

Czech University of Life Sciences Prague

Faculty of Economics and Management

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Diploma Thesis

Challenges in the workplace: The virtual team

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DIPLOMA THESIS ASSIGNMENT

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Thesis title

Challenges in the workplace: virtual team

Objectives of thesis

The main objective of this diploma thesis is to research challenges in the workplace, connected with virtual teamworking.

The main research question is: "What are the biggest challenges of virtual teams", and following on from that "How to overcome these challenges".

Methodology

This thesis is divided into two main parts – one theoretical and the other practical.

In the theoretical part a summary of modern thinking of the subject will be compiled, taking concepts and ideas from a wide range of current academic, scientific and professional writing.

The practical part of this thesis will be based largely on a detailed analysis of a questionnaire, circulated to workers who have experience with virtual teams. The main result will be to identify the most common challenges related to virtual teamwork.

In addition, interviews will be undertaken with workers and their managers to identify whether more complex underlying problems exist.

Having identified any difficulties, proposals will be made to overcome these, and to make the virtual team more efficient.

The proposed extent of the thesis

approx 60-80 pages

Keywords

efficient teamwork,international environment,management,multicultural team,online collaboration,teamwork,virtual challenges,virtual communication,virtual team

Recommended information sources

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Declaration

I declare that I have worked on my diploma thesis titled "Challenges in the workplace: 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 copyrights.

In Prague on 29.03.2021

Nadezda Kiseleva

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Challenges in the workplace: virtual team

Abstract

Due to the current situation associated with the Covid-19 pandemic, virtual teams are becoming increasingly popular among companies these days.

Modern technologies and technical communication tools allow employees to work in virtual teams. This form of work can be beneficial and convenient for both employees and companies. Simultaneously, collaborating in a virtual team involves certain risks and difficulties that can be avoided if the process is appropriately organized.

The primary purpose of this thesis is to identify the challenges associated with working in a virtual team. Additionally, give recommendations on how to deal with these issues of virtual collaboration.

The first part of the thesis is a literature review, represented by various books, articles in scientific journals, Internet sources, and other scientific materials on virtual teams. The second part of the thesis is represented by own research, divided into two parts: a questionnaire that examines the most relevant challenges of virtual teams nowadays and interviews that allow exploring the topic in depth. Based on the literature review and research, the answers to how to cope with difficulties in a virtual team and make its work more effective were proposed.

Keywords: efficient teamwork, international environment, management, multicultural team, online collaboration, teamwork, virtual challenges, virtual communication, virtual team

Výzvy na pracovišti: virtuální tým

Abstrakt

Vzhledem k současné epidemické situaci spojené s onemocněním Covid-19, se v dnešní době využití virtuálních týmů stává stále populárnějšími mezi firmami.

Díky moderním technologiím a technickým komunikačním nástrojům lze umožnit zaměstnancům pracovat ve virtuálních týmech. Tato forma práce může poskytnout prospěšnou a praktickou alternativu jak pro zaměstnance, tak pro firmy. Zároveň je ale kooperace ve virtuálních týmech spojena s určitými riziky a obtížemi. Těm by se ale dalo vyhnout náležitou organizací.

Primárním účelem této práce je identifikovat výzvy spojené s prací ve virtuálních týmech. Poté na bázi těchto poznatků je cílem doporučit, jak se s těmito obtížemi vypořádat.

První, teoretická část práce, obsahuje literární rešerši, která zahrnuje rozbor knih, vědeckých článků, internetových zdrojů a dalších vědeckých materiálů o virtuálních týmech.

Druhá, praktická část práce, obsahující vlastní výzkum, se skládá ze dvou částí. První část zkoumá nejrelevantnější výzvy virtuálních týmů v dnešní době ve formě dotazníku, a druhá část obsahuje rozhovory, které umožňují hloubkovou analýzu tématu. Na základě poznatků z literární rešerše a výzkumu byly navrženy metody, které by přispěly k efektivnímu zvládnutí potíží spojenými s prací ve virtuálních týmech.

Klíčová slova: efektivní týmová práce, mezinárodní prostředí, management, multikulturní tým, online spolupráce, týmová práce, virtuální výzvy, virtuální komunikace, virtuální tým

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1 Introduction

The development of information technologies and the internet change many aspects of doing business in modern companies. New products, sales channels, ways to promote goods and services, business processes are being created. As a result, new ways of organizing workspace and labor are being developed. Many organizations today use virtual teams; such teams open up many new opportunities for companies and employees and positively impact business activities. Virtual teams have several significant advantages, which can play a key role in implementing the project or any other goal set for the team.

However, virtual teams are not suitable in all cases, so it is worth analyzing their implementation's possible positive or negative effects. The positive effect can be disrupted by incorrect selection of personnel, communication channels, role allocation, and organization of other activities in a virtual team. Therefore, the systematic approach is important when implementing the work of the virtual team.

Building and effectively operating a virtual team involves positive aspects and challenges for both managers and employees. This topic has been studied in many scientific sources and is becoming more and more popular since recently the situation around the world has forced many companies to use virtual teams as the main way of collaboration. Therefore, the topic "Challenges in the workplace: virtual team" was chosen for this study.

To study the topic "Challenges in the workplace: virtual team," a literary review was conducted, and a study that includes a questionnaire, which was attended by 50 people with experience in working in a virtual team, and two interviews were taken to study the issue in more depth..

2 Objectives and Methodology

2.1 Objectives

The main objective of this diploma thesis is to research challenges in the workplace, connected with virtual teamworking. The main research question is: "What are the biggest challenges of virtual teams", and following on from that "How to overcome these challenges".

To answer these research questions, the following objectives were defined:

- Identify what a virtual team is
- Identify the differences between virtual and traditional teams
- Find out advantages and disadvantages of virtual teams
- Identify the types of virtual teams
- Identify the process of team formation
- Describe the process of virtual team's management
- Describe the importance of technologies in a virtual team
- Describe the relations between Covid-19 pandemic and virtual teams
- Identify the most critical challenges of virtual teams
- Find out the solutions how to overcome the difficulties with virtual teams
- Provide recommendations on how to improve the process of collaboration in virtual teams

2.2 Methodology

This thesis is divided into two main parts - one theoretical and the other practical. In the theoretical part a summary of modern thinking of the subject will be compiled, taking concepts and ideas from a wide range of current academic, scientific and professional writing.

The practical part of this thesis will be based largely on a detailed analysis of a questionnaire, circulated to workers who have experience with virtual teams. The main result will be to identify the most common challenges related to virtual teamwork. The questionnaire will be distributed among several participants, who have experience working in a virtual team.

In addition, interviews will be undertaken with workers and their managers to identify whether more complex underlying problems exist.

Having identified any difficulties, proposals will be made to overcome these, and to make the virtual team more efficient.

3 Literature Review

3.1 Definition of a Team/Group and Differences between them

Teamwork plays a leading role in achieving overall organizational results. The organization and its sub-units consist of groups of people or teams. Most organizational activities require some teamwork. An understanding of the concept of the group helps the manager to influence the behavior of employees and make the organization successful.

There are many possible definitions of a group. It is believed that there is no single accepted definition of a group, but on the other hand most people understand the meaning. There is a popular definition of a group in psychological terms: several people who collaborate with one another, they are aware of each other and they identify themselves as a group.

There is one more definition of a workgroup or team: it is the collection of people who share most of the following aspects:

- group recognition,
- definite membership
- a sense of shared plan and purpose
- interdependence
- take responsibility for actions
- interaction

The characteristics of a workgroup are not always easy to divide. The hidden feature of a group is effective cooperation, which helps members to work as a united team, maintaining harmonious relationships. To maintain proper communication and to be in supportive relationships members of a workgroup should respect:

- Values and norms of a group
- Responsibilities in a group
- Felling of trust and dependency

Furthermore, a number of additional points can be made. For example, for an effective workgroup all members should participate in the decision-making process, they should be open to express their feelings and disagreements, they should be able to resolve

the conflict. An organization should have a low level of staff turnover, accidents, and complaints.

If all teams are groups, it is not possible to say that all groups are teams. These two terms can be used interchangeably in some cases and it is not so easy to find a clear difference between a team and a group. A team occurs when a group of people works together to achieve a common goal. The team's potential is far greater than the potential of a group or individual efforts. People should understand that their success is dependent on the success of other members of a team. In other words, teamwork means that people contribute their different skills to achieve a certain goal, they share information, make decisions, and accomplish necessary tasks together. (Mullins, 2005)

3.2 Importance of Teams in Organisation

The behavior of people in a team is just as important as the behavior of people in individual projects. Not only members of the group should work well as a team, but also groups should be able to interact with other teams. Balanced and peaceful working relationships and exceptional teamwork help to increase the work performance and to create an inspiring spirit in a company. Effective teamwork is a crucial element of modern management. Teamwork is important for every organisation, notably for service industries, for instance hospitality businesses, where it is possible to observe the direct effect on customer satisfaction.

People use the teamwork when they want to show the advantages of collaboration and the need to use the individual strengths of employees. Sometimes teamwork helps to reorganise the way of work in a company. It helps to increase the competitiveness of a company because of:

- improved quality of a product or service
- improved productivity
- improved employees motivation and loyalty (Mullins, 2005)

3.3 Features of Teams in Organisation

One of the main features of a successful team is that all members of the team have a clear aim. This target gives them the common purpose-something they want to complete. This clear focus is a vision of where they could be as a team in the future. (Oxford, 2008)

In addition to the main feature of a team, several other important characteristics can be distinguished:

- Skills relevant for the project: Effective team is a community of competent professionals, who can show their best skills and talents.
- Excellent communication skills: Team members should be able to feel and listen to their colleagues. It is also important to provide feedback from team members and especially managers. Feedback helps lead team members and adjust misunderstandings
- Negotiating skills: Effective teams have to be flexible and able to adapt to particular conditions when needed. This requires team members to have good negotiating skills. Problems and relationships systematically change, requiring members of a team to deal with their differences.
- Mutual trust: Members of an effective team should believe in one another's abilities and skills to complete the work successfully. Trust helps them to be openminded, strongly organized, and honest with their colleagues.
- Loyalty: Members of a team should be willing to do anything that has to be done to help their team succeed. Their team is a source of professional and personal development.
- Conflict management skills: Teams should be able to resolve or manage conflict.
- Mutual support: Members of an effective team should have support from the management and company, including proper training, performance measurement systems, the benefits system, and infrastructure in the company. Management should provide the team with all the necessary resources needed to get the job done.

- Leadership: Professional leaders can motivate their team to deal with difficult situations. They help to set the goals and increase team members' self-assurance to help them realize their potential and to be successful.
- Company environment and culture: The corporate environment influences team effectiveness. Cultures that use innovative and efficient methods make great progress and make teamwork enjoyable and efficient. (Genc, 2019)

3.4 Definition of a Virtual team. Differences between Virtual and Traditional Teams

3.4.1 Virtual Team: Definition

Nowadays, the idea of a virtual team is gaining more and more popularity. In virtual teams the primary communication occurs by electronic means. This process enables organizations to make business without the physical availability of staff and traditional working hours.

A virtual team is a community or group where team members are geographically dispersed. They have limited face-to-face contact, and most of their time they work independently with the help of electronic communication tools to accomplish a common goal. Virtual teams collect employees' knowledge and combine them to make the process effective. (Bell & Kozlowski, 2002)

There are several elements, which define a virtual team:

The key point to be addressed in the definition of a virtual team is the virtual distance between members of a team. This distance includes time and organizational boundaries. Additionally, global dispersion and technology matter a lot to collaborate and communicate. These critical elements shape a virtual team and affect its performance.

A virtual team's degree of virtuality is also a factor to consider. The degree of virtuality is measured by the percentage of time spent on virtual work, the percentage of team members who work virtually, and the virtual distance between team members. The degree of virtuality influences the virtual team's sophistication and, as a result, its effectiveness. Individuals' ability within a virtual team to work together against shared goals, create and achieve successful results, and maintain collective accountability is directly related to the virtual team's effectiveness. Collaboration and teamwork appear to be critical in defining a virtual team, particularly given the high degree of dispersion and technology dependence. (Silvester Ivanaj, 2016)

Over the past several years, there has been a huge growth in organizations' use of virtual teams to coordinate the processes and this tendency is expected to continue in the future. (Dulebohna & Hoch, 2017)

3.4.2 Advantages and Disadvantages of Virtual Teams

Today, as a result of development and under the influence of globalization, many companies are expanding their borders so much that their employees, members of the same team, may not know each other personally. People may be located in different cities and countries, which means that they have different upbringing, belong to different cultures, and even speak different languages. Managing such "virtual" or "distributed" teams has its characteristics, pros, and cons.

Organizations may benefit from having virtual teamwork. For instance, professionals from different countries all over the world may mutually work on the same project. It does not require them to be physically at the same location. One more benefit is that virtual teamwork enables businesses to cut their travel budgets, people do not need to travel over long distances, they can solve their problems with the help of technical communication tools. Moreover, new knowledge and skills may be implemented more quickly, because team members can observe and learn a lot from many markets all over the world. Finally, companies can react more quickly to changing business requirements and rules and adjust virtual teams according to these changes. (Siebradt & Hoegl, 2009)

Analyzing the main advantages of virtual teams, it is possible to determine the main ones:

- Open and transparent structure. Openness promotes trust and honesty. The project manager creates and maintains an atmosphere of trust in the team and tries to reduce tension. The manager pays attention, not to individuals but actions.
- High level of flexibility;
- Increase team productivity by distributing tasks;
- Lack of geographical and other features
- Restrictions in the process of forming the team composition and its functioning;
- Reducing the costs of companies for the organization and maintenance of the employee's workplace, which allows highly qualified personnel to work remotely, which subsequently affects the quality of project development;

- High level of autonomy;
- High level of information exchange (for example, it can be publicly available to all team members). An ongoing exchange of information using various technologies. Each team member has access to the appropriate technologies for sharing current information.
- High status of information and personnel integration tools.
- High efficiency in decision-making, as they are often limited in time; the team demonstrates global thinking.

An effective virtual team focuses on global issues rather than private ones, which imperceptibly creates an atmosphere of mutual respect. Respect breeds engagement, without which team members can't be able to take responsibility for the result and work towards achieving a common goal.

On the other hand, organizations are facing certain challenges when they implement virtual teamwork in their businesses. Virtual teams, on the other hand, often have different issues. Virtual team leaders all too frequently assume that whatever works for them in the real world can be extended to their virtual teams, and they fail to realize what is necessary to make virtual teams work. As a result, team members may become disengaged and depressed and may even tune out quietly.

Organizations are only now realizing that, in addition to having the right mix of virtual communication technology resources, specific skills and competencies are needed to lead successful virtual teams. (Settle-Murphy, 2012)

Organizations should create efficient workflows across several locations to make virtual collaboration effective. Moreover, it is important to monitor the performance and arrange little face-to-face meetings through technical communication tools, because employees need to be motivated. Besides, it can be difficult to maintain a feeling of trust and good relationships among different locations and cultures. Finally, collaboration via digital media has some challenges, including, communication across different time zones and establishing a sense of belonging. (Makani, et al., 2016)

3.4.3 Differences Between Virtual and Traditional Teams

A virtual team is an alternative to the traditional form of business organization. A traditional team is characterized by the presence of a physical office of the company.

However, in practice, a mixed model is more common, in which a company with a physical office uses remote workers, outsourcing, or freelancing to solve most tasks.

Virtual teams may differ from each other, but it is possible to say that virtual teams are teams which use digital media to coordinate the work and to communicate. Members of a team are situated in different locations and on different time zones. On the contrary, traditional teams work together in the same location, members of traditional team communicate and coordinate their work in face-to-face meetings. (Afflerbach, 2020)

Virtual teams share some common characteristics with traditional teams, several unique attributes that define a virtual team. Virtual teams are brought together because each person has a specific skill, which is necessary to reach the common goal of a project. Each member of a team should have an assigned role, based on his or her skills and abilities. Members of traditional teams are chosen on proximity and sometimes location. But they follow the same pattern as virtual teams. Members of traditional teams are together to achieve a common goal, to recognize each other's habits and skills. But there is one small difference with leadership roles, it is more complicated in virtual teams because employees and managers do not have enough face-to-face meetings.

One more important thing is that all collaboration within a virtual team must be done using electronic methods, including video conferences, shared documents, emails, shared databases, different online chats and applications, and telephone communications. In comparison, traditional teams use face-to-face meetings, personal conversations to establish processes.

Cultural differences can be an issue in both types of teams. Traditional teams may feel cultural differences, but it can be minimized by a good working environment and corporate culture. Employees can have formal or informal communications issues or issues with a language barrier. IN virtual teams the situation is even worse. Cultural diversity is multiplied in these teams. In addition to that, members of virtual teams have distance and time differences, it is often difficult to be engaged in a project.

Supervision and management are driven by electronic methods in virtual teams. Managers and team leaders should be working closely with each member of the group and at the same time they should know how to establish effective teamwork and establish balanced and calm relationships in a team. In a virtual environment these tasks become even more complicated. Communication with groups and individuals must be done

electronically. It is not easy to monitor and control the employees and check measures of success in virtual teams.

Finally, there is one more difference between traditional and virtual teams – outside influences. All teams should be able to deal with outside influences. But in traditional teams this issue is a little bit easier to resolve, all members of a team are in the same location or geographically close and probably they have almost the same issues. Members of virtual teams can also have some outside influences, but they are invisible to their colleagues and leaders, that is why it should be a big issue to resolve them. (Guillot, n.d.)

3.5 Types of Virtual Teams

According to Deborah L. Duarte there are seven basic types of virtual teams :

- Parallel team
- Networked team
- Functional or production teams
- Project and product development teams
- Management teams
- Service teams
- Action teams

3.5.1 Networked Team

A networked virtual team consists of members who collaborate together to gain a common aim. Individuals who are in the team sometimes are not even aware of all members, teams or organizations in network. There is an issue with clear explanation and definition between organizations and teams. This type of virtual teams can be found in consulting organizations. Consulting firms are a typical example of networked teams. Members of the networked team receive a request from their client to receive an issue concerning, for example, supply chain services or logistics.

3.5.2 Parallel Team

Parallel virtual teams accomplish special tasks, assignments, and functions for regular organizations, which doesn't want to perform these tasks, or their business doesn't have resources or equipment to perform. Such teams often in different time zones, they

cross distance and organizational boundaries. If we compare the parallel virtual team and networked team, it is possible to see that it is clear who is in the team and who is not, parallel teams have a distinct membership. The members of a team usually work together on a short-term basis. They make recommendations for the development of organizational processes or to solve specific business issues. Virtual parallel teams are common for international organizations with worldwide business.

3.5.3 Project and Product Development Team

Virtual project and product development teams are working across distances and time. Members of the teams handle the projects for customers or users for an extended period, but the boundaries of this time are strictly defined. A new product, organizational process, or new information system are typical examples of product development teams' results. The main difference between parallel and virtual project teams is that a product development team occurs for a longer period. Members of the team have to make decisions, not just provide instructions and support. The final project and membership for these types of items are clearly defined. Functional or production teams perform regular work. Such teams are based on one particular function, for instance, accounting, training, accounting, or research and development. These teams differ from other teams in the organization, they have clearly defined membership. Many teams all over the world operate their businesses virtually in different time zones.

Sometimes these types of teams have an opportunity to work from home, members have access to workflow processes. They usually meet several times per year for face-to-face meetings to summarize and solve the most important issues.

3.5.4 Service Team

Service teams are teams that provide call center support or technical support. They locate all over the world and distributed across times and distances. Members of service or technical teams deal with network issues and upgrades. The typical example of service teams can be technical support teams, which provide their services across different locations. Members of technical support teams are responsible for handling user issues, installation errors, and many other technical issues that prevent the employees or customers from using the product or service. In other words, technical support teams

focus on helping clients or customers to use service or product more efficiently. (Duarte, 1999)

3.6 Virtual Team Communication

Virtual communication is how people collaborate without being in the same location. This type of communication is mainly used in the office environment almost in every industry. For employees and their managers in a virtual working environment, business collaboration takes place in various channels, most of them are technological:

- Instant messaging applications: iMessage, Viber, WhatsApp
- Video conferencing tools: Microsoft Teams, Zoom, Hangouts
- Project management tools: Asana, Trello
- Emails: Outlook, Gmail
- Social media platforms: LinkedIn, Facebook, Twitter
- Phone calls: Desk phones, mobile phones

When a team is working remotely, its members must get communication in a right way. Does not matter if it is a call center where employees are answering calls or if it is a management team who are solving the most important issues for a company, effective virtual communication matters everywhere. When people know how to communicate well, they increase their productivity.

But on the other hand, poor communication within virtual team increases the chance that the the whole project will fail. Even small misunderstandings can change the whole picture. (Dinardi, 2020)

3.7 Importance of Organisation of a Virtual Team

It is very important to qualitatively create the virtual team and to organize the virtual team working conditions. Different businesses always were spread across different locations all over the world. But recently the trend for virtual teams is gaining popularity. People across different locations have the same goal and shared responsibilities. (Zofi, 2011)

If a manager finds a strong group of people where everyone already knows each other and works well together, keep in mind that such a team can create even more barriers by starting to network with new, unfamiliar group members. Employees of such ready-made teams are very reluctant to share information, as they always have their own, proven

method of doing work. Invest in building relationships between all team members, or start with a clean slate, hiring new employees in each location.

Many employers believe that employees work effectively just in the office environment. In practice, you can also organize productive work remotely. More and more companies, including large ones, are doing this. Setting tasks is very important in a virtual team. When organizing remote work of employees, the importance of this issue increases many times. We can ask again, approach, and see what the other person is doing in live communication. In the virtual space, we rely only on a written source. The task should be short, specific, and not allow for different interpretations.

What is recommended to do for practical work and control of remote employees is to distinguish between general rules and a specific technical task. The first ones should be thought out, brought to employees' attention; in many companies, managers even conduct a test.

It is strongly recommended that all participants meet face-to-face at the beginning of the virtual teamwork. The essential elements of such a "start-up" workshop are getting to know other team members, clarifying team goals, explaining team members' roles and functions, providing information and training on how to use communication technologies effectively, and developing standard rules for collaboration. As a result, such workshops are expected to help clarify team processes, build trust, build a familiar interpretive context, and promote high identification with the team. At this stage, there should also be familiarization, clarification of goals, and team rules development. Initial field data that compares virtual teams with and without such introduction meetings confirm the overall positive impact on team performance, although more differentiated studies are needed. Experimental studies show that familiarity before starting computer work promotes cooperation and trust. (Lipnack & Stamps, 2000)

3.8 Importance of Technologies in Virtual Team

People communicate and cooperate to reach common business objectives. Virtual teams help companies to spread the businesses all over the world and to increase profitability by expanding geographic boundaries. (Russell & Wilson, 2013)

Technology is one of the most important aspects of building an effective virtual team. It is impossible to imagine a virtual team without technologies. In order to create richer dialogue, manage the time, more effectively use the resources, it is necessary to use

the right communication channels, including various technological tools. These online capabilities improve the operations of virtual teams. Among these technological tools are phone calls, messaging platforms, emails, software, file sharing applications, scheduling systems.

Technologies help to solve numerous issues related to various areas of business processes. The first thing is online learning, which allows employees to receive decent training from different professionals around the world. This virtual method helps them learn more and not be narrow-minded in their field of business.

Additionally, business social media platforms, such as LinkedIn and Facebook develop online communication, which increases a sense of unity and cohesion, which helps to improve relationships in the team and not be distracted by conflicts. Thus, increase the productivity of the virtual team.

File sharing applications enable the quick and easy exchange of important documents.

Video conference applications are becoming more and more popular. They allow virtual teams to hold meetings and even team buildings. These programs have greatly simplified virtual work since video conferences create the illusion of real face-to-face communication. (Zofi, 2011)

3.9 Team Formation

Just like in a traditional team, in a virtual team, members and their choice are important. The virtual team can be formed from various locations. But the challenge is to find out where the right person should be found. The team potential depends on this circumstance because managers or team leaders narrow their potential choice by recommendations or people they already know. (Edwards & Wilson, 2004)

The virtual team requires a competent and experienced manager, because online projects are more problematic and complex, and they need qualitative administration. The virtual team should have good schedule management to follow the deadlines, strong coordination of processes. (Lee, 2014)

Virtual teams and outsourced remote positions can be found in different spheres, such as search engine optimization, advertising, marketing, web design, public relations, financial and sales support. Talent can be found anywhere and everywhere, in other words globally.

Some organizations are so large that they have doubts about who is an expert in which field. A virtual team is a good solution and an extra opportunity for them. The main challenge for them is to identify and develop the process of how to find the right person with a specific set of expertise. The required expertise sometimes doesn't exist in a company. In this case, the virtual team can be extended by different professionals and experts outside the organizations. This procedure of broadening the expertise will help to meet customers' requirements. (Edwards & Wilson, 2004)

3.10 Management of Virtual Teams

As companies continue to expand worldwide, the number of people working together and separated by vast distances (and sometimes time zones) is skyrocketing. The concept of a virtual team has many advantages, but it also represents a unique set of management tasks.

A unique role in virtual teams is played by its managers. Managing success and guiding professional growth is difficult enough for any traditional team. For those in charge of virtual teams, designing and managing people poses several new and more challenging issues, all of which can be addressed with excellent preparation and the development of specific skills, especially active listening. (Settle-Murphy, 2012)

The management of a virtual team and a real (classical) one is similar in many ways, but there are also some features. Team management system is important. Real teams are most productive if the manager performs a connecting role between the team members, introducing adjustments in their joint work. In virtual teams, the manager initially formulates the goal and tasks specifically. In teams working remotely, explicit coordination is the most effective method. The manager must immediately distribute the functions and responsibilities, particularly their own, and continue to coordinate throughout the entire existence of the team, using various technologies and communication methods.

Making management decisions is very important too. One of the most challenging tasks facing a the virtual team manager is to develop a decision-making style and algorithm.

The main mistake of virtual team leaders is often that they first train their employees in communication skills in remote conditions, but at the same time forget about teamwork

skills. However, this is a defining skill for employees of virtual teams. Some completely different people do not know each other, and teamwork is essential for them.

It is crucial that each team member has leadership skills. In a situation of all team members' remoteness, it is much more difficult for the team leader to work and lead the team. Therefore, each employee should be able to take responsibility, make independent decisions, and be a leader when necessary.

Trusting relationships is an important aspect of managing a virtual team. In real teams, there are interpersonal relationships based on daily meetings and contacts. In a virtual team, trust is the performance reliability and the quality of work results. At the same time, the project manager should organize the process so that the team members provide the result of the appointed time.

In geographically separated teams, communication is an essential part of the workflow. Long-distance communication is not always convincing. Live communication during negotiations significantly improves the quality of perception. Virtual teams are often quite highly efficient

So, what correction should leaders make because of the new conditions – the gradual disappearance of real teams and the creation of an increasing number of virtual ones? First, of all-to, it reduces virtual distances between group members and creates trust between people and groups. Here is what the Virtual Team leader should pay special attention to:

- Clarity of communication: a clear statement of the vision of the main task.
- Team cohesion: to make each project participant feel needed, necessary for the project, and supported by the team; to make everyone a member of the project community and associate themselves with it.
- Cultural sensitivity: if the project involves people of different nationalities, it is necessary to demonstrate sensitivity to their culture's peculiarities and seek it from the rest of the team.
- Sensitivity to subtext: try to formulate all unclear aspects as accurately as possible, to ensure that the context is evident to all participants.
- Overcoming boundaries: to achieve the appearance of informal communication within the team, even if this communication is not personal, but through telephone and video communication; to make the team members feel part of one whole.

- Representative function: the virtual team manager is its representative in the circle of top management; it is necessary to ensure that the team members are evaluated on merit and rewarded. This function of project leaders has always been relevant, but for Virtual teams, its importance has increased several times because often, the success of a virtual team is less noticeable than the actual team.

- Share leadership: if the Virtual Team is large enough, then it is desirable to have a leader in each region with whom employees need to share even the most secret information and the most important powers.

- Allow the team to see each other: even if a minimal budget is allocated for trips to the regions of the project participants, it is essential not only to focus on their visits to the team members but also to allow them to visit each other, allowing them to communicate personally with each other.

On virtual teams, these qualities are especially significant. Since many time zones can separate them, virtual team members may work with some control. This results in a pause in input. When the team leader or boss is six time zones away, it is always easier to "beg forgiveness" than to ask permission. Leaders and managers must have confidence that their teams are behaving in the project's and company's best interests, and they must pay attention to even the most strident objections. (Katherine Brown, 2007)

3.11 Challenges of Virtual Teams

Both in a traditional team and a virtual one there are challenges, some of them are similar, some are completely specific. Despite the fact that virtual teams have a number of undeniable advantages, they are also associated with some difficulties that make the work of a virtual team more difficult. There are several main difficulties in the work of a virtual team.

3.11.1 Technological Challenges

Technological challenges are associated with setting this up, such as investment in technical equipment, IT support, training, as well as learning issues. (Zofi, 2011)

Technology is the base, that makes virtual work possible nowadays. Nonetheless, technological challenges can lead to unproductivity, inefficiency, and frustration of virtual collaboration. And as a result, the productivity of the whole team will drop. The most conspicuous challenges connected with technologies are:

Discomfort with technology: For some people, technology can be challenging. It is especially difficult to make a transition from a traditional face-to-face collaboration to a virtual one. To those who are new in a virtual world, virtual meeting facilitator or IT support training can be useful.

Technological equipment malfunction: Sometimes technology malfunctions can be time-consuming and causes delays. A virtual team must have some backup plan, which will allow implementation plans if technology fails.

Imbalance of technologies and objectives: Members of the virtual team must understand how particular tasks and specific technology collaborate because organizations spend a lot of money on purchasing and establishing technologies. Specific training should be established to teach employees how to select a proper technology. (Nemiro, et al., 2008)

3.11.2 Communication Issues

The second large group of challenges is associated with communication within a virtual team. This complexity includes several issues connected with cultural differences, slow decision-making process, brainstorming, productivity, feeling of loneliness, and separation in a virtual team. The communicational issue has a clear disadvantage of a virtual team. It is a potentially lower level of trust between employees, at least at the initial stage of work. When people constantly work together, they intersect in an informal setting, for example, at lunch or on a smoke break, which undoubtedly makes the connections between them closer. The team's fragmentation prevents the emergence of a sense of friendship, thereby increasing the likelihood of conflicts.

3.11.3 Brainstorming Issues

Brainstorming is an important technique that is used in virtual teams. However, brainstorming becomes more challenging when members of a team are physically separated. (Zofi, 2011)

For instance, brainstorming sessions held by virtual teams are sometimes not so fast and successful, as in traditional teams, where everyone is in the same room. (Robson, 2002)

3.11.4 Cultural Issues in Virtual Teams

Another advantage of remote teams is that they are very diverse in structure and composition. Structural diversity provides people with diverse work experiences and feedback and enhanced networking opportunities. The diversity of the composition (people of different nationalities, mentalities, ages) provides more different views on the problem, different points of view, allowing you to expand the overview, look at the situation from a new angle.

But at the same time cross-cultural differences can be an important issue a virtual team. Cultural differences can occur both in traditional teams in international companies and virtual teams. In the second case, this challenge is more common, since there is more chance that there are colleagues of different cultures or nationalities in a virtual team.

The pattern of beliefs, characteristics, or attitudes expressed by the people in an area is referred to as social culture. The word "community" has become increasingly popular in international management research over the years. This occurred in the area of science as well. There are four main dimensions of culture.

These values are masculinity versus feminine values, power distance or the limit to which people will recognize authority and difference in society, ambiguity avoidance meaning avoiding ambiguous situations, individualism meaning the self-definition of becoming or being autonomous or dependent on a particular group, and masculinity versus feminine values. Virtual teams that collaborate are conscious of their own culture and will advance in understanding other cultures.

Language and body language are not used in interactive virtual teams to communicate. Misunderstandings can quickly become a problematic issue in this situation. Three factors must be addressed when developing a collaborative team environment: individuals, process, and technology. The most critical part of a successful team is trust. Communication is the most crucial factor in maintaining trust among team members. People will only be able to understand and depend on each other if they have confidence. In a virtual workplace, trust is the essential element. (Zolingen S.J. van, 2013)

The nature of virtual teams can be described in two formats: the first one those teams located almost in the same area and the second one virtual teams, in which participants interact with each other from geographically dispersed locations. It is essential to distinguish these two types of virtual teams because there is a crucial thing, which plays a very important role-culture. Members from collocated virtual teams do not usually worry

so much about cultural differences, compared to individuals who collaborate in a global virtual team.

Culture can be a very critical issue, which can influence peoples' behavior directly through rules and norms when we communicate with each other. When we are socialized with our teammates, culture indirectly influence our communication through individual characteristics.

The need to adapt cultural understanding is crucial in a virtual team. Team members with diverse cultural backgrounds have different preferences and communication styles. It is more reasonable to adapt to different cultures by spoken communication. (Kirk, 2007)

3.11.5 Slow Decision Making Process.

One more important challenge is the slow decision-making process. The decision-making process can be decentralized. Hundreds and even thousands of decisions have to be made every day in every project. Some of them are small and seem not so important, some of them are big and significant for the success of a project. All decisions need to have inputs from various team players. Traditional teams have an opportunity to discuss concerning particular projects face to face because they have a great benefit, they are co-located. Virtual teams do not have this opportunity. Separation by distance and time can cause delays and become a moderator to timely decision-making. Accordingly, an imperative issue affecting virtual teams is the slow decision-making process and certain project management modifications have to be done to amend this problem. (Martinelli, et al., 2017)

3.11.6 Feeling of Separation and Loneliness

One more challenge, connected with communication is a feeling of separation and loneliness among virtual team members. A common corporate culture with shared values and standards is one of the main factors of success of any company. (Frey, 2001) Virtual environment can influence this factor. Workers feel isolated from other team members, may feel information gaps which can influence possible organizational changes in the future. Or potential decisions of organizational structure and its functions. Present conditions and the mental stability of employees can influence the future of the organization.

The lack of personal interaction which happens in virtual teams can lead to increased cases of misinterpretation of communication and cause feelings of isolation, loneliness, and dissatisfaction among virtual team players. This challenge should be solved with a structured successful implementation of virtual teams. (Morley, et al., 2015)

3.11.7 Productivity

Productivity is something that directly affects the performance of the team and its final product or outcome.

Informal social interaction between virtual team members leads to a more productive approach and helps to create a shared group identity and to establish trust between members of a team. Therefore, virtual teams should be allowed to collaborate outside of formal meetings. Additionally, day-to-day activities may cause distractions from group tasks and disrupt teamwork and reduce productivity. (Morley, et al., 2015)

A lot of things can influence employees' productivity. For example, the manager's lack of clear directions, minimal training provided by the company, inappropriate management behavior, or poorly designed workflow. In some cases? One employee's workgroups carry more weight and do much more, when their colleagues are allowed to do minimum. (Bowles D., 2009)

3.11.8 Distraction in Virtual Teams

Day-to-day activities may cause distractions from team tasks. But on the other hand, the question of productivity is different for different people. Some teams work more efficiently, some keep the same pace of work, for some the transition to a remote format and virtual teams are more difficult. How remote jobs and virtual teams affect performance will be recognized in the survey in the practical part of this thesis.

3.12 Virtual Teams During Pandemic of Covid19

The COVID-19 pandemic has brought an unpredicted social and economic crisis that has affected many businesses all over the world in a bad way. Many organizations implemented virtual teams and started to manage their businesses remotely due to health concerns. This can be challenging, especially for employers and employees that didn't have experience with virtual collaboration and are used to face-to-face communication and also for those members of a team who are not technically savvy. (Agarwal, et al., 2020)

During a pandemic situation, it is more challenging to organize the onboarding process. It can be problematic for newcomers to the company to enter the workflow if it happens virtually. If possible, newcomers should visit the organization's physical office before they begin working in virtual teams. This should be done to build relationships with colleagues and managers. (Graves & Karabayeva, 2020)

Such changes have led to the fact that the importance of being able to work effectively remotely is no longer disputed by anyone, only the formats of remote work are disputed. No one knows how long the COVID crisis will last, most probably many people will be working remotely in virtual teams for at least a few more months. Performance may suffer, but it shouldn't hurt. An agile approach can ensure that remote teams function efficiently and make them more resilient in the future.

4 Practical Part

The practical part of this thesis consists of two parts. The first part is represented by a questionnaire conducted among employees of various companies around the world. The second part of this study's practical part is two interviews taken from employees of different companies. One of the respondents holds a managerial position in a small company in Prague that deals with accounting. The second respondent is a junior employee of a large international company, which provides customer support for various companies all over the world.

4.1 Questionnaire Design and Distribution

The questionnaire was created specifically for this master's thesis, exclusively for educational and research purposes. The questionnaire was created on the platform [Survio.com](#). The survey was created to study the challenges of working in a virtual team to find which challenges are most relevant for certain people in different companies.

The final version of the questionnaire includes 17 questions, which are closed questions with different answer options. This study guaranteed the anonymity of the respondents, so their answers can be considered subjective and truthful. The survey was attended by 50 people, people who have experience in working in a virtual team. People who do not have experience working in virtual teams did not have access to this questionnaire, as their opinion could make the study irrelevant.

After all, respondents completed the questionnaire, it was analyzed and compiled into statistical data using the results section on [Survio.com](#). Additionally, Excel was used to analyze the observed data.

As mentioned before, the survey consists of 17 questions; the survey starts with the standard questions about gender, age, level of position in a company, duration of work in a virtual team. This information allows us to learn more about the research group.

Next, the respondents are asked to answer several questions related to virtual teams' most important challenges, described in the theoretical part of this study. The questions cover technical problems, communication problems, differences in the team members' cultures and personal characters, etc.

4.2 Respondents

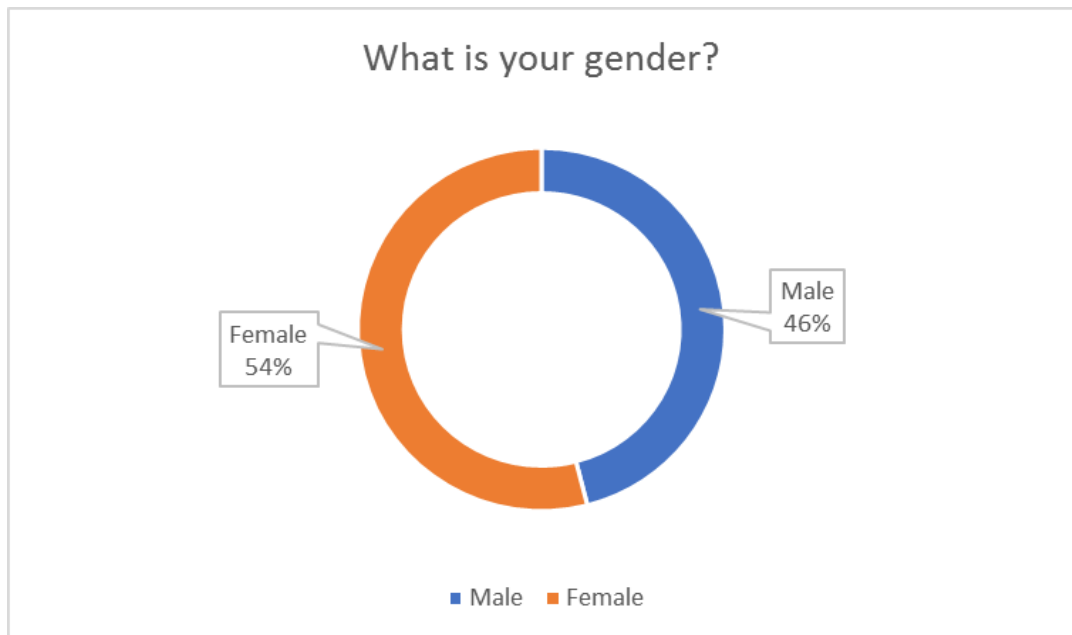
The total number of respondents is 50 people. Figure 1 represents the distribution of gender of respondents. Male respondents are represented by 46%; female respondents are represented by 54%. The gender distribution of the research group is almost equal.

Table 1 Gender distribution in the questionnaire

Gender	Number of people
Male	23
Female	27

Source: Own research

Figure 1 Gender distribution in the questionnaire,%



Source: Own research

Figure 2 represents the age distribution among the participants of the research. It is possible to observe that the largest age group of people falls on the age 18-26(74%), then

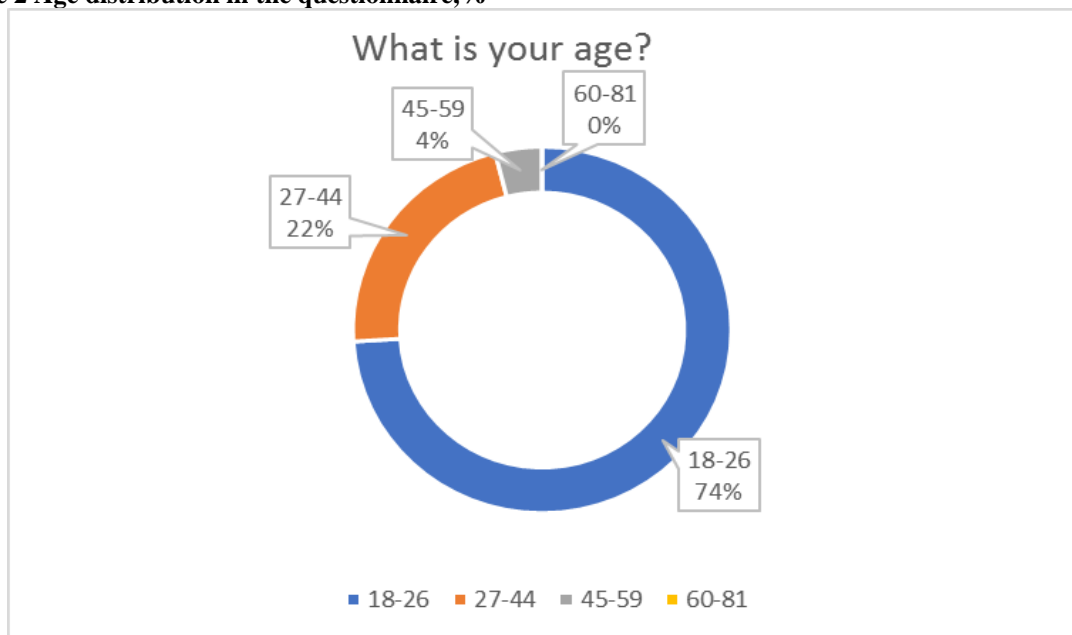
there are 22% of participants of the age 27-44, and the age 45-59 years represents the smallest group of respondents. (4%)

Table 2 Age distribution in the questionnaire

Age	Number of people
18-27	37
28-44	11
45-59	2
60-81	0

Source: Own research

Figure 2 Age distribution in the questionnaire,%



Source: Own research

The next question is about the duration of working in a virtual team, and the specific wording of the question was as follows: "How long have you been working in a virtual team?" Figure 3 represents the results. It can be seen that the majority of respondents have less than one year of working experience in a virtual team. (70%) A few people have one-

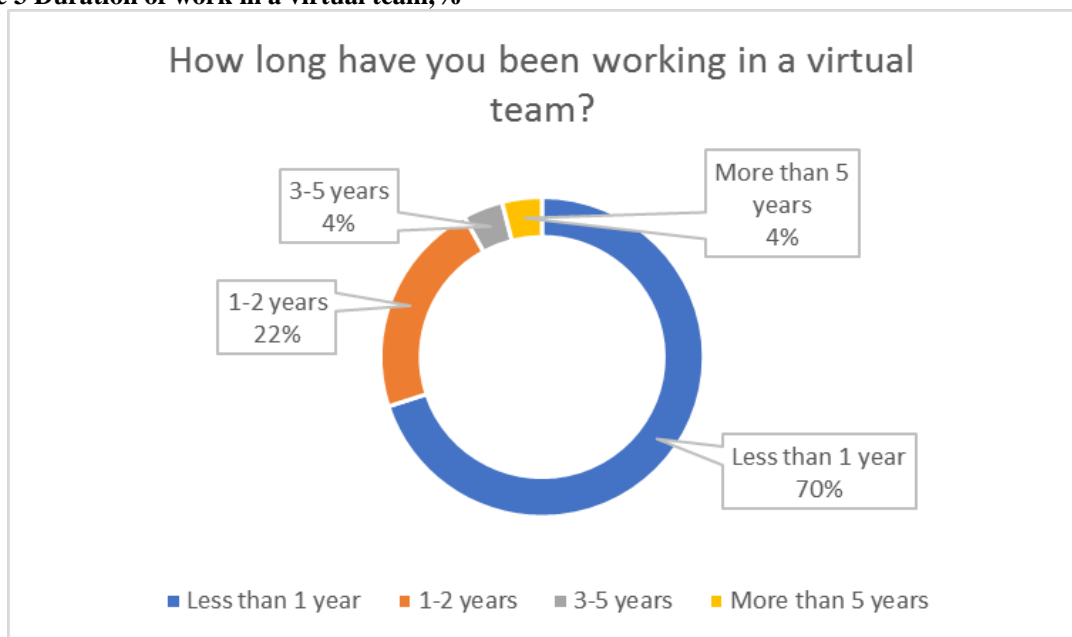
two years of experience working in a virtual team. (22%) Followed by the smallest number of people taking part in the survey: 4% for three-five years of experience and 4% for more than 5 years. Since most of the people who passed our survey have only one year of experience working in a virtual team, it is possible to assume that this type of remote work is relatively new for most people. Perhaps this statistic is related to the fact that people did not have the opportunity or need to work in a virtual team before the coronavirus pandemic.

Table 3 Duration of work in a virtual team

Duration of work	Number of people
Less than 1 year	35
1-2 years	11
3-5 years	2
More than 5 years	2

Source: Own research

Figure 3 Duration of work in a virtual team, %



Source: Own research

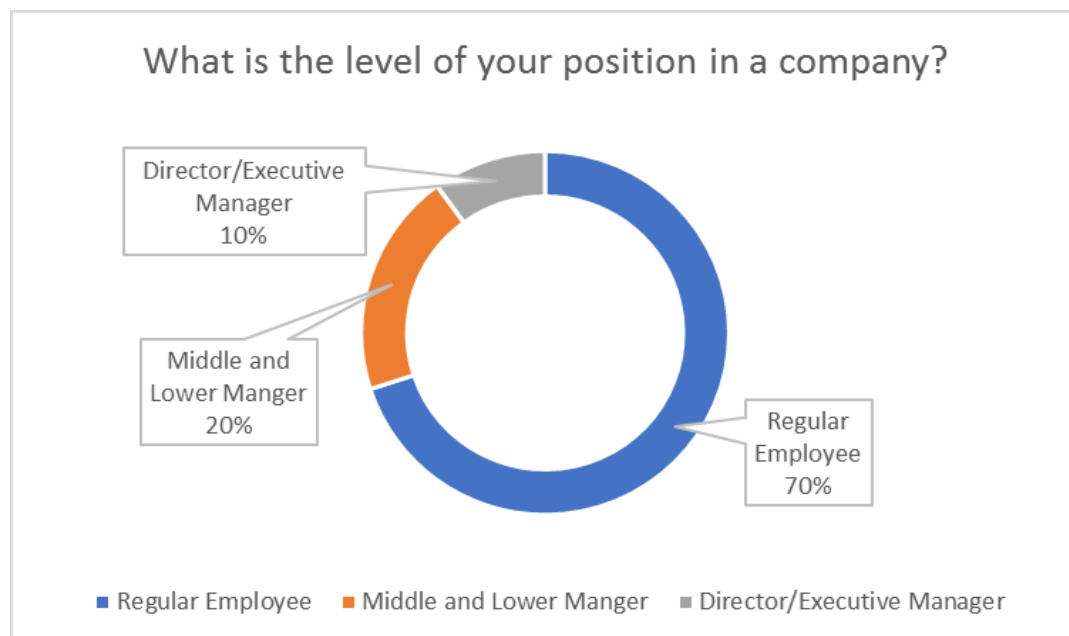
Furthermore, the last question, which will allow readers to learn more details about the research group, is related to the company's level of the position. This question is posed as follows: "What is the level of your position in a company?" Most of the respondents hold regular positions in the company(70%); the second-largest group is middle and lower managers(20%), and only four people from the survey are company directors(10%).(Figure 4)

Table 4 Level of position in a company

Position in a company	Number of people
Regular employee	35
Middle and lower manager	10
Director/Executive manager	5

Source: Own research

Figure 4 Level of position in a company, %

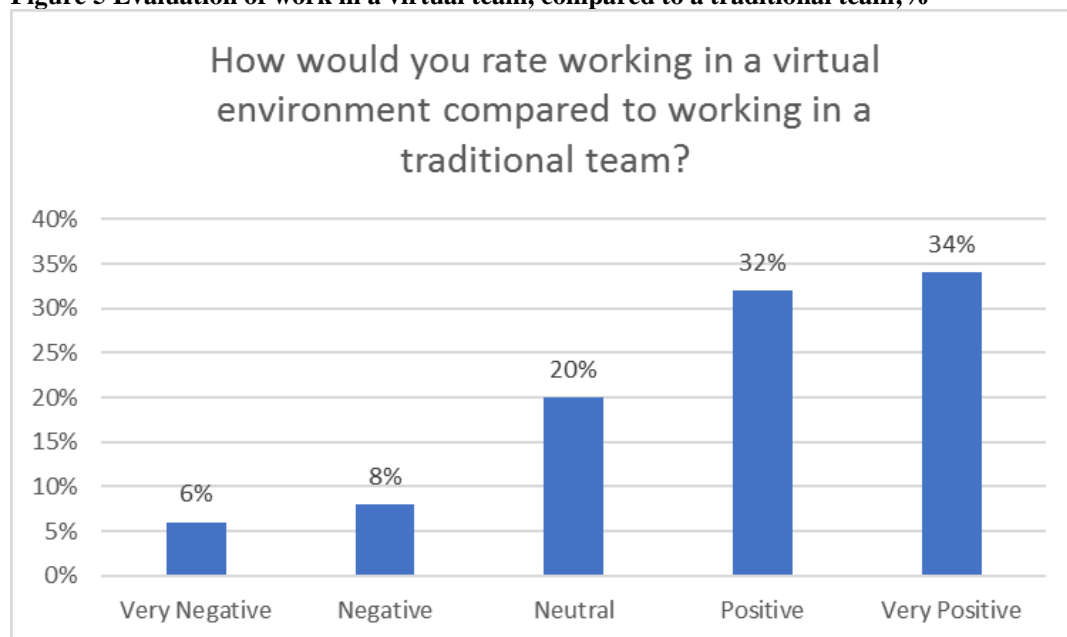


Source: Own research

4.3 Analysis of the Survey

The first question will help analyze and determine how respondents feel about virtual teams compared to traditional ones. To make the analysis more comprehensive, it is needed to compare the duration of working in a virtual team with the answers to the question "How would you rate working in a virtual environment compared to working in a traditional team?" Nevertheless, Figure 5 shows that most of the respondents positively evaluated virtual teams compared to traditional ones. 32% of respondents have positive and 34% very positive experience.

Figure 5 Evaluation of work in a virtual team, compared to a traditional team,%



Source: Own research

In Table 1, it is possible to observe that the majority of respondents have less than one year of experience in a virtual team. It is possible to notice that these people are satisfied with a virtual team's working conditions compared to the traditional one. Most of the respondents 12 and 11 chose the largest category "Positive" and "Very Positive", respectively, which means that they gave positive feedback. When people have worked for one to two years in a virtual team, the statistics are also positive concerning the virtual way of communication. Unfortunately, few respondents have more than three years of experience working in a virtual team. However, this question also showed that most of them have a positive perspective about the virtual team.

Table 5 Comparison of the duration of work in a virtual team and the evaluation of work in a virtual team

Experience	Very Negative	Negative	Neutral	Positive	Very Positive
Less than 1 year	3	2	7	12	11
1-2 years		1	2	4	4
3-5 years				1	1
More than 5 years			1		1

Source: Own research

The following two questions are devoted to the problem raised in the theoretical part of this thesis. This is a technical problem. First, it is necessary to determine what technical devices are used for the virtual teams' effective work participating in our survey. The first question sounds like this "What technical tools do you use to communicate with your virtual team members?"

There are several answers to choose from; the respondent can choose several options or add their answer option that is not listed in the survey. From the literature review, it can be seen that the most frequently used virtual teams are the following technical devices: phones, e-mails, video conferencing platforms, internal social networks, and cloud storage services. That is why they were listed in our questionnaire.

The introduction of collaboration technologies-from, from shared workspaces to multi-point video conferencing - all make teamwork easier without a doubt. However, choosing the "best" technologies does not necessarily mean using the newest or most opportunistic. In the search for stability, уьздщнууы do not necessarily need to be at the forefront of high-tech. If the team has to take the time to connect or link their work together, then all attempts will go down the drain. So it is better to be more straightforward. Also, members of a virtual team will have to sacrifice some features in order for everyone to be on the same level. Otherwise, there is a risk that will create a second-rate team and reduce overall efficiency.

Figure 6 shows that the emails and videos of the conference received the same higher number of votes. (27.1% and 27.8% respectively) Emails are a universal way to send information and communicate in a business environment. This method of switching has been used for a long time and still has not lost its relevance. As for video conferencing devices, this type of information exchange is quite new in everyday use. However, judging

by the survey, it is also prevalent. Video communication conveys much more emotions than a phone conversation — it is important to establish contact with the interlocutor and solve business issues. Besides, communication in the video format does not allow distractions and focuses only on communication, as in a personal meeting.

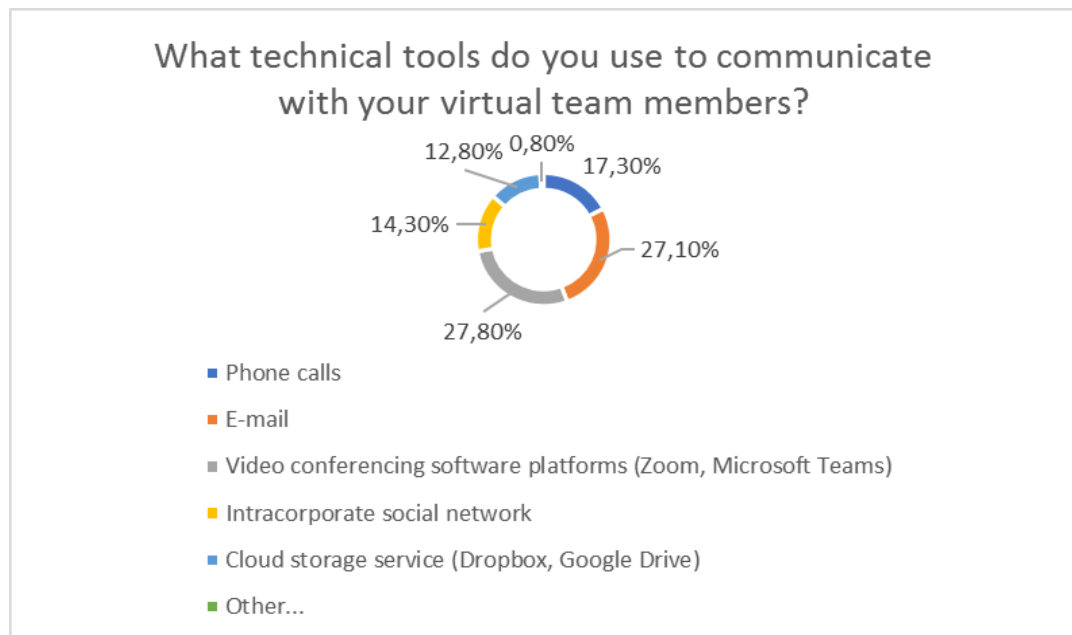
In third place in terms of the number of responses are telephone conversations. (17.3%) When the interlocutor has received the message, it is possible to know when he got it. Moreover, he, in turn, knows that the respondent has found out his reaction.

In contrast to the situation when people send a business letter, they can ask additional clarifying questions immediately. Furthermore, immediately eliminate possible misunderstandings and misinterpretations (this applies to both parties).

Intercorporate social networks rank fourth, with only 19 out of 50 people using this method of communication in a virtual team. (14.3%) Social networks are useful for private life communication; they are also becoming increasingly important in the business sector. More and more companies use social networks as a communication platform between employees to optimize virtual teams' internal collaboration.

In the very last place of the options offered in the question are cloud storage services, such as Dropbox, Google drive. Only 17 people indicated that they use these services. (12.8%) This may be because, in some companies, information is stored on a server that employees of companies have access to, and cloud storage services are not relevant.

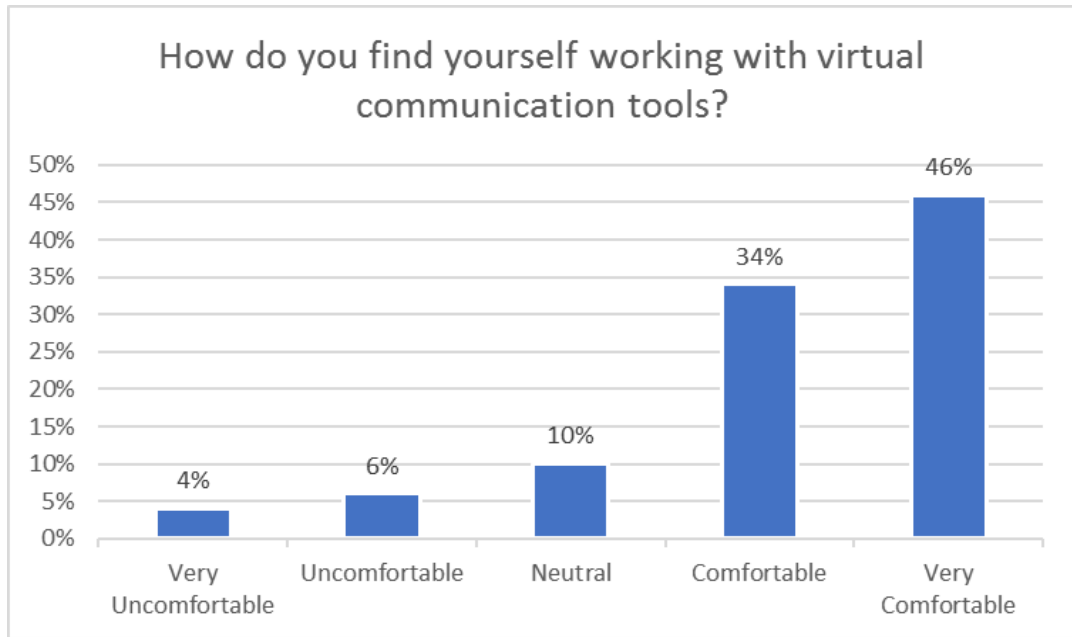
Figure 6 Technological tools used for communication in a virtual team, %



Source: Own research

The next step is to determine whether the respondents feel confident and comfortable working with technological equipment in a virtual environment. The question is as follows: "How do you find yourself working with virtual communication tools?" The respondents are asked to rate their experience from 1 to 5 inclusive, where one means very uncomfortable, and five means very comfortable. Figure 7 shows that 80% of respondents feel very comfortable working with technical devices.

Figure 7 The level of confidence in working with technical devices,%



Source: Own research

To be more detailed in the analysis, it is necessary to compare the answers to this question with the respondents' age. It is shown in Table 2 below.

From 18 to 26 years, the age group has almost no technology problems; only two people answered that they are very uncomfortable or uncomfortable using technological devices working in a virtual team. In the age group from 27 to 44 years, most respondents also do not experience difficulties. Unfortunately, the age group from 45 to 59 years is small in this study, but these two people have different experiences with technology; one feels uncomfortable and the second one quite comfortable working in virtual devices.

Table 6 Comparison of the respondents ' age with the level of confidence in working with technical devices

	18-26	27-44	45-59
Very Uncomfortable	1	1	
Uncomfortable	1	1	1
Neutral	2	3	
Comfortable	14	2	1
Very comfortable	19	4	

Source: Own research

To conclude the question about the difficulties with technology, it should be said that most of the respondents still feel confident with various technological programs and devices, regardless of the age group.

The next question of the survey is devoted to the difficulties of virtual collaboration with colleagues. This question is general and will help to assess the overall situation with communication in virtual teams. The question is: "Do you have any challenges related to virtual collaboration with your colleagues?"

Participants are invited to choose one of the suggested options from 1 to 5, where 1 is "Strongly disagree," 2 is "Disagree," 3 is "Neither agree nor disagree," 4 is "Agree," 5 is "Strongly Agree." Figure 8 shows that 30% of the respondents did not give a definite answer to this question (neither agreed nor disagreed), and 28% of the respondents chose option 4, which means that they agree with the question and have difficulties with virtual collaboration. An additional 12% of respondents chose option 5, which means that they strongly agree with this statement and have more problems communicating with colleagues in the virtual team than the traditional one. 14% and 16% of respondents disagree and strongly disagree with this statement. They have absolutely no difficulties with collaboration with colleagues.

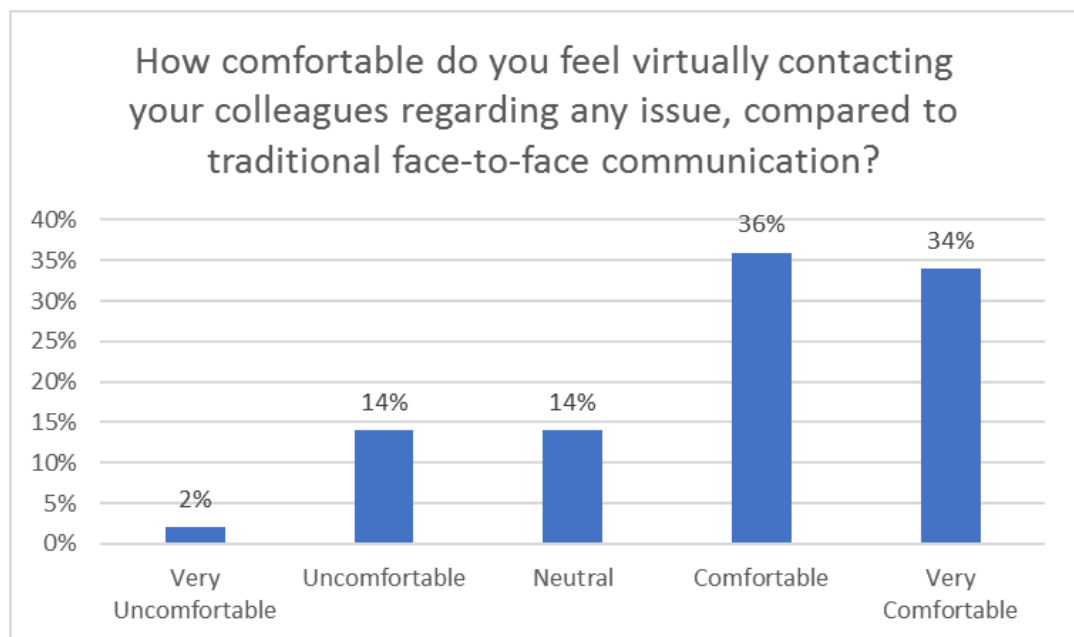
Figure 8 Challenges with collaboration in a virtual team, %



Source: Own research

The following question also applies to the general questions section related to communication among virtual team employees. The question is: "How comfortable do you feel communicating with your colleagues on any issue, compared to traditional face-to-face communication?" 34% and 36% of people feel very comfortable and comfortable, respectively. In the case of a negative and neutral position, the votes were divided almost equally. 14% of respondents took a neutral position, and 14% feel slightly uncomfortable and 2% very uncomfortable when they contact their colleagues in a virtual team compared to the traditional one.(Figure 9) If it is manageable, managers should take the time to help the team members get to know each other better, personally and professionally. Moreover, highlight the overall vision and a set of fundamental rules by which the team will work. Schedule a meeting as early as possible and keep in touch semi-annually or annually as much as possible.

Figure 9 The level of comfort of working in a virtual team compared to a traditional team



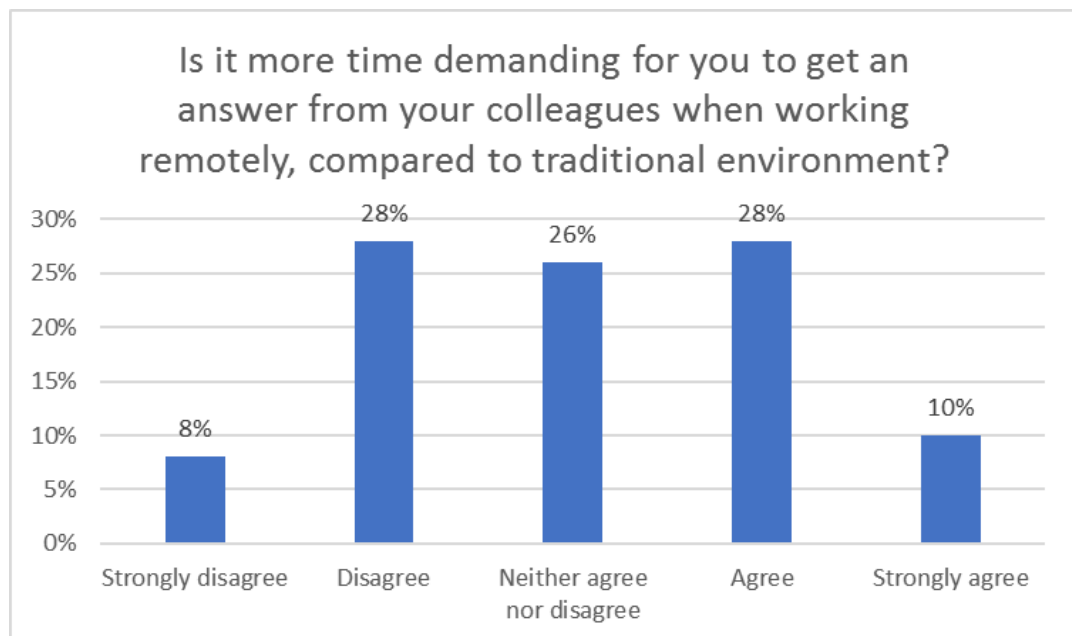
Source: Own research

The next problem raised in the theoretical part of this thesis is the slow decision-making process in a virtual team. These questions are: "Is it more time demanding for you to get an answer from your colleagues when working remotely, compared to the traditional environment?". "Is it more time demanding to answer your colleagues' questions when working remotely, compared to the traditional environment?".

These two questions are related and show how team groups evaluate their colleagues and themselves regarding the time spent on a particular problem.

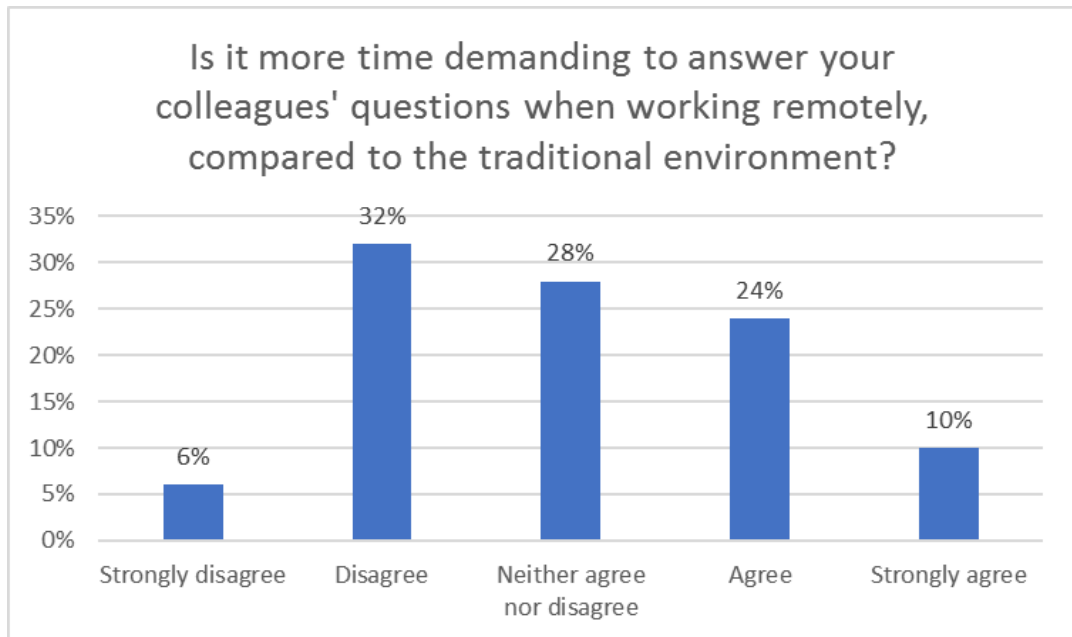
In both questions, a significant part of the respondents took a neutral position. In the first question (Figure 10), 26% neither agree nor disagree, and in the second question, 28% took a neutral position. (Figure 11) As for the positive and negative responses, in the first case, when it comes to colleagues and the time spent on getting an answer from them, 38% agreed with this statement together, and 36% refuted it. (Figure 10) In the second question, which concerns the respondents' own time spent, the answers are opposite. 34% of respondents believe that they spend more time giving an answer or feedback to a question, working in a virtual team than in a traditional one. (Figure 11) On the contrary, 38% do not believe that this slows down the decision-making process. Even though the percentage of people was divided almost equally, it can be noted that more people believe that their contribution to the work of the virtual team does not slow down the decision-making process. At the same time, according to the respondents, their colleagues have some problems with this issue.

Figure 10 Time evaluation, spent on getting an answer from colleagues, working in a virtual team.



Source: Own research

Figure 11 Time evaluation, spent on answering a question from colleagues, working in a virtual team.

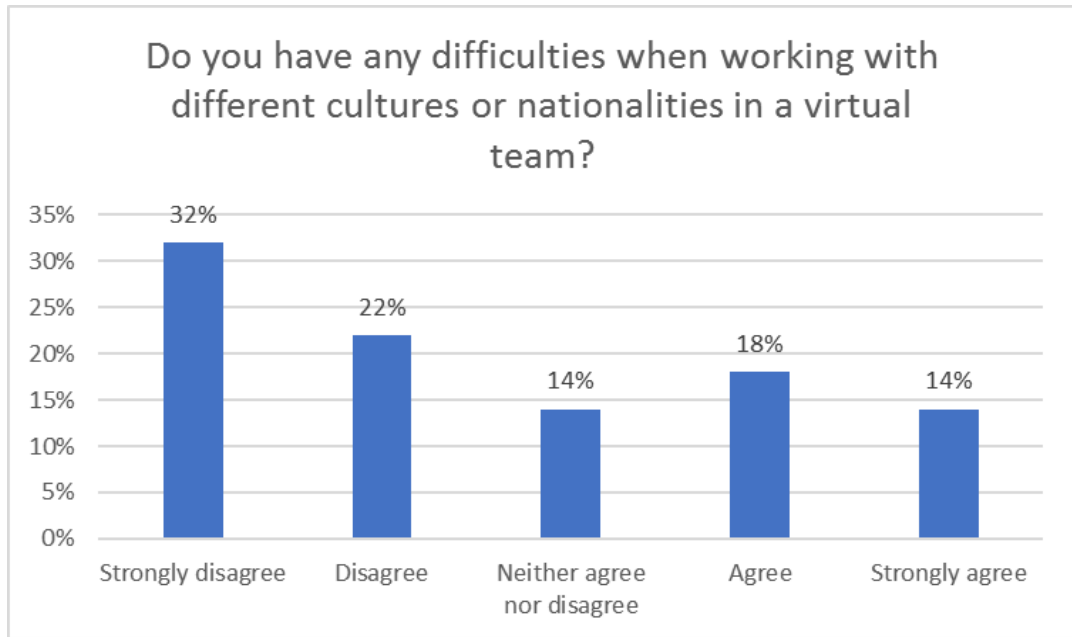


Source: Own research

Being receptive to a different culture in a virtual space, given people's characteristics from different places on the planet, is even more important than in real life. Employees need to know the cultural differences in a team and promote them among the employees. For example, some people can send short and "straightforward" emails to other team members. If members of a virtual team do not know that it is part of her culture, they may feel uncomfortable and think that she or he mistreats them.

The next two questions relate to personal and cross-cultural differences. The question: "Do you have any difficulties when working with different cultures or nationalities in a virtual team?" concerns the difficulties associated with cultural and national differences. Although this issue is considered quite relevant today, the survey shows the opposite. 32% of respondents say that they strongly disagree that they have difficulties working with different cultures and nationalities. Also, 22 % of respondents disagree with this statement. 14% hold a neutral position. (Figure 12) Despite the differences in approaches to work among different nationalities and the peculiarities of the regime and principles of work in different countries, only 32% of respondents feel the difficulties of working in a multinational team. Perhaps they need time to get used to different cultures to start working effectively.

Figure 12 Impact of cultural differences on a virtual team, %



Source: Own research

The next question is related to personal misunderstandings between colleagues in the virtual team. The question is: "Have you ever felt a personal misunderstanding with your colleagues in a virtual team?" In this question, there are only two possible answers: yes and no. The majority of respondents (56%) answered positively to this question, respectively; 44% answered negatively. (Figure 13) This means that such complexity in work exists. Remote communication changes the normal rhythm of a conversation. The delay between messages often leads to emotional reactions to our comments being delayed or hidden. Sometimes, after sending an email, employees immediately feel unsure about how it would be received. The boss can consider this letter an encroachment on his time. Even when such asynchronous communication becomes a habit, it can still conflict with social interaction's typical rules. If we do not get an immediate response, we can get distracted, doubt ourselves, or even hold a grudge against our team. To keep productivity up, remote teams need to find new and better ways to communicate.

Figure 13 Impact of personal misunderstanding on a virtual team.



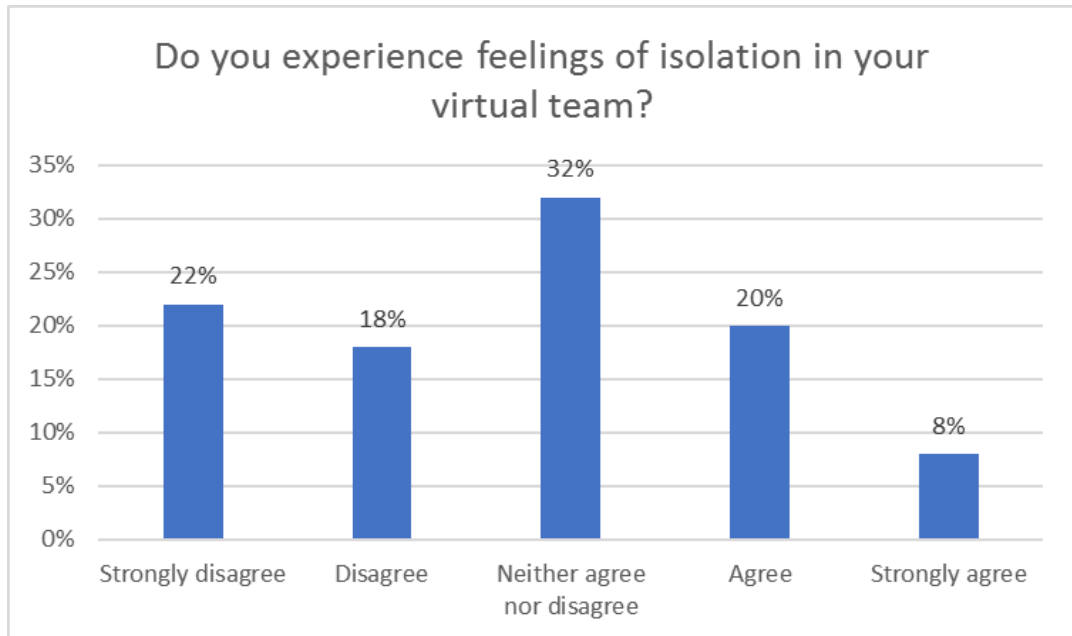
Source: Own research

One of the problems with managing remote employees is that people can feel lonely and isolated. Not everyone copes well with this style of work. Most people do not have this problem and love the freedom that comes with working from home, but it is important that employees can check on their work from time to time and make sure they are successful.

For many virtual teams' members, a huge disadvantage is the feeling of isolation that will inevitably overtake any remote employee. In this study, respondents were asked whether they felt a sense of isolation in a virtual team. As in many of the previous questions in this survey, there are several possible answers from 1 to 5. Where 1 is "Strongly disagree," 2 is "Disagree," 3 is "Neither agree nor disagree," 4 is "Agree," 5 is "Strongly Agree." Figure 14 shows that 32% of the respondents gave a neutral answer to this question, 8% of respondents strongly agreed, and 20% agreed that they feel lonely being in a virtual team. The percentage of those who agree is less than those who deny this statement. (40% of respondents) If we do not consider those who gave a neutral answer to this question, then for those who participated in the questionnaire, the problem of feeling alone in a virtual team is not important enough. Perhaps those who answered negatively to this question conduct constant communication and discuss some important issues so that everyone feels part of the same team.

Virtual work is very isolating. Members of a team may feel the absence of a manager. Stay in constant contact with employees is essential. Talk to them about their daily work responsibilities and their day, mood, and social life is essential.

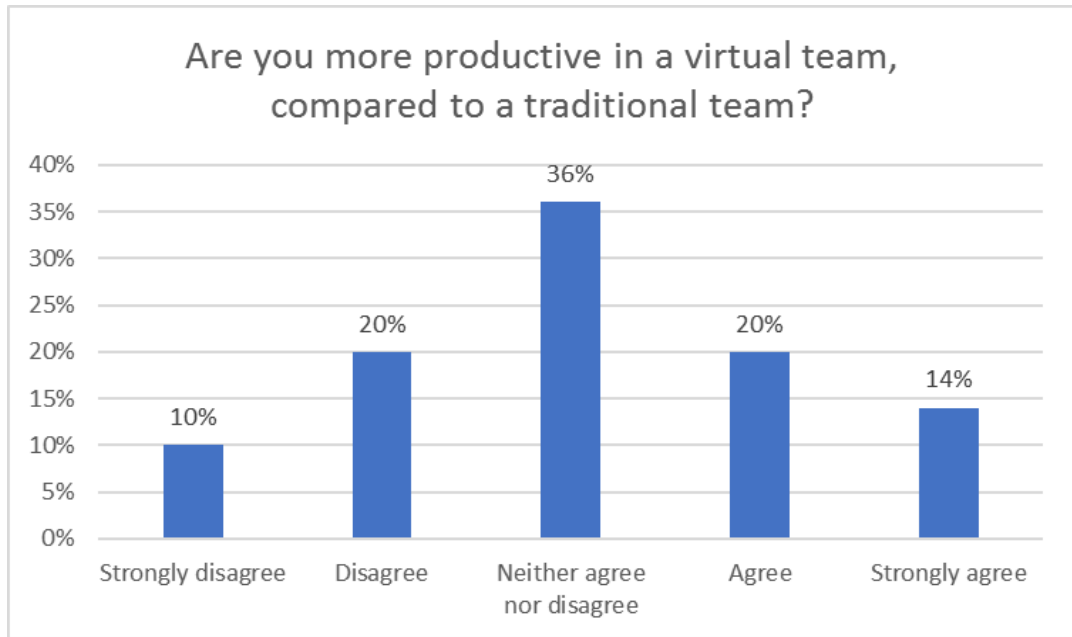
Figure 14 Feeling of isolation in a virtual team, %



Source: Own research

Virtual team or not, people should try to measure its performance. Productivity is another of the important issues raised during the literature review. When managing remote employees, it can not be easy to understand exactly what is going on, how long, and what each employee managed to do. According to the study, most people believe that their work is more productive in a virtual team compared to a traditional team. 34% agreed with the statement, in contrast to 30% of respondents who believe that their productivity has decreased in a virtual team compared to a traditional team. 36% of the respondents did not agree and did not disagree. (Figure 15) Their productivity in virtual and traditional teams may remain the same.

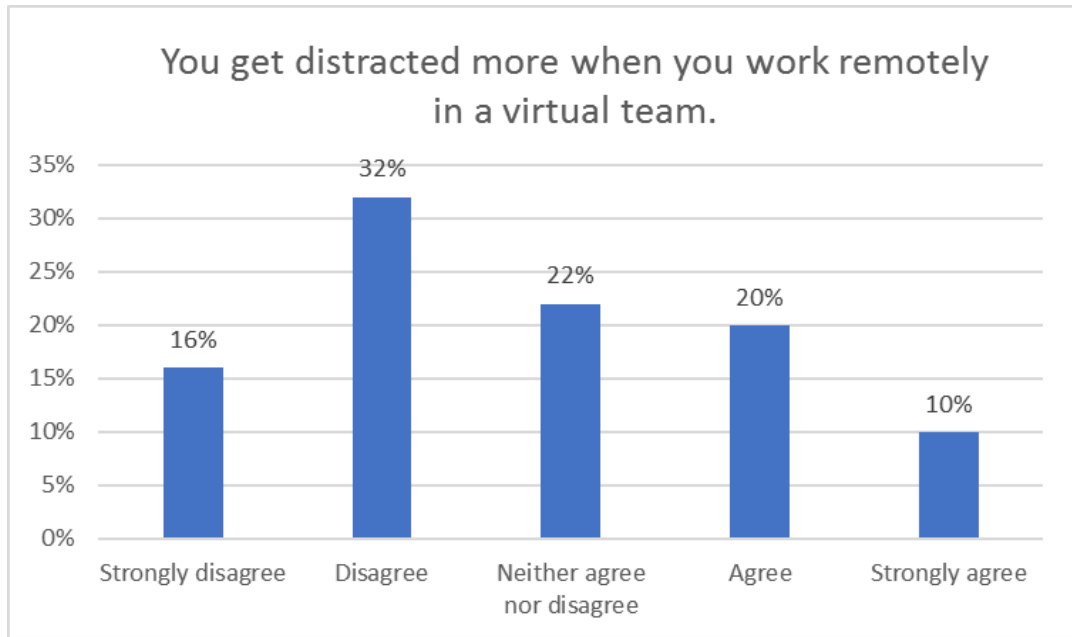
Figure 15 A level of productivity in a virtual team compared to a traditional team,%



Source: Own research

Furthermore, the next problem that may affect the virtual team members is that people working in a virtual team are being distracted from their work processes. This study's theoretical part was not given an unambiguous judgment whether people are really working in a virtual team and are remotely distracted by extraneous things around them. Therefore, the statement "You get distracted more when you work remotely in a virtual team." was included in this questionnaire. Figure 16 shows that 22% of respondents gave a neutral answer, which most likely means no difference in distraction from work processes in different types of teams. 48% of respondents do not agree that they are more distracted by things that do not relate to their direct responsibilities in virtual remote work. Finally, 30% of the respondents agreed with this statement. From these statistics, we can conclude that a virtual team positively affects its members' productivity. There is a striking difference in the percentage of positive and negative responses. Thanks to this question, it was revealed that most survey participants manage to cope with distraction in the workplace while working in a virtual team.

Figure 16 A level of distraction in a virtual team,%



Source: Own research

The final question of this survey, "If you would have an opportunity to choose between a virtual team and a traditional team, what would you choose?" sums it up and summarizes all the previous questions. Two possible answers are given: traditional and virtual teams. Figure 17 shows 56% of respondents chose a traditional team as their preferred way of working. 44% chose a virtual team. To be more detailed in analyzing this question, it is possible to compare the answers to this question with the age, gender, and duration of work in the virtual team.

Figure 17 Distribution of choice between a virtual team and a traditional team,%



Source: Own research

First, let's compare the answers to this question with the gender of the respondents. (Table 3) 17 out of 27 women surveyed prefer to work in a traditional team. They can better organize processes and

create a favorable psychological climate in the team. It is possible to assume that personal communication and visual contact with their colleagues are more important for women. In men, out of 23 respondents, 12 people chose a virtual team and 11 a traditional one; opinions were divided almost equally.

Table 7 Comparison of gender and choice between virtual and traditional teams

	Virtual team	Traditional team	Total
Male	12	11	23
Female	10	17	27
Total	22	28	50

Source: Own research

The next step is to compare the age and the choice between the virtual and traditional teams. (Table 4) Unfortunately, the respondents' group did not include

people over 60 years old, and in this case, this age group will not participate in the study. It can be noted that the age group from 18 to 26 years old preferred both types of teams, 18 people chose a virtual team, and 19 people chose a traditional team. Most likely, their choices depended on their personal preferences in communication and certain situations in the companies with which they work. The age group from 27 to 44 years gave the greatest preference to the traditional team, and the figures, in this case, are strikingly different: 8 people voted for the traditional team and three people for the virtual team. This trend can be explained by the fact that the older a person becomes, the more conservative he is and adheres to the old but proven ways of organizing work. Unfortunately, the third age group from 45 to 59 years is represented by only two respondents. In this case, it is not easy to objectively assess the satisfaction of working in a virtual team.

Table 8 Comparison of age and choice between virtual and traditional teams

	Virtual team	Traditional team	Total
18-26	18	19	37
27-44	3	8	11
45-59	1	1	2
60-81	0	0	0
Total	22	28	50

Source: Own research

Finally, it is necessary to compare the respondents' working experience in the virtual team and their team type preferences. With less than one year of experience in a virtual team, most respondents preferred the traditional team (22 people), and 13 people out of 35 chose the virtual team. This trend can be explained by the fact that the duration of work in a virtual team is minimal; not all team processes are adequately built. Some virtual teams were formed in critical conditions due to the pandemic. These factors may have influenced respondents' choice of a traditional team. In the second case, when the work experience is from one to two years, opinions were divided almost equally. However, there is a positive trend in favor of the virtual type of cooperation between employees. With three to five years of experience in a virtual team, two out of two respondents voted in favor of a virtual

team. Based on the information obtained in this research, it can be argued that there is a positive trend in the use of virtual teams. Moreover, the longer a person works in a virtual environment, the more preferable this type of communication is.

Table 9 Comparison of working experience and choice between virtual and traditional teams

	Virtual team	Traditional team	Total
Less than 1 year	13	22	35
1-2 years	6	5	11
3-5 years	2	0	2
More than 5 years	1	1	2
Total	22	28	50

Source: Own research

4.4 Interviews

Two interviews were conducted, giving a deeper assessment of virtual teams' challenges. Two interviewees were asked several questions, and they were slightly different for different respondents. One of the interviewees has a management position in a small company that outsources accounting for various companies. The manager was asked two additional questions to look at this problem from the manager's side. The second person works for a large international company whose employees are located in different parts of the world. The company is also outsourced, providing various companies around the world with customer support.

4.4.1 1st Interview

- 1. What is your position in a company?*

I am an accounting manager in a small company (15 employees)

- 2. How long have you been working in a virtual team?*

I have been working in a virtual team since the start of the pandemic, 1 year.

- 3. Can you compare work in a virtual team and a traditional face-to-face environment? Where do you see more advantages and why?*

I have been working in this company for 3 years already. For the first time at the beginning of last year, we were forced to switch to a remote type of work, and all my colleagues were members of one large virtual team. If you compare the traditional and

virtual teams, then each of them has pros and cons. The traditional format of working in a team wins in terms of efficiency of work, the integrity of information delivery (fewer inaccuracies in the transmission of information). It is important to feel the spirit of the team, its cohesion, and in some difficult situations to come to my colleagues' aid, in the conditions of a traditional team, it is much easier and faster to do this. In the traditional format, the advantage is that you feel the team's mood, you can quickly get or provide support.

One of the advantages of remote work is high productivity. If you look at our company's annual performance, you can see that with the introduction of the virtual type of communication and cooperation, our productivity has increased. I have had conversations with some of my colleagues. I have also noticed that we get many distractions from outside informal conversations with our team members in the office. At the same time, at home, we become more focused on work issues. We are also more independent in making decisions, as sometimes it is difficult to reach a colleague to ask a question quickly.

The main advantage of virtual team is a flexible schedule. We do not have clearly defined working hours, but it is still important that everyone has a predictable schedule. We specify the period during which a particular person will be available for operational communication. There are possible errors, but in general, this segment should be fixed. Then, each team member will know at what point he can count on the other's participation and start working with this in mind.

4. *What are the biggest challenges of a virtual team from your point of view/ in your team?*

Some of the employees do not have sufficient knowledge of modern software, which affects communication efficiency. At the very beginning, it was difficult for us to organize everything quickly and at the same time efficiently. This is especially true of the technical side of the issue. Almost half of the company employees are people who are used to conservative paper methods of work in the office. It was difficult for them to get used to online communication and use only technical devices in their work.

5. *What challenges are you facing as a manager?*

Even though productivity has increased, some employees lose motivation to work when they are at home, as they do not receive full support from managers. As a manager, I can say that it was difficult to provide professional support, being in different parts of the city. Also, there is no full opportunity to control 100% of the work process.

6. *How would you compare the overall performance of your team (virtual face to face)*

As I said before, as soon as our team switched to remote work, within 2-3 weeks, all employees' productivity increased by 40%. It seems to me that this happened because many employees overworked their hours. While at home, the employees could not separate the boundaries of work and leisure. By week 4, productivity plummeted as employees began to experience stress. But after we created a system of communication, distribution of working hours, attendance, productivity increased again. Employees understood exactly what managers want from them and in what time frame.

7. *How can these challenges be solved?*

Difficulties with misunderstandings in the virtual team can be corrected with personal conversations between the manager and the employee. I also consider technical training of employees to be effective to improve their technical abilities. This will help to reduce a large amount of time when organizing a home office.

All those who create a team focus on goals, roles, and responsibilities in the first three months. Coordination in virtual teams is much more complex, simply because people are in different places. Therefore, it is important to focus on the details when designing tasks and the processes involved in their execution. Simplify the proposed amount of work as much as possible is my advice. Ideally, break down tasks for subgroups consisting of 2-3 team members. And be sure to make sure that there is some clarity about the workflow, explaining who is doing what and at what time. After that, it is necessary to periodically conduct "checks" to understand how the work will make the necessary adjustments in the process and the training needs.

As for the control of the virtual team, in my opinion, this can be solved in part by careful preparation of tasks and regular meetings for discussion. In addition, it helps team members to achieve specific indicators and track the amount of work done. A helpful tool is the "reporting board," which is available to all team members, regardless of how they work together. If you dare to take this step, then you do not need to get too involved in micromanagement. There is a fine line between proper case tracking and overly busy oversight.

8. *What type of teams would you choose and why?*

Our experience of remote collaboration is just one example out of many possible ones. It is important to debug everything according to the needs and specifics of your

particular team. I have a team that is concerned about the quality of the services. The rest happens by itself. The methodologies and workflows that we have been working on in recent years were created and developed for the traditional environment.

However, I must admit that the virtual team is becoming commonplace in modern business. Moreover, it is necessary to establish processes for this type of communication, as, in my opinion, it will become more and more popular over the next few years. Therefore, one of my main goals is to learn how to manage virtual teams and organize their work processes so that there is no need to return to the old traditional ways of communication. As a result, I would prefer to work offline, but with the possibility to provide some home office for employees and train to be in a virtual environment.

4.4.2 2nd Interview

1. What is your position in a company?

I am working as a customer support agent in a multinational company. We have many agents globally, from Germany, Ukraine, South Korea, and Serbia.

2. How long have you been working in a virtual team?

I am working in a virtual team for about two years.

3. Can you compare work in a virtual team and traditional face-to-face environment?

Where do you see more advantages and why?

In the very beginning, working in a virtual team was a little challenging for me but still the better way to earn money compared with the traditional face-to-face environment. To start with, remote work allowed me to work whenever I want. It is the most important advantage from my perspective, as I prefer to spend much time with my family instead of sitting in the office the whole day long. It is also worth mentioning that working from home with a virtual team saves much time. I do not need to waste time driving to and from the office. Additionally, for me, as a student, it is a chance to combine studies and workflow.

4. What are the biggest challenges of virtual team from your point of view/ in your team?

The biggest challenge for my colleagues and me is not to lose motivation during the shift. It is not easy to stay fresh and concentrated when no one sees you. Sometimes I can get distracted by some extraneous things that are not related to work. Of course, we have meetings, discuss job-related stuff, and relax, drink coffee, and play games. It helps to stay

tuned and motivated. It is also frustrating that you cannot see your teammates in real life. I've never met them in person. But at least some online informal meetings help us to find out more about each other. They build a friendly environment in our team.

5. How can these challenges be solved?

I believe that my managers and my team provide a good example of dealing with difficulties in virtual teams. Firstly, they hold informal meetings online, and secondly, we have a special platform where we stay in touch throughout the working day. Managers also conduct 1 - to-1 sessions at the end of each week, also in an online format. In these sessions, we discuss the successes and failures of the past week. Also, the manager advises on coping with certain difficulties that relate not only to work but also to relationships with colleagues.

6. What type of team would you choose and why?

Despite the disadvantages of working with a virtual team, I would prefer to work constantly online. Time is the most expensive source in our life, and as corona realities show, there are almost no things that cannot be done without personal offline meetings.

Results and Discussion

This thesis's primary purpose is to answer the question "What are the biggest challenges of virtual teams" and following on from that, "How to overcome these challenges."

This part of the thesis explores these questions based on information and data obtained from a literature study, a questionnaire conducted between 50 employees who have experience working in a virtual team, and two interviews taken from a manager of a small company and a customer support agent in a large international company.

From the literature review, it became clear that managing a virtual team can be difficult. Although the team is called "virtual," it consists of living people, working with whom implies the possibility of specific difficulties and problems. Working together as a team is one thing. Working together as part of a virtual team is something else entirely. Moreover, effective collaboration as part of a virtual team is the challenging thing.

From the literary review, it became clear that working in a virtual team has several positive aspects and clear advantages over a traditional team, for example, such as reducing companies' costs to organize and maintain an employee's workplace, sharing experience, obtaining and transferring knowledge, quickly implementing knowledge and technologies collected from around the world from different locations.

However, not everything is so easy in the organization of work and development of a virtual team. In the theoretical part of this thesis, it was found out that there are several of the most common difficulties that employees and their managers experience when working in a virtual team. These complexities will include technological, communication, and cultural differences. Similarly, slow decision-making, productivity issues, and extraneous things not related to work can interfere with a virtual team's excellent and successful experience.

In the theoretical part, the question of technologies and working with them in a virtual team was described. The primary way of communication of virtual teams is various information technologies, so when initiating a project with such teams'

participation, it is necessary to choose convenient software and install it on the hardware of each of the participants.

In the questionnaire, which was prepared and conducted among 50 participants who have experience in virtual teamwork, it was found that the most popular and possibly effective ways of communication in a virtual team are such technological means as emails, programs for video conferences, incorporate social networks, as well as a popular way of communication are telephone conversations.

Also, according to the survey conducted in this study, most respondents do not have problems working with their technical devices. Regardless of their age, most said they felt comfortable with technology. Almost everyone knows at least a little how-to handle computer technologies and various programs in the modern world. It is not difficult for many people to quickly get used to the technologies used in a particular company's work.

In contrast to the questionnaire, one of the interviewees claims that part of his team has some difficulties in working with technological innovations used in a small company. *„Some of the employees do not have sufficient knowledge of modern software, which affects communication efficiency. At the very beginning, it was difficult for us to organize everything quickly and at the same time efficiently. This is especially true of the technical side of the issue. Almost half of the company employees are people who are used to conservative paper methods of work in the office. It was difficult for them to get used to online communication and use only technical devices in their work.“*

Perhaps these difficulties are since the company is small and does not provide a decent level of technical training in the onboarding process and directly during the working process.

There are several ways to solve this problem. First, it is the organization of professional corporate training, taking into account the company's goals and capabilities. In this case, the training can be narrowly focused-aimed on acquiring technical skills in working with various programs. The second way that will help solve the complexities of working with technologies is to provide consulting and technological services for technical support. Companies can hire IT specialists or find an outsourced company that will provide technical support to their employees.

Another important thing is the organization of data for employees who work in a remote team. Everything must be appropriately distributed and accessible. In the data warehouse, there should be a specific system. The principle of organization can be based on the types of documents, projects, and employees.

It is necessary to create a separate backup folder to save everything that does not coincide with other folders' logic. Periodically, this folder should be checked, and the folder structure in the primary storage should be updated.

Remote employees should only have access to the data they need to work with. If the specialist only needs to view the document, he should not have the right to edit or delete it. Proper rights settings will help to control employees in a virtual team.

The next problem described in this thesis is the problem of communication with the virtual team members. The problem of communication in teams is one of the key ones. First, it is connected with the need for a common understanding of each participant's goals, objectives, and actions. Achieving this understanding requires communicating with each other, which can be limited in the context of online interaction. Secondly, it is necessary to ensure unity of goals and objectives, a common understanding of the principles of action and unity of opinions on critical issues, and a typical attitude, which is also not easy to do without personal communication.

According to the survey conducted in this study, the majority believe that they have difficulties with collaboration with colleagues in a virtual team and personal misunderstandings on some issues. It was also found out from the interview that one of the respondents believes that he has difficulties with communication within the virtual team. The respondent notes that it is a bit difficult when colleagues are in different parts of the world, and he has never met them in person. *“It is also frustrating that you cannot see your teammates in real life. I've never met them in person. But at least some online informal meetings help us to find out more about each other. They build a friendly environment in our team.”*

Despite the difficulties with communication, many companies, including our respondents' companies, are trying to improve the process of virtual collaboration. This process can be done in several ways, for example, the interviewees pointed out that managers try to keep in constant contact with their employees: *“Firstly, they hold informal meetings online, and secondly, we have a special platform where we*

stay in touch throughout the working day. Managers also conduct 1 - to-1 sessions at the end of each week, also in an online format. In these sessions, we discuss the successes and failures of the past week. Also, the manager advises on coping with certain difficulties that relate not only to work but also to relationships with colleagues.”

Providing face-to-face meetings is an important thing. Regular personal meetings make the communication of employees more informal, open. They allow you to solve urgent problems, controversial issues. This is a contribution to the future, the return of which will be better work. After all, the closer the relationship between employees, the better they understand each other, the fewer disputes and conflicts arise between them, and the more productive their work becomes.

The virtual team members need such work experience that would put specific difficulties in front of them and give meaning to their tasks independently and without external influence. When all team members are engaged in work that motivates and interests them, they perform better, have a clear understanding of the benefits, and invest themselves more fully in this work. There is a mutual benefit here. Without creating relationships and interaction, the virtual team will not be able to do what it needs to do. All virtual team members, and especially managers or team leaders, must create an atmosphere of unwavering trust, support, and understanding, even in the difficult realities of online cooperation.

The communicational issue is also inextricably linked to the cross-cultural differences in the virtual team and the difficulties associated with these differences. According to the theoretical part of this thesis, even in our constantly globalizing world, cultural, religious, and social contradictions exist. People in different countries or different nationalities may have different views on political processes and events. As recent years' practice shows, these contradictions tend to significantly worsen and complicate the process of interpersonal communication and team integration, which can negatively affect the formation of the team itself and its performance. But, according to the survey, most respondents have no difficulties in working and communicating with representatives of different cultures and nationalities in a virtual team. Perhaps these positive indicators are related to globalization and the massive growth of this process in the last few years. They concern especially business globalization. Companies that do business in various

countries around the world, especially multi-national companies, generate a considerable amount of international interactions; of course, this is trade and capital, but also human resources, which play a crucial role in business development. (Ghemawat, 2017)

For many people, especially those working in an international environment, it is not difficult to understand the differences in the methods of work, communication, and culture of different people.

The next problem described in the theoretical part of the thesis and the practical part is the problem of feeling of isolation and loneliness in a virtual team. All team members must be united by a common goal and vision and have complementary methods to achieve this goal. It often happens that virtual team members are engaged in their own individual goals and do not share the organization's values and needs that form the team.

According to the survey, most respondents said they do not feel lonely and do not feel isolated from the virtual team. Nevertheless, a small part of the respondents still agreed with the statement that there are some difficulties. They do not feel a sense of involvement in the team and do not feel like part of the company.

Since the team members bring different work to the common cause, the work's goals and vision - including the end result-are set from the very beginning, and the team must adapt to them. Isolated team members need work experience that puts them in specific difficulties and gives meaning to the tasks they are working on independently and without external influence. When all team members are engaged in work that motivates and interests them, they perform better, have a clear understanding of the benefits, and invest themselves more fully in this work. There is a mutual benefit here.

It is not very interesting to work day after day on the same task or with the same person. It can be excruciating when employees have to work in an isolated atmosphere. To keep the virtual team interested in the work and enthusiastic about the upcoming opportunities, it is essential to make sure that the team members have different partners, work on changing projects, and change the work schedule. The following problems discussed in the theoretical part of this thesis are related to productivity and slow decision-making in the conditions of virtual collaboration. As stated in the theoretical part of the thesis, "Additionally, day-to-day activities may

cause distractions from group tasks and disrupt teamwork and reduce productivity" (Morley et al., 2015). This means that the problem of distraction by extraneous matters in the workplace and productivity are inextricably linked to each other. In the theoretical part of this thesis, it was not explicitly stated that this issue positively or negatively impacts productivity. This question was considered in the practical part of the thesis, namely in the questionnaire, 34% of respondents agreed that they work more productively in a virtual team, and 30% of respondents accepted the neutral position, which means that their productivity remained at the same level. Despite a certain stereotype described in the theoretical part that productivity in a virtual team decreases, in the interview, one of the respondents said that productivity in his team has increased since they switched to the virtual type of collaboration in connection with the pandemic. *«As I said before, as soon as our team switched to remote work, within 2-3 weeks, all employees' productivity increased by 40%. It seems to me that this happened because many employees overworked their hours. While at home, the employees could not separate the boundaries of work and leisure. By week 4, productivity plummeted as employees began to experience stress. But after we created a system of communication, distribution of working hours, attendance, productivity increased again. Employees understood exactly what managers want from them and in what time frame.»*

However, a small negative aspect in this issue was that perhaps this productivity was increased because employees could not clearly distinguish between work and personal life while being at home.

As mentioned earlier, productivity is inextricably linked to factors that can distract a person who works in a virtual team. In the survey, only 30% of respondents said they are more distracted by extraneous things when working in a virtual team. They do not always manage to concentrate and fully immerse themselves in the task. People who work in a virtual team, especially those who work from home, should separate personal and work moments. In a virtual team, work and personal boundaries are sometimes blurred; many people can call and write emails at night, so employees need somehow to restrain themselves and their colleagues in these impulses.

Another critical issue that should be discussed is the speed of decision-making in a virtual environment. The speed and time of communication are inevitably not as

uniform in digital communication as in face-to-face communication. Some parties will have more limited access to communication than others. Differences in time zones compound differences in relative speed and feedback time. In some cases, problems arising from relative speed differences can be attributed to a lack of consciousness on the part of slower partners. When digital technologies are used instead of face-to-face communication, it is difficult to detect the messages sent and received by the recipient, and vice versa.

Thanks to the interview, from the practical part of this thesis, another critical problem of virtual teams was identified, which was not addressed in the thesis's theoretical part. This is a problem of control and self-discipline in a virtual team. One of the interviewed respondents said that it is difficult for him to control his team, being in different parts of the city. In interview #1, it was noted that *"As a manager, I can say that it was difficult to provide professional support, being in different parts of the city. Also, there is no full opportunity to control 100% of the work process."* From this, we can conclude that the problem of control and self-discipline is one of the actual challenges of working in a virtual team.

The virtual team involves mainly self-control. Nevertheless, not all people can work effectively in the absence of external control, the role of self-organization and self-management, including time management, and the risks associated with the fact that one of the team members does not do their part of the work well enough or does not meet the allotted time requirements.

If managers build a result control system incorrectly, there is a risk that an employee with low self-discipline can disrupt the project. Besides, working in a virtual team can quickly get boring to an employee: often, remote workers do not have enough live communication. This may reduce the result or force the employee to change jobs. Thus, managers need to apply a slightly different system of motivation for virtual employees. It is important to praise employees more often if there are reasons for it. To increase the motivation of employees in virtual teams, link the amount of remuneration to the number of completed tasks and their complexity. For example, in CRM systems, it is possible to specify each task the amount that an employee will receive for completing it. You can give bonuses if you have completed tasks beyond the plan.

For many people, good motivation is an opportunity to earn a decent living by performing valuable and necessary tasks. If you properly organize remote work, employees can work even more productively and earn more than in the office.

In the business environment people are most concerned with the result, not the process. Each employee has their ways of achieving it. Keeping the finger on the pulse is essential, but it must be done carefully. The controls must not take too much time — if a person spends an hour or two on reports, the working day is essentially reduced and used inefficiently. Moreover, there are tasks whose progress can be seen only after a long time, and such daily reports do not make sense. One half-hour conversation with a manager in a week will often be much more effective than five daily reports, especially in a virtual environment.

5 Conclusion

Due to the spread of information technologies, creating, managing, and forming projects has changed. It became possible to create a virtual project team. By virtual, we mean a team whose members have the same goal (solving a common project task), but they are separated by distance, time, and territorial boundaries. Members of such a team communicate by electronic means. Virtual teams open up new opportunities for project implementation because they can use any resource and attract highly qualified specialists to implement it successfully.

There is no doubt that virtual teams today provide organizations with many advantages:

- the ability to retain the most outstanding talent anywhere in the world
- an incredible diversity of cross-cultural and global opinions
- colossal cash savings on corporate travel expenses when companies need to bring someone from another geographical location

Nevertheless, the process of forming a first-class virtual team is not without difficulties.

This thesis's main goal was to identify the most common difficulties employees of companies experience when cooperating in a virtual team. Based on this thesis's purpose, another of his tasks was to find ways to overcome these difficulties in the virtual team and make its work more efficient and productive.

To find solutions to the problems mentioned above, the thesis was divided into three parts. The first part of this literary review, which defines the virtual team, lists the differences between virtual and traditional teams and provides a theoretical basis for the difficulties faced by virtual team members.

The second part of the thesis is divided into two parts. The first is a questionnaire that gave a general idea of virtual teams' problems and identified the most relevant and frequently encountered ones. The questionnaire was distributed to 50 people of different nationalities who have experience working in a virtual environment.

The second part of the practical study allowed us to delve into how virtual teams work. The second part is represented by two interviews in which respondents with different positions, senior and junior, gave their subjective opinions about the

difficulties they experienced working in virtual teams. The interviews also proved to be a reasonable basis for answering the second question of this study, "How to overcome the difficulties in working with a virtual team and make it more effective and productive.»

According to the theoretical and practical part, several difficulties encountered by members of virtual teams in the business environment were identified. Among these difficulties are such as difficulties in interacting with technical devices, 10% of respondents had them, as well as this problem was noted as necessary by one of the respondents in the interview; the problem of communication, collaboration and personal misunderstandings (40% of respondents said that they have difficulties with collaboration and 56% noted that they may have personal misunderstandings between colleagues in the virtual team; cross-cultural differences, 32% of people who took part in the survey noted that they have difficulties in working with different cultures and nationalities in a virtual team; the problem of isolation and feelings of loneliness, 28% of people out of 50 people said that they feel isolated from the working business environment and from the company; the problem of productivity, 30% of respondents believe that their productivity has decreased, if we compare work in a virtual team and traditional, this problem was also noted in one of the interviews, but in this case, the result is fortunately positive and the manager of one of the companies claims that productivity has increased, on the contrary, since the company switched to the virtual type of interaction; the problem of time spent was identified by 38% of the survey participants, and the problem of distraction in the workplace by extraneous matters was noted by 30% of the survey participants.

With the help of the interview, not only ways to overcome difficulties in the virtual team were identified but also another critical problem that was not addressed in either the literature review or the questionnaire. This problem concerns the manager's control over the employees and the problem of self-discipline. One of the interviewees noted that the problem of control is a priority in solving it.

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

In the final part of the thesis, an answer was given to overcoming difficulties in a virtual team, and recommendations were given on how to make its work more effective and efficient. Among the recommendations are the following:

- Choose convenient software for virtual collaboration
- Provide a decent level of corporate technical training for employees
- Provide consulting and technological services for technical support for employees
- Ensure unity of goals and objectives for virtual team players
- Separate work and personal life
- Share positive experience and conduct informal conversations
- Managers should keep in constant contact with their employees
- Create an atmosphere of unwavering trust, support, and understanding in a virtual team
- A manager should engage employees in work that motivates and interests them
- Make sure that the team members have different partners, work on changing projects, and change the work schedule
- Build a result control system
- Conduct sessions with a manager to discuss and solve issues

These tips are recommendations for building a virtual team and its proper and effective operation. Unfortunately, this survey was limited to only 50 respondents who answered the questionnaire and two interviews. Perhaps if more people had participated in the survey, the data obtained would have been slightly different. In conclusion, it should be noted that only 44% of the people surveyed in the survey in this study said that they would choose a virtual team. Moreover, 56% chose the traditional team.

A virtual team is an excellent opportunity for companies to build and develop businesses, regardless of distance and boundaries. However, perhaps at present, some people and companies find it challenging to adapt to a rapidly changing situation, and the complexity of working in a virtual team forces them to choose the traditional type of collaboration as more convenient and practical. Perhaps over time, the situation will change for the better, and virtual teams will become a more popular

way to organize employees in companies. After all, despite all their difficulties, they have enormous potential and many advantages.

The issue of the effectiveness of virtual teams has only recently come to the attention of various companies. It is relevant only for several fields and is primarily associated with reducing budgets, spending on business trips and project offices. However, the trends of modern business around the world suggest that very soon, many employees will switch to remote work from home using a virtual workplace, and virtual project teams will become even more common than traditional ones. Thus, increasing the virtual distance between the company's employees will become relevant for managers of various areas.

6 References

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7 Appendix

Appendix 1. Questionnaire

1. What is your gender?
Male
Female
2. What is your age?
18-26
27-44
45-59
60-81
3. How long have you been working in a virtual team?
Less than 1 year
1-2 years
3-5 years
More than 5 years
4. What is the level of your position in a company?
Regular employee
Middle and lower manager
Director/Executive manager
5. How would you rate working in a virtual environment compared to working in a traditional team?
Very negative
Negative
Neutral
Positive
Very positive
6. What technical tools do you use to communicate with your virtual team members?
Phone calls
E-mail
Video conferencing software platforms (Zoom, Microsoft Teams)
Intracorporate social network
Cloud storage service (Dropbox, Google Drive)
Other
7. Do you find yourself comfortable working with virtual communication tools?
Very uncomfortable
Uncomfortable
Neutral
Comfortable
Very comfortable
8. Do you have any challenges related to virtual collaboration with your colleagues?

Strongly disagree
Disagree
Neither disagree nor agree
Agree
Strongly Agree

9. How comfortable do you feel virtually contacting your colleagues regarding any issue, compared to traditional face-to-face communication?

Very uncomfortable
Uncomfortable
Neutral
Comfortable
Very comfortable

10. Is it more time demanding for you to get an answer from your colleagues when working remotely, compared to traditional environment?

Strongly disagree
Disagree
Neither disagree nor agree
Agree
Strongly Agree

11. Is it more time demanding to answer your colleagues' questions when working remotely, compared to the traditional environment?

Strongly disagree
Disagree
Neither disagree nor agree
Agree
Strongly Agree

12. Do you have any difficulties when working with different cultures or nationalities in a virtual team?

Strongly disagree
Disagree
Neither disagree nor agree
Agree
Strongly Agree

13. Have you ever felt a personal misunderstanding with your colleagues in a virtual team?

Yes
No

14. Do you experience feelings of isolation in your virtual team?

Strongly disagree
Disagree
Neither disagree nor agree
Agree
Strongly Agree

15. Are you more productive in a virtual team, compared to a traditional team?
Strongly disagree
Disagree
Neither disagree nor agree
Agree
Strongly Agree
16. You get distracted more when you work remotely in a virtual team.
Strongly disagree
Disagree
Neither disagree nor agree
Agree
Strongly Agree
17. If you would have an opportunity to choose between a virtual team and a traditional team, what would you choose?
Traditional team
Virtual team