more	More	Same	Less	Much less
Yes	8	28	31	28	5
Partially	2	35	42	17	4
No	1	19	39	23	18

Source: Own Research, 2019-2020

Several comments, corroborate the results of the above analysis, they were added by participants of the survey:

"Working remotely, it is difficult for me to balance personal life and work time."

"Overall not having separated physical spaces for work and leisure/rest time can be stressful and also compromise the time we have to spend with family/partner."

"Working remotely saves the time spent getting to work and back home … more time for you and for your family as you are at home when you finish at work."

"Working from home should be always voluntary, no matter if there is a pandemic or not. Less stress, less time spent on transportation, higher productivity."

4.4 Presentation of the Interviews

There are 5 main questions that managers were asked to reply. The interviews were conducted via Skype. The names of the managers and team leaders will not be mentioned with regards to companies' procedures and rules. The interviews are arranged randomly. The lexicon used by interviewees is left without change, as well as grammar and semantic accuracy.

The questions that were asked are as following:

1. How does working with virtual teams differ from working with traditional teams?
2. What tools and strategies do you usually use in working with the members of virtual teams?
3. What are the challenges that members of a virtual team are facing on the daily basis?
4. How are you, as a manager, helping the team members to overcome these challenges? Were there any strategies that did not work?
5. Are there tools and strategies that you would like to use but cannot?

4.4.1 Interview 1.

1. *How does working with virtual teams differ from working with traditional teams?*

Primarily a different level of engagement and teamwork. It is in many ways easier for team mates to interact and speak together to solve individual or team-level issues when sitting in the same physical space. Furthermore, sole reliance on the limitations of technology to communicate effectively (e.g. to discuss, inform, agree/disagree, dispute, chat, instruct/train, etc.). It is more challenging to ensure business continuity, alignment, or motivation within a virtual team compared to traditional team. (e.g. often a need to increase amount of meetings; loss of efficiency due to additional written communication compared to face-to-face, not as easy to track productivity).

2. What tools and strategies do you usually use in working with the members of virtual teams?

Use any tool we have available to ensure clear and strong lines of communication are kept up. Tailor each method of communication to the individual, as each person often responds differently or prefers another type of approach. Regular 'catch-ups'. Focus on positives, both work and non-work related. Set daily/weekly goals. Use of new technologies to observe statuses and trends in work performance of teams or individuals.

3. What are the challenges that members of a virtual team are facing on the daily basis?

Virtual team members can struggle with many things, including:

- a feeling of disconnection or isolation from his/her team mates;
- uncertainty on how they are performing their daily tasks;
- reduction of their ability to maintain a wider view of what is going on in the day to day business;
- increased lack of focus on work tasks due to external distractions or mental 'claustrophobia';
- the perceived repetitiveness of a working week at home.

4. How are you, as a manager, helping the team members to overcome these challenges? Were there any strategies that did not work?

Early identification and action with team members who express or exhibit these tendencies. Then customized follow-ups with each person as regularly as needed. Expressing empathy is crucial. Acknowledge that you as a manager are also affected in some of the same ways; sharing best practices and methods to improve working conditions, communication, addressing personal issues, etc. Facilitate more relaxed attitude towards daily working time, to take into consideration multiple factors which may impact a team members' ability to focus for a straight 8 hours – 09:00-18:00.

5. Are there tools and strategies that you would like to use but cannot?

Team building events. *(smiles)*

4.4.2 Interview 2.

1. How does working with virtual teams differ from working with traditional teams?

In a lot of different ways. In a virtual team it takes much longer to really know the person you are working with. And in some cases, you work years together without knowing her/him (and it is ok, because it is her/his choice). You base your trust, your cooperation, and your relationship on different factors in the two different types of team. E.g., you deal with an introvert who does not share much usually and is not very communicative. If she sees you every day, she will observe you and this is a form of communication. In a virtual team, she is blind on you and you cannot ask her to share more (would put her in an uncomfortable situation). So, it is up to you to find a different way to let her observe your behavior. There are tons of different cases like this.

2. *What tools and strategies do you usually use in working with the members of virtual teams?*

I know I need to find different occasions to get in touch with some team members that are more difficult to reach, for whatever reason. Having fix One-On-One's does not work for everybody, neither in an office nor in a virtual one. Understand what works with employee for me to understand his needs and motivation is the same in both scenarios. In a virtual one it might take more time.

3. *What are the challenges that members of a virtual team are facing on the daily basis?*

I always had a part of my team virtual, and usually it is difficult for them because they see that a lot happens in the office. Right now, paradoxically the forced work from home we are all facing made it even. But challenges stay the same: the environment does not talk to you when you are at home, in the office yes.

4. *How are you, as a manager, helping the team members to overcome these challenges? Were there any strategies that did not work?*

There is one strategy that never works: shortcuts. Asking people to adopt a certain behavior (even switching on the camera during calls, for example) does not always work. Being an example, but a tolerant one with a lot of patience might work. Provided that you, as a manager know what you are doing. *(smiles)*

5. *Are there tools and strategies that you would like to use but cannot?*

Having the possibility, even once per year to meet in person. It is different to work with somebody you have met vs. working with a team you have never physically met.

4.4.3 Interview 3.

1. *How does working with virtual teams differ from working with traditional teams?*

Emotional intelligence due to voluntary mic/video participation.

2. *What tools and strategies do you usually use in working with the members of virtual teams?*

Daily team meetings, daily management meetings, and promotion of mic/video participation.

3. *What are the challenges that members of a virtual team are facing on the daily basis?*

Technical interruptions (e.g. hacker attack, load factor of server in order to provide sufficient system access and smooth communication channels). Limitation of building a personnel network in order to Know-Your-Neighbor. Group Wide - too much communication channels increasing the complexity of communication (e.g. Skype, Teams, Slack, Outlook, Hotline, Personnel phone, WhatsApp, etc.).

4. *How are you, as a manager, helping the team members to overcome these challenges? Were there any strategies that did not work?*

Sharing of technical experiences/fixes via WhatsApp/Email/Team Meeting. Role model approach by proactive calls and asking for mental situation, situation at home (partner, kids, etc.), health status. Role model approach by proactive activation of mic/video and contribution of content.

As to what is not working - group wide approach to solve technical difficulties and proper information of staff.

5. *Are there tools and strategies that you would like to use but cannot?*

Clear approach in order to avoid using simultaneously several communication channels. Weekly update from the top management via open line meeting with video and mic.

4.4.4 Interview 4.

1. *How does working with virtual teams differ from working with traditional teams?*

You do not share the atmosphere together with the team. You cannot just stop by at someone, have the eye contact, see the reaction of his or her face, the connection does not get created or is not kept the way it would in the office.

2.   *What tools and strategies do you usually use in working with the members of virtual teams?*

A lot of One-On-One's, spend time on small talk as much as possible to feel we are still people on both sides.

3.   *What are the challenges that members of a virtual team are facing on the daily basis?*

I guess the same as the managers, the connection is missing. But of course, home provides some comfort too, except for the ergonomical one. *(smiles)*

4.   *How are you, as a manager, helping the team members to overcome these challenges? Were there any strategies that did not work?*

As mentioned, have those One-On-One's and plan a bit of future.

5.   *Are there tools and strategies that you would like to use but cannot?*

I am missing the ergonomical equipment, otherwise we have good technology and software to be used. *(smiles)*

4.4.5   Interview 5.

1.   *How does working with virtual teams differ from working with traditional teams?*

Connecting and maintaining a good relationship/partnership with your team needs to be more formal and intentional with a virtual team to ensure your associates feel supported and the leader is able to monitor and coach, and reward performance. Availability of the leader via chat, link, phone is critical as well as setting up regular check-ins. For both types of teams either virtual or traditional, staying connected is not the same for all. I am a fan of Situational Leadership and working out a plan with each individual.

2.   *What tools and strategies do you usually use in working with the members of virtual teams?*

Strategy - Assess talent. Newer associates need regular interaction to ensure knowledge progression and their needs are supported. Tenured associates - assess knowledge, do they need regular direction or can they operate independently. Then schedule video or phone meetings as appropriate. Lastly, ask the associate, those that need

more positive reinforcement schedule frequent meetings. For all ensure availability so they feel comfortable to connect via link, chat, or phone.

As for the tools, Stand up Check Ins helped a lot, it gave me an idea of the needs of the associates and what they were working on. I found it to be a good way for the associate to stop prioritize and think about what they needed to be successful Link and text were most used, email for bigger issues they needed support on.

3. *What are the challenges that members of a virtual team are facing on the daily basis?*

I am sure newer associates are struggling not having tenured associates close. Ensuring good virtual mentoring is critical. Collaboration with other teams could be challenging.

4. *How are you, as a manager, helping the team members to overcome these challenges? Were there any strategies that did not work?*

Discussed Strategy above.

Did not work - I found weekly One-On-One's were not as effective as the Standout Check In's and being available for impromptu meetings. To keep Weekly One-On-One's effective needed a lot of planning which took time. Monthly formal One-On-One's worked best.

5. *Are there tools and strategies that you would like to use but cannot?*

I managed virtual teams for over 20 years, if you have good relationships with the associates and generally care for their success managing virtually can be very successful. Wish list if there is an opportunity to bring leader and associates together it is a great opportunity to enhance to partnership/relationship.

5 Results and Discussion

The following research questions were mentioned in the objectives:

1. What are the differences between virtual teams and traditional teams from an organizational leadership perspective?
2. What are the factors that impact distributed teams?
3. What are the challenges that virtual employees and their managers are facing?
4. What are the main solutions for building a successful virtual team suggested by team leaders?

In this section of the thesis, these research questions are explored based on the results derived from the literature review, survey responses, and interviews with the managers.

1. What are the differences between virtual teams and traditional teams from an organizational leadership perspective?

It can be concluded from the results of the literature review, as well as the survey's results and interviews that virtual teams are noticeably different than face-to-face teams. While, as defined by Bell and Kozlowski (2002), restricted face-to-face communication due to the distance between team members and heavy reliance on communication technologies are vital features that separate virtual teams from traditional teams, during the research it was noticed that the differences may lay in more areas, including the way team members interact, how they utilize resources, their work environment, cultural and educational background, and technological compatibility.

The analysis of the interviews confirms that from the organizational leadership perspective the differences between virtual teams and face-to-face teams lay in the above mentioned areas, as one of the virtual teams' leader mentioned: "*It is in many ways easier for team mates to interact and speak together to solve individual or team-level issues when sitting in the same physical space. Furthermore, [the difference between two is] sole reliance on the limitations of technology to communicate effectively. It is more challenging to ensure business continuity, alignment, or motivation within a virtual team compared to traditional team*" .

Another team leader emphasized: "*In a virtual team it takes much longer to really know the person you are working with. And in some cases, you work years together*

without knowing her/him. You base your trust, your cooperation, and your relationship on different factors in the two different types of team" .

Furthermore, both the literature and this research shows that there are certain advantages and disadvantages of virtual teams compared to face-to-face teams.

Common advantages that were mentioned by various studies and pointed out in this research are:

- Reduced commuting costs and time;
- Flexibility and greater degree of freedom;
- Decrease environmental footprints.

Common disadvantages of virtual teams noted in different studies and noticed in this research are:

- Decrease in communication and vulnerability to conflicts;
- Organizational and technological barriers;
- Decrease monitoring and control of activities.

Although, one of the disadvantages that was mentioned in the study conducted by Ebrahim et al. (2009) is a decrease in productivity, and as a result negative impact on virtual team performance. The results of the survey's analysis showed that only 22% of respondents experienced decreased productivity, meanwhile 47% of respondents noticed that they are more productive working remotely compared to working in face-to-face teams. The reasons for these results are described in the best way by several respondents of the survey. As one of them stated: *"I am definitelly more productive at home because of lack of social interaction and chatting with my colleagues about non-working things...".* In contrast the other mentioned: *"...Productivity can be can issue specially for those with kids in school age...".* Furthermore, one respondent pointed out: *"Home Office is not for all people. The person should have the responsibility and do the work that is needed and find mostly self-motivation."*

Even though working in virtual teams is more challenging compared to traditional teams, as 57% of respondents of this research have answered, virtual teams, as an organizational form, are becoming more and more popular. Therefore, further research of differences between the two team types and the advantages and disadvantages of each may yield insights into building a robust and successful virtual team.

2.   What are the factors that impact distributed teams?

Based on the results of the literature review it can be concluded that the factors that affect virtual teams are trust, communication, interaction, geographic distance, time zone differences, and organizational system. However, the author of this thesis observes that it is important to note that the significance of each of the factors in building a successful virtual team can be argued. Although a number of studies stated that trust is the primary factor here (Jarvenpaa et al., 1998; Novak and Bocarnea, 2008), this researcher found that communication and interaction are key underlying mechanisms for establishing trust, thus, in some ways, they are more significant.

There are numerous explanations to why communication and interaction play vital roles in building effective virtual teams. They inspire cooperative relationships, stipulate insightful information about the characters of team members, lay a foundation for developing shared values, and boost continued collaboration.

On the other hand, as it was stated by Stevenson and McGrath (2004), distance and time boundaries can overexaggerate the lack of timely communications. The results of the survey and interviews show that although various communication technologies like Phone/E-mail (72% of respondents), Skype (41% of respondents), Webex (40% of respondents), Microsoft Teams (33% of respondents), Slack (4% of respondents) and Zoom (1% of respondents) are used on a daily basis to help virtual teams' members share information and stay in touch, they cannot offer the same richness as face-to-face contact which in turn can cause misunderstandings. As one of the survey's respondents observed: *"Online meetings are fine, but it will never replace face to face communication. Some information can get misunderstood"*. Furthermore, another respondent added: *"I could notice more passive aggressive communication between the team which wouldn't occur if we were at the office face to face"*.

The idea of Zeuge et al. (2020) is that leadership of virtual teams as a critical factor can be also noticed in the interviews: *"Connecting and maintaining a good relationship/partnership with your team needs to be more formal and intentional with a virtual team to ensure your associates feel supported and the leader is able to monitor and coach, and reward performance. Availability of the leader via chat, link, phone is critical as well as setting up regular check-ins… staying connected is not the same for all. I am a fan of Situational Leadership and working out a plan with each individual"* (see p. 64).

Additionally, the interviewee mentioned: *"I am sure newer associates are struggling not having tenured associates close. Ensuring good virtual mentoring is critical. Collaboration with other teams could be challenging."* .

3. What are the challenges that virtual employees and their managers are facing?

After conducting a study on virtual teams, Graves and Karabayeva (2020) summarized the challenges that come with virtual work, which are intense workloads, technological challenges, weakened manager–employee relationships, low degrees of social connection, and the blurring of the boundary between home and work. It was observed during this research that the results of the analysis of the survey and interviews confirm some challenges mentioned above while debating the others.

Although Graves and Karabayeva (2020) mentioned that increased employee workload is one of the challenges that is often associated with virtual teams, 58% of the survey's respondents stated that their workload is the same compared to working from the office, while 36% answered that the workload was increased. On the other hand, the outcomes of the analysis of the survey show that 51% of respondents noticed that they work more hours per day, which confirms the thought of Dettmers (2017) that long work hours are possible when working in virtual teams. These results can be obtained due to companies' expectations that the employee will be available more hours per day or because it is easier for employee to work more working from home because *"the physical spaces for work and leisure are not separated"*.

Next, in this research it was noticed that the major challenges that were stressed through the literature review, as well as the survey and interviews are the lack of social connection and lack of face-to-face communication. A number of authors, such as Raghuram and Wiesenfeld (2004), Golden (2006), Zhang (2016), agreed that the lack of social cues in the virtual interactions may lead to personal conflicts, miscommunication, and frayed relationships. It can be seen from the results of the survey's analysis that 57% of respondents notice that they communicate less working in virtual teams compared to traditional teams. Yet, 71% of the respondents answered that they feel connected with their team members. Although some of the respondents mentioned in the comment section: "*…more and more I miss the social contact, chatting, rumoring, having fun and coffee together*", and *"what I mainly miss is the social contact with colleagues..."*.

It should be noted that the results of the survey and interviews can be affected by the fact that 63% of respondents have been working in face-to-face teams and their experience in virtual teams is limited to the beginning of COVID-19 pandemic outbreak. Nevertheless, each and every participant of the survey and interview has been experiencing the challenges of working remotely, as one of the team leaders stressed in the interview: "*Virtual team members can struggle with many things, including: a feeling of disconnection or isolation from his/her team mates; uncertainty on how they are performing their daily tasks; reduction of their ability to maintain a wider view of what is going on in the day to day business; increased lack of focus on work tasks due to external distractions or mental 'claustrophobia'; the perceived repetitiveness of a working week at home*" (see p. 61).

Another team leader added: *"[The challenges of virtual teams are] Technical interruptions (e.g. hacker attack, load factor of server in order to provide sufficient system access and smooth communication channels)...too much communication channels increasing the complexity of communication (e.g. Skype, Teams, Slack, Outlook, Hotline, Personnel phone, WhatsApp, etc.)"* (see p. 63).

An informal interview was done with an employee who decided to leave the company. This person had only been working in a face to face team for 4 months before COVID-19 forced them into a virtual team. This person mentioned that one of the reasons they decided to leave was because of lack of communication with colleagues. They noticed that they went from daily conversations and discussions to a few times a week and so they became demotivated. Further, they found that learning new skills was harder and took longer. While this anecdotal evidence cannot be used to make any conclusions for this research, further research could be made that would explore if there is evidence of higher turnover due to virtual teams and/or the communication deficiencies within a team.

4. What are the main solutions for building a successful virtual team suggested by team leaders?

It can be noted that building a successful team is hard, but it is even more challenging to build a successful virtual team. To do so a manager will have to cross the distance and time boundaries, as well as battle challenges in a virtual setting. As it was mentioned earlier in this thesis, some of these challenges arise from dependence on communication technologies, others from lack of social interactions, and from being kilometers away from each other.

The role of the manager is very inportant in helping team members to combat these difficulties. While Graves and Karabayeva (2020) noted that proactive management will lead to positive experiences for virtual workers, and passive management is likely to result in negative experiences. One of the team leaders stressed in the interview that the importance of being the role model for team members as an approach in helping them to cope with challenges that virtual teams bring: *"Role model approach by proactive calls and asking for mental situation, situation at home (partner, kids, etc.), health status…proactive activation of mic/video and contribution of content"* (see p. 63).

Additionally, it can be seen from the results of the survey analysis, the more often a manager communicates with a particular team member, the better this team member feels about work, the team, and the company in general, which in turn leads to better productivity and outcomes of team work. It can be noted that 60% of the research participants have their One-On-One's with the manager from daily to weekly. This is likely a factor for the 79% of respondents that feel that their manager is concerned about their well-being and 69% of respondents that stated their manager recognizes their efforts and contributions.

Yet, it can be observed that it is important not only how many One-On-One's the manager and their team members have, but also the quality of these interactions, as one of the team leaders noted: *"Having fix One-On-One's does not work for everybody, neither in an office nor in a virtual one. Understand what works with employee for me to understand his needs and motivation"* (see p. 62). Another manager added: *"I found weekly One-On-One's were not as effective as the Standout Check In's and being available for impromptu meetings"* (see p. 65).

To continue the findings of Neeley (2020) that managers should not underestimate the need to communicate and use technology that provides social cues for regular conversations, one of the team leaders, when asked about strategies to overcome challenges, one manager mentioned: *"Tailor each method of communication to the individual, as each person often responds differently or prefers another type of approach. Focus on positives, both work and non-work related"* (see p. 61). Furthermore, another manager added: *"Asking people to adopt a certain behavior (even switching on the camera during calls, for example) does not always work. Being an example, but a tolerant one with a lot of patience might work"* (see p. 62).

Graves and Karabayeva (2020), as well as the author of this thesis, observed that managers should take measures to respond to a sense of isolation built by virtual work, as one of the team leaders mentioned: *"Expressing empathy is crucial. Acknowledge that you as a manager are also affected in some of the same ways; sharing best practices and methods to improve working conditions, communication, addressing personal issues, etc."*

Neeley (2020) stated that managers must withstand the urge to overcontrol virtual teams' members. Evidence for this can be seen from one team leader's comment: *"Newer associates need regular interaction to ensure knowledge progression and their needs are supported. Tenured associates - assess knowledge, do they need regular direction or can they operate independently"* It gives strong evidence that the team leader should give employees a level of autonomy that is appropriate for their level of competence and experience.

It can be concluded that further research into challenges of working remotely, their effects on employee's well-being, and solutions to overcome these challenges should be conducted, as one of the survey's respondents revealed: *"Even though I have a great team and manager, same as family and friends, I fell more and more alone :("*.

6 Conclusion

These days the character of work in companies is becoming more dynamic, complex, and global with the growing prominence of virtual teams. Distributed teams present a number of benefits to organizations trying to stay ahead of a more demanding work atmosphere, but equally offer numerous challenges for both team members and team leaders.

The main aim of this thesis is to identify factors contributing to building a successful virtual team and determine issues that a manager may face when working with distributed teams. By using a comparison between face-to-face teams and remote teams, any significant differences should be identified. Likewise, the objective of this thesis is to recommend ways of building a successful virtual team based on the results of the conducted research and reviewed literature.

In order to meet the objectives, this thesis is divided into the following sections: first, the literature review to emphasis research towards understanding of virtual teams and, above all, to pinpoint the challenges of remote work for leadership. Then, a methodological approach is described, and findings of own research are discussed. Lastly, solutions on how to overcome challenges of virtual teams were highlighted based on the results of the conducted research and literature review.

As it was mentioned earlier, the literature review part of this thesis focuses on virtual work. First, the concepts of teams and elements of effective teams were identified. Second, a concept of virtual teams was defined. This allowed to distinguish virtual teams from traditional teams, highlight advantages and disadvantages of virtual teams compared to face-to-face teams, and recognize areas where existing knowledge applies and areas where more research is needed. Third, a study of factors affecting virtual team effectiveness was conducted, as well as five problem areas of virtual work were identified.

In the practical part of the thesis, two international companies with offices in Prague were selected in order to understand how working remotely impacts an employee. For this purpose, a questionnaire consisting of 20 questions was created and uploaded to Survey Monkey. The link to the survey was distributed among the personnel of the companies. Additionally, interviews with team leaders were carried out via Skype. Then, all the obtained data was carefully analyzed and presented.

The conclusions of the data analysis were presented in the results and discussion part of this thesis by answering the research questions mentioned in the objectives part of this paper.

According to the results, although the vital features that separate virtual teams from traditional teams are restricted face-to-face communication due to the distance between team members and a heavy reliance on communication technologies. The differences between two types of teams lay in more areas, including the way team members interact, how they utilize resources, their work environment, cultural and educational background, and technological compatibility. Likewise, the factors that impact virtual teams are trust, communication, interaction, geographic distance, time zone differences, and organizational system. The significance of each of the factors can be argued and needs further research.

The following problem areas of virtual teams were identified: increased workload, technological challenges, weakened manager–employee relationships, low degrees of social connection, and the blurring of the boundary between home and work. According to the results, 57% of respondents noted that working in virtual teams is more challenging compared to face-to-face teams and 29% of respondents stated that working remotely is harder than working from the office. Furthermore, 36% of respondents noticed increased workload and 49% are working more hours per day. Additionally, 57% of respondents noticed a decrease in communication. Lastly, 56% of respondents noted that working remotely compromised the time they spend with family and friends.

The following practices to overcome the challenges of virtual teams could be recommended:

- Serve as a role model for the team members, be an example.
- Understand employee's needs and motivation.
- Tailor each method of communication used in the company to individual.
- Enable sharing of personal information, as well as information about day-to-day activities.
- Offer easy access to and support for videoconferencing (including training and technical support).
- Use Standout Check-ups in addition to planned One-On-One's.
- Share positive experiences at work.

- Take a holistic approach that recognizes the importance of employees' work and personal lives.
- Regular interaction with newer team members to ensure knowledge progression and their needs are supported.

Application of the approaches mentioned above should help to build a successful virtual team and to ease the impact of challenges of remote work on employee's well-being, as well as personal life. It should be mentioned that most deficiencies in a virtual team from this research points to the ability of the team leader to structure the team and encourage social discourse. Additionally, a strong focus by the company has to be put on providing tools to their management and employees, along with being clear about when and how to use these tools.

As with all studies, this research has a limitation that offer possibilities for future study. Unfortunately, just two companies have agreed to participate in the research. Furthermore, only 21% of employees who had received the link to the survey, had returned the filled in surveys. The limited number of participants, as well as limited number of companies, could affect the results of this research. Yet, future studies could look into the results of this study and by comparing the answers of participants to determine if there is the connection between challenges faced by virtual teams and company's culture.

Further research into challenges of working remotely, their effects on employee's well-being, and solutions to overcome these challenges is required, especially for enduring virtual teams that became a part of today's global, hypercompetitive environment. There are many questions that remain, including procedures that are unique to virtual teams, and which of them are effective. These are: ways of building successful relationships between team members and their manager; identifying an impact of communication and interaction on building trust in virtual teams. Virtual teams are an opportunity for academics and practitioners to collaborate and develop new ideas about leadership and organizations.

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8 Appendix

Appendix 1. Questionnaire

1.   What is your age?
18-20
21-30
31-40
41-50
51+

2.   What is your gender?
Male
Female
Other_____

3.   How long have you worked in the company?
Less than 1 year
1-3 years
4-6 years
7+ years

4.   Have you worked in a virtual team before COVID-19?
Yes
No

5.   (if yes in Q.4) How long have you worked in a virtual team?
1-2 years
3+ years

6.   How would you assess the impact of working in a virtual team on your everyday life compared to working in face-to-fate team?

Stress Level	Much more / More / The same / Less / Much less
Communications	Much more / More / The same / Less / Much less
Workload	Much more / More / The same / Less / Much less

7.   Is working in virtual team more challenging than working in traditional team (in the office)?
Yes
No

8. How often do you interact with team members?

E-mail/Phone	Daily / Every few days / Weekly / Monthly / Almost no interaction / No interaction
Skype	Daily / Every few days / Weekly / Monthly / Almost no interaction / No interaction
Microsoft Teams	Daily / Every few days / Weekly / Monthly / Almost no interaction / No interaction

Zoom	Daily / Every few days / Weekly / Monthly / Almost no interaction / No interaction
Google Meet	Daily / Every few days / Weekly / Monthly / Almost no interaction / No interaction
Slack	Daily / Every few days / Weekly / Monthly / Almost no interaction / No interaction
Webex	Daily / Every few days / Weekly / Monthly / Almost no interaction / No interaction

9. Do you feel connected to your team members working remotely?
Yes
No

10. How often do you communicate with your manager one-to-one?
Daily
Every few days
Weekly
Monthly
Almost no interaction

11. Do you feel that your manager is:
concern for your well-being   Could be less / Yes / No / Could be more
recognizes your efforts and contributions   Could be less / Yes / No / Could be more

12. How comfortable do you feel contacting your manager about the topic or issue?
Very comfortable
Comfortable
Neutral
Not comfortable
Only if (s)he contacts me

13. Do you feel that decisions are made quicker or slower when working remote?
Much quicker
Quicker
The same
Slower
Much slower

14. Hor do you getting answers when working remotely compared to working from the office?
Much easier
Easier
The same
Harder
Much harder

15. Do you work more hours per day when working remotely compared to working from the office?
Much more
More

The same
Less
Much less

16. How productive are you working remotely compared to working from the office?
Much more productive
Productive
Same
Less productive
Much less productive

17. Do you feel pressure to accomplish work faster or under tight schedule when working remotely compared to working from the office?
Much more
More
The same
Less
Much less

18. How do you find working remotely compared to working from the office?
Much more
More
Neutral
Less
Much less

19. Do you feel that working from home compromises the quality time that you can spend with family and friends?
Yes
Partially
No

20. If you have any comments, please feel free to leave them below
_____

Appendix 2. Interview questions:

1.   How does working with virtual teams differ from working with traditional teams?
2.   What tools and strategies do you usually use in working with the members of virtual teams?
3.   What are the challenges that members of a virtual team are facing on the daily basis?
4.   How are you, as a manager, helping the team members to overcome these challenges? Were there any strategies that did not work?
5.   Are there tools and strategies that you would like to use but cannot?

Appendix 3. Comments left by participants of survey - question 20.

#	RESPONSES
1	Working remotely, it is difficult for me to balance personal life and work time.
2	I am definitelly more productive at home because of lack of social interaction and chatting with my colleagues about non working things, however it is nice to be less isolated sometimes. So, in the future, I would prefer to work something like 70/30 - Remotely/Office.
3	There appears to be a problem with the survey in that when you go backwards and forward the question numbering changes. Originally a page seemed to duplicate but when I then went back to see what was wrong to tell you about it all of the number changed again. Hopefully it is ok (This final question is number 34). But maybe it is my browser. Question 9 - It was a yes/no response - but connectivity is about individuals. The people I get on well with I connect more with.
4	Home Office is not for all people. The person should have the responsibility and do the work that is needed and find mostly self-motivation.
5	It is missing coffee breaks with colleagues in office
6	I love working from home, it saves me tremendous amount of time (commuting)
7	It is a challenge, more and more I miss the social contact, chating, rumoring , having fun and coffee together. Even though I have a great team and manager, same as family and friends, I fell more and more alone :(Fingers crossed with your thesis.
8	Working from home should be always voluntary, no matter if there is a pandemic or not. Less stress, less time spent on transportation, higher productivity.
9	all about is due to missing Home office culture in our company. we were 90% maybe more office orientated , now we are 20% in office and 80 % working from home without any guidance.
10	The only issue with home office is related with human interactions. I could noticed more passive aggressive communication between the team which wouldn't occur if we were at the office face to face.
11	I find working from home a bit harder because I don't have a second screen there which is essential and also can't even connect a mouse to my tablet(unfortunately it's not a laptop). Also I don't have a comfortable chair to sit while working remotely.
12	Could have been more productive if the servers weren't slow.
13	We are a remote team here in Prague so our Line Manager is in Eschborn - therefor we don't have one-on-one meetings daily but via Skype.
14	I like the combination of remote and onsite work. When in the home office I am more flexible but onsite I have more interaction which I also appreciate.
15	Online meetings are fine, but it will never replace face to face communication. Some information can get misunderstood in written form.
16	In question 11 I would replace the words "could be less" with "too much" and "could be more" with "not enough". Almost any state could be rated as "could be less" and "could be more" at the same time - it isn't a meaningful evaluation by itself. Only by supposing that the person voting "could be less" desires it to be less

	that these options make sense.
17	Good luck)))))))))
18	I think working remotely is a more to be seen as a benefit rather than a more efficient way of working. Nevertheless, I am sure that with the proper technology and processes in place, home office can be a valid alternative to working on site, even permanently
19	working remotely saves the time spent getting to work and back home / you can also sleep longer which brings you more relax / you can eat more healthy (not using canteens) / more time for you and for your family as you are at home when you finish at work /
20	Overall not having separated physical spaces for work and leisure/rest time can be stressful and also compromise the time we have to spend with family/partner. Productivity can be can issue specially for those with kinds in school age. It's also harder to train new colleagues, create a team spirit and connect with the colleagues when interacting only virtually. The big advantage is the flexibility and the time saved on commuting to work - not to mention safety in this crazy times...
21	Workwise there is no issue to work remotely, the big advantage is the flexibility where you can start earlier and arrange other things in between.. But what I mainly miss is the social contact with colleagues. Also you can catch much more information when working in the office since at home you are completely isolated unless some message is spread over the email.
22	There is also an important environmental impact of home office. (Not using a car every day for commuting to work.)
23	My personal biggest downside about remote working is the absence of ergonomic furniture. Since the remote work started, I regularly suffer from lower back pain and sciatica. This would not have been the case that much if the employer would have to provide adequate furniture by law. I wonder how this complies with current european/local directives on health and safety at work and if/how this will be adressed in the future.
24	Working remotely has improved my physical and mental health. it has made my day-to-day work much less stressful
25	Good luck in your thesis
26	No questions about health related issues?

Source: Own Research, Survey Monkey, 2019-2020