VILNIUS UNIVERSITY
BUSINESS SCHOOL

INTERNATIONAL PROJECT MANAGEMENT

INNA GROMYKO

THE FINAL MASTER'S THESIS

ORGANIZACINĖ PARAMA LYDERYSTEI IR KOMANDINIAM DARBUI TARPTAUTINĖSE VIRTUALIOSE PROJECTŲ KOMANDOSE	*ORGANIZATIONAL SUPPORT FOR LEADERSHIP AND TEAMWORK IN INTERNATIONAL VIRTUAL PROJECT TEAM*

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SUMMARY

VILNIUS UNIVERSITY BUSINESS SCHOOL
INTERNATIONAL PROJECT MANAGEMENT STUDY PROGRAMME
INNA GROMYKO
ORGANIZATIONAL SUPPORT FOR LEADERSHIP AND TEAMWORK IN INTERNATIONAL VIRTUAL PROJECT TEAM

Supervisor –   Dr. Andrius Valickas

Master's thesis was prepared in Vilnius, in 2023

Scope of Master's thesis 81 pages.

Number of tables used in the FMT 2 pcs.

Number of figures used in the FMT 9 pcs.

Number of bibliography and references 114 pcs.

Brief description of FMT: This master's thesis explores the advantages and disadvantages of working in an international virtual project team and the ways in which organizational influences on leadership and teamwork in an international virtual project team can be made.

Problem, objective and tasks of the FMT: Organizations are not sufficiently aware of their ability to influence the success of the virtual project and therefore cannot fully utilize their resources to assist the leader and his team in the process of achieving the goal. Objective is to identify the ways of influence of the organization on the work in the international project team and leadership in it.

Tasks: 1) to examine the concept of international virtual project team; 2) to systematize the advantages and disadvantages of the international virtual project team for the organization; 3) identify factors that may influence the effectiveness of the international virtual project team; 4) to study the concept of leadership in an international virtual project environment; 5) identify the most optimal leadership styles for international virtual project teams; 6) to examine an essence of organizational support in virtual project team; 7) to demonstrate the role of perceived organizational support for an international virtual project team and the leader within it.

Research methods used in the FMT: qualitative research methods. The first part of the research was a case study. The second part of the research was realized through anonymous

semi-structured interview. The second part complements the first part.

Research and results obtained: The results showed that the organization provides project teams with support on equal terms with permanent employees. The organization has mechanisms to support the project team, but without the participation of the team leader, the implementation of these mechanisms may not be effective.

Conclusions of the FMT: Over the past decade, very little research has been devoted to organizational support for virtual project teams. Nevertheless, organizational support as a separate factor can influence team performance and minimize the disadvantages of working in an international virtual project team. The role of the leader, leadership style in the perception of organizational support for the project is separately emphasized.

SANTRAUKA

VILNIAUS UNIVERSITETO VERSLO MOKYKLA
TARPTAUTINIŲ PROJEKTŲ VALDYMO STUDIJŲ PROGRAMA
INNA GROMYKO
ORGANIZACINĖ PARAMA LYDERYSTEI IR KOMANDINIAM DARBUI TARPTAUTINĖJE VIRTUALIOJE PROJEKTŲ KOMANDOSE

Vadovas - Dr. Andrius Valickas

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FMT naudotų lentelių skaičius 2 vnt.

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Naudotos literatūros ir šaltinių skaičius 114 vnt.

Trumpas FMT aprašymas: šiame magistro darbe nagrinėjami darbo tarptautinėje virtualioje projektų komandoje privalumai ir trūkumai bei organizacinės įtakos lyderystei ir komandiniam darbui tarptautinėje virtualioje projektų komandoje būdai.

FMT problema, tikslas ir uždaviniai: Organizacijos nepakankamai suvokia savo galimybes daryti įtaką virtualaus projekto sėkmei, todėl negali visapusiškai panaudoti savo išteklių, kad padėtų vadovui ir jo komandai siekti tikslo. Tikslas - nustatyti organizacijos įtakos būdus darbui tarptautinio projekto komandoje ir lyderystei joje.

Uždaviniai: 1) išnagrinėti tarptautinės virtualios projekto komandos sampratą; 2) susisteminti tarptautinės virtualios projekto komandos privalumus ir trūkumus organizacijai; 3) nustatyti veiksnius, galinčius turėti įtakos tarptautinės virtualios projekto komandos efektyvumui; 4) ištirti lyderystės tarptautinėje virtualioje projekto aplinkoje sampratą; 5) nustatyti optimaliausius lyderystės stilius tarptautinėje virtualioje projekto komandoje; 6) išnagrinėti organizacinės paramos virtualioje projekto komandoje esmę; 7) parodyti suvokiamos organizacinės paramos vaidmenį tarptautinei virtualiai projekto komandai ir lyderiui joje.

FMT taikyti tyrimo metodai: kokybiniai tyrimo metodai. Pirmoji tyrimo dalis buvo atvejo tyrimas. Antroji tyrimo dalis buvo įgyvendinta anoniminio pusiau struktūruoto interviu būdu. Antroji dalis papildo pirmąją dalį.

Tyrimas ir gauti rezultatai: Rezultatai parodė, kad organizacija projektų komandoms

teikia paramą vienodomis sąlygomis su nuolatiniais darbuotojais. Organizacija turi paramos projektų komandai mechanizmus, tačiau nedalyvaujant komandos vadovui šių mechanizmų įgyvendinimas gali būti neveiksmingas.

FMT išvados: per pastarąjį dešimtmetį labai mažai tyrimų skirta organizacinei paramai virtualioms projektų komandoms. Nepaisant to, organizacinė parama kaip atskiras veiksnys gali turėti įtakos komandos veiklai ir sumažinti darbo tarptautinėje virtualioje projektų komandoje trūkumus. Atskirai pabrėžiamas vadovo, vadovavimo stiliaus vaidmuo suvokiant organizacinę paramą projektui.

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1. GVT – Global virtual team
2. IVPT – International virtual project team
3. PMBOK - Project Management Body of Knowledge
4. HR – Human resource
5. WHO - World Health Organization
6. US OPM - US Office of Personnel Management
7. UNESCO - United Nations Educational, Scientific and Cultural Organization
8. OS – Organizational support
9. UN- United Nation
10. EU – European Union
11. PRAG - Practical Recommendations for Institutional Funding

INTRODUCTION

Novelty. This master's thesis is devoted to the study of organizational influence on leadership and teamwork in an international virtual project team. The work is the first to analyze the advantages and disadvantages of an international virtual project team according to the identified factors at the organizational, social and individual levels. The paper also presents for the first time the author's own model of the factors' influence on the effectiveness of a virtual project team, in particular, possible ways of influence of the organization on the basis of which the project is implemented. For the first time, the author demonstrates the mediating role of the project team leader in relation to the impact of organizational support.

The relevance of research in this topic is explained by the fact that digital technologies have allowed organizations to implement a wide variety of project activities in the international business environment, to bring together professionals from different countries, cultures, continents, time zones (Barry and Kane, 2023) to perform tasks without the need to place them in the same room (Simpson, 2017).

For international businesses, this is the main advantage that allows companies to stay in the market and be competitive. Implementation of virtual projects in the international business environment opens up unique opportunities for companies: global cooperation between companies, exchange of knowledge and practices (Barry and McIntosh, 2019), use of the best talents in work processes, minimization of physical location costs, etc.

Formulation of the problem. The implementing projects in a virtual environment carries a number of risks associated with the limited timeframe of the project, lack of live communication within the team, cultural diversity of team members and the team leader, different time zones and languages spoken. This requires the leader to adapt and implement a higher level of leadership and management skills compared to traditional teams (Subrahmanyam, 2019). It is also a challenge for the organization as a project initiator or partner, especially if the advantages and disadvantages of virtual project teamwork are not well analyzed. The organization's management, unaware of the peculiarities of project teams' work in a virtual environment and their own potential, cannot positively influence the project's progress or even hinder its implementation.

Also, during the researching of the theoretical material on the topic, it was found that over the past decade, there has been no fundamental research on the impact of organizational support on an international virtual project team in the scientific literature. More researches on the impact of organizational support on employee productivity has been conducted in the field of psychology (Maan et al., 2020) or simply in relation to virtual work in an organization.

However, Drouin et al. (2013) find that overall project behavior in distributed teams tends to be very sensitive to organizational support, especially to decisions made by the organization, and that organizational support has a positive effect on distributed project team performance.

Tureski et al. (2020) emphasize that the lack of formal support, including tools to guide virtual teams towards positive work outcomes, from senior management and the organization as a whole has a negative impact on team performance. Arifin et al. (2023) and Sun Li (2018) found that organizational support in the form of technological support, virtual communication equipment affects task performance in a virtual team.

In this master's thesis, the approach to studying the impact of the organization on the virtual project team will be initially through the prism of analyzing the advantages and disadvantages of this form of work in the organization. Actually, through the analyzed disadvantages of the international virtual project team, strategies for the organization will be formed that can help the manager and his team to work more effectively in the process of project implementation.

Subject matter: organizational support for the leadership and teamwork in the international virtual project team

Objective: to identify the ways of influence of the organization on the work in the international project team and leadership in it.

Tasks: 1) to examine the concept of international virtual project team; 2) to systematize the advantages and disadvantages of the international virtual project team for the organization; 3) identify factors that may influence the effectiveness of the international virtual project team; 4) to study the concept of leadership in an international virtual project environment; 5) identify the most optimal leadership styles for international virtual project teams; 6) to examine an essence of organizational support in virtual project team; 7) to demonstrate the role of perceived organizational support for an international virtual project team and the leader within it.

Selected research methods: qualitative research methods were used in this master thesis. The first part of the research is a case study. This method was used to analyze the activities of the organization SOS Children village International, on the basis of which the research will be conducted. The general and some internal documents of the organization that relate to the working methods of the organization were studied. A preliminary Interview was conducted with the intended respondents to determine whether the project was indeed relevant to the research topic. The second part of the research was realized through an anonymous semi-structured interview.

The structure of master thesis presented in theoretical, methodological, research parts as well as conclusions and recommendations. The theoretical part details the concept of international virtual project team, analyses the advantages and disadvantages of this form of work for the organization, the factors of teamwork, which can impact on project success. Also, theoretical part analyses the concept of leadership in an international virtual project team and presents the most optimal leadership styles from the point of view of scientific literature. The last section of the theoretical part presents possible ways in which the organization can influence the work and leadership in an international virtual project team.

The methodological part lists the research methods that were used in the study of both the theoretical part of the Master's thesis and the research itself. The research part details the methods of the research conducted: case study and anonymous semi-structured interview.

The research part presents the results of the case study research and the results of the interview conducted with the respondents.

Difficulties and limitations. There has been very little research over the last 10 years that has covered the topic of organizational influence on and leadership of the international virtual project team in detail. This research has focused on either the virtual team or the project team. Therefore, research on the topic of organizational support in projects has also been considered for its potential application in virtual projects.

A limitation of this research is that it was conducted in a single organization. The issue of multi-organizational influence on an international virtual project team, i.e. when a project implemented by staff from several organizations, has not been considered.

1. THEORETICAL ASPECTS OF ORGANIZATIONAL SUPPORT FOR INTERNATIONAL VIRTUAL PROJECT TEAM

1.1 Definition and main characteristics of an international virtual project team

The analysis of the scientific literature allowed us to subsume that there is no single unified definition of an international virtual project team. This definition is a set of basic key attributes characteristic of the terms project team, international or global team, remote team or virtual team, virtual project team in an international environment.

Aiste Kukite (2021), based on academic sources, defined a virtual project team in an international environment as a team characterized by:

1) Geographically distributed team members (Eisenberg et al., 2019);

2) Communication between team members takes place in a virtual environment using specialized technologies (Frost & Duan, 2020);

3) Team members are culturally different from each other (Raithel et al., 2021);

4) Work of the team itself is defined over time (Mwamba et al., 2021).

Additional research allows us to add a few more characteristics to this definition that will help to more fully explore this form of work and collaboration. So, international virtual project teams (IVPT) are also:

5) Is a team of two or more people working virtually (G. Hertel et al., 2005);

5) Multidisciplinary, which means specialists from different disciplines work together to achieve complex deliverables (PMBOK Version 4.0.1);

6) For at least one team member, the language of communication is not the native language (Taylor, 2021);

7) Team members work asynchronously (Grosser & Baumöl, 2022) or may work in different time zones (Jarrell et al., 2020).

Also, the definition of IVPT can be viewed through the prism of qualitative characteristics such as the degree of virtuality of teamwork and the degree of team dispersion.

For example, Maley L. (2020) in his thesis describes the multi-dimensionality of the degree of virtuality as "the ratio of time spent in a virtual environment, the number of team members working virtually, and the distance between team members". He suggests measuring the degree of virtuality as a percentage from 0% to 100%, where 0% is working in the office with colleagues and 100% is only working remotely. The author (Maley L., 2020) states that

the degree of virtuality can influence the use of technology, team structure and the role of management.

Based on the degree of virtuality and the time employees spend apart from each other, teams are categorized into traditional, hybrid and virtual (Winkler et al., 2022). Virtuality requires the project manager to take a different approach to leadership and is expected to have the flexibility needed to manage teams with varying degrees of virtuality (Adeoluwa Arowolo, 2022).

Previously, virtual working conditions were dictated by the need for specialists who were far away and it was not economically viable to hire them offline. But the Covid-19 situation has shown that working in a virtual team provides workflow stability despite a pandemic (Victor Garro Abarca et al. 2021, Qatamin et al., 2023), national economic crises, wars or another unstable situation. (Tudor Tarbujaru et al., 2021).

According to Grosser B. & Baumöl U. (2017), the level of team virtuality is affected by the dispersal of team members and the asynchrony of team members' work. These are the main factors that differentiate it from a traditional team (Figure 1).

Distributed team or dispersed team? Both of these concepts are found in the scientific literature. These concepts imply that team members are not in the same work area and there is a certain physical distance between them. However, these concepts are often confused.

For example, a distributed team is a group of workers who are geographically dispersed, organizationally separated or working in different time zones. Despite these physical or organizational differences, they collaborate and work together using information and telecommunication technologies to solve one or more organizational tasks or achieve goals (Sejla Manjusak, 2019). In this context, dispersion is defined as a property of geographical distance of team members from each other.

But according to the material published by Project Management Institute (2021), which formally trains and certifies project managers, there are differences between co-location, geographical distribution and geographical dispersion of a team. These are shown schematically (Figure 2).

So, a team is considered co-located if its members are in the same workspace. This is a shared physical space specifically designed for project related tasks. Team members should sit close to each other. In Zenun et al. (2007), the degree of proximity is assessed by the ability to overhear another team member's phone conversation.

 Otherwise, the team is considered geographically distributed or dispersed in some way.

The analysis of the scientific literature did not allow us to find and demonstrate research

on the differences in the concepts of "distributed team" and "dispersed team". Given that the official accrediting organization (Project Management Institute) points out the difference in these concepts, it is possible to suggest this topic as a subject for future research.

So, describing and illustrating (Figure 2) the difference in the concepts, we can say that a dispersed project team involves working in sub-teams, i.e. mini-teams at a distance from each other. A distributed team may consist of different sub-teams (Sejla Manjusak, 2019). Distributed project team implies the isolation of each team member from the main team (sub-team) or other team members. This provides insight into the change in communicative distance between project team members inside the team and the project manager.

Recent research (Helen op 't Roodt et al., 2021) has shown that virtual team leaders are advised to avoid forming sub-teams as this can lead to a 'own-group-alien-group' mind set. This mindset can generate prejudices, stereotypes, and conflicts. The authors (Helen op 't Roodt et al., 2021) also emphasize the importance of this finding, as the creation of subgroups can undermine the sharing of knowledge and other potential resources of virtual teams. In the context of this master's thesis, the distribution or dispersal of groups should be considered at the international level rather than at the national level.

In scientific literature, concepts such as remote teams are common. Currently, there is no international statistical definition of remote working. (International Labour Organization, 2020). The US Office of Personnel Management (US OPM) gave one of the most accurate definitions of remote work. Thus, remote work defined as a flexible work schedule in which an employee required by a written remote work agreement to perform work at an alternative workplace and is not required to perform work at the workplace on a regular and recurring basis. The remote employee's official place of work may be either within or outside the local commuting distance of the primary workplace (OPM's 2021 Guide to Telework and Remote Work in the Federal Government).

It is clear from the context of the definition that remote work has some time constraints, is tied to certain conditions and locations outside the main place of work, and involves verbal or written arrangements that are governed by labor law. If these conditions change, the employee may start work at the main place of work. The same context applies to persons working remotely in a group - a remote team.

It can be inferred that the difference between a remote team and a virtual team is that a member of a virtual team cannot be recalled to work offline because he or she is not initially bound by any formal arrangements to do so. It also follows that both concepts involve the use of communication technologies for teamwork. It is important to understand the difference in

these concepts in order to maximize the objective assessment of the advantages and disadvantages of working in virtual project teams

Daniela Sokolich (2022) notes in her research that the concept of teleworking is often used interchangeably with the terms teleworking, remote working, distributed working, virtual working, flexible working, flexible place, remote working and others.

The key feature of virtual team, distributed team, dispersed team and remote team is the physical distance between the team members Van Zyl, & Hofmeyr, (2021), the team leader, and a common technological tool. This tool has several meanings. First of all, it is seen as a tool for work, a useful aid, a challenge, an object of competence, an object of technical properties, as well as a way of expressing proximity, a shared space and a cause of uncertainty (Laitinen, Kaisa & Valo, Maarit, 2018).

In her research, Seyla Manjusak (2019) compared co-located teams and distributed teams. The results showed that "communication effectiveness, shared identity and trust are higher in co-located teams and the values of cultural clashes are lower".

The analyzed material allows us to propose a unified definition of IVPT for further use.

An international virtual project team is a geographically and (or) time-zone distributed (distributed) team of multicultural, multidisciplinary specialists interacting with each other in the process of performing their tasks using special or virtual technologies, usually in one language defined by the organization, during the time period specified by the project.

This definition will allow a more systematic approach to analyzing the advantages and disadvantages of IVPT work in the next section of this master thesis.

1.2 Advantages and disadvantages international virtual project team

The spread of virtual work around the world is closely linked to several key factors, including globalization, information and communication technologies, digital culture, and the influence of crises and disruptive events like wars, disasters, and epidemics (Vìctor M. Garro Abarca et al., 2021).

According to data analyzed by Meluso et al. (2020), since the coronavirus crisis, 80% of global corporate remote working policies have migrated to virtual and mixed forms of virtual team collaboration.

Modern research on the effectiveness of virtual working is not as optimistic as it was at first (Simpson,2017). It follows that before organizing a virtual team (especially in an international environment), the advantages and disadvantages of virtual working should be considered.

Dorothy Simpson (2017) in her study proposes to explore the advantages and disadvantages of working in an IVPT, comparing it with traditional teams at various levels: organizational; individual; societal.

This is a very convenient and simple way to analyze the advantages and disadvantages. It allows the researcher to look at everything from the perspective of the company, team member and member of society and to structure their findings more clearly.

At the same time, Aiste Kukite (2021) highlights the challenges of managing a virtual project team in terms of technology, culture and geographic location.

In this master thesis, I will try to consider, this and other factors in perspective of advantages and disadvantages IVPT on organizational, individual and social levels.

On the organizational level, it is assumed that advantages and disadvantages will be considered in terms of company's benefits and the company's competitiveness in business environment.

The societal level is intended to analyze the role of working in IVPT for society from a positive and negative point of view.

On the individual level, it is expected to analyze the advantages and disadvantages of working in IVPT for a team member, as a human.

<u>Advantages working of IVTP on the organizational level</u>

Economic benefits

Saving the company's money. Members of an international project team need to meet in a single, properly equipped office space, which increases rental and maintenance costs (Schuster N. 2022, Beno M., 2021). If they come from different countries, they need to obtain work permits and visas, and the company must cover their travel and accommodation costs, as well as provide them with temporary accommodation with internet access, telephone, etc. (Dorota Simpson, 2017). In contrast, the only cost in the case of an international virtual project team is the cost of virtual communication, which requires a much smaller budget.

Access to the cheap labour. According to (Hannah Jacobs W., 2021), the key to the development of global companies in the context of global competition is to provide consumers with better and cheaper products compared to competitors' products. Companies operating globally attract employees from all over the world. They are likely to attract management personnel from countries where they maintain a presence and hire workers in a country where labour is relatively affordable.

A well-chosen low-cost labour force reduces the cost of production, but does not reduce its quality. All of these cost savings provide a competitive advantage in global markets.

Economical disadvantage

Virtual environment security costs. Companies are a constant target for organized cybercrime and implicit, cyberattacks. As we move towards digitalisation, more and more information will be digitised. The more companies depend on digital information, the more information will be vulnerable to cyber threats (Seneler & Murat, 2018).

Data security in a cyber-environment is an important topic, especially when it comes to handling sensitive or confidential data, moving critical company data to the cloud, or working on projects of strategic, national or global importance. This threatens the company's credibility and competitiveness in the business environment.

Moreover, technological advances are increasing the variability and number of offences in virtual environments. According to data published by global platform Statista, the average cost of data records globally has increased from $3.5 million to $4.45 million between 2014 and 2023 (securityintelligence.com/articles/cost-of-a-data-breach-10-years-in-review/). Staying safe in a cyber-environment requires not only the right software, but also cybersecurity experts or companies that can provide such services. This is an additional and considerable expenses.

Different labour laws. Working at IVTP is governed by the labour laws of different countries. This is very important to consider when hiring employees, especially when it comes to seamless work across different time zones. For example, Finnish law does not recognise global virtual work or time requirements for employees. However, an agreement can be reached between the employer and the employee on schedule flexibility (Sivunen et al., 2016). Improperly drafted contract and timekeeping will lead to economic costs associated with overtime pay. IVTP organizations require international lawyers and HR professionals, and these professionals are usually valued more highly than national ones. This is an additional cost for the companies.

Geographical advantages and disadvantages

With technology, IVTPs can work regardless of geographical distance or time zone differences (Gaye Kiely et al. 2022). Increasing the working day from 8 to 24 hours per day, utilising time differences between countries allows global virtual teams to be more productive (Qatami et al., 2023) as work can be done by one team member outside the working hours of another (Morrison-Smith, S., Ruiz, J.,2020).

Limited face-to-face communication, lack of team spirit, coordination and lack of trust are remarkable challenges of geographical distance (Seneler, Cagla & Kahya, Murat, 2018).

Large geographical remoteness as well as large differences in geographical zones have

a very negative impact on the effectiveness of informal mutual adjustment (Gaye Kiely et al., 2022).

Geographical distance issues can also include situations where the project is multi-organisational, i.e. where team members come from different organisations or regions of a global organisation. Jimenez et al. (2017) find that differences in institutional affiliations can pose the greatest number of challenges.

With respect to physical time boundaries, the magnitude and direction of time differences are critical to how visible these boundaries are in global collaboration. Small time zone differences are difficult both to manage and to perceive by other team members. Large time zone differences are more visible and often better managed. The direction of the time difference (east or west) is also important for time zone visibility in global virtual work. (Sivunen et al., 2016).

Cultural advantages

Cultural intelligence in work IVPT. Team cultural intelligence positively influences team decisions (Davidaviciene, 2022) and also contributes to high task performance in virtual teams. (Mangla, 2021).

Access to the global pool of specialists and global talents. Al Dalahmeh (2020) describes in his study that the greatest value of an organisation is the employees who work for it. The success or failure, growth or decline of any organisation undoubtedly depends, to a significant extent, on the proper management of the available human resource (Cross Ogohi Daniel et al., 2020). This is a competitive advantage and the most valuable asset of any organisation, especially in times of rapid change and instability. GVTs have the opportunity to take advantage of cultural diversity by taking into account the values, beliefs, perspectives and experiences of foreign team members and integrating their specialised skills (Mockaitis et al., 2018).

Effective management of multicultural teams enables companies, with the help of IVPT members, to explore and develop new markets in other regions, open representative offices in other countries, and make better decisions to expand their borders and opportunities.

According to Eva Gallardo-Gallardo et al. (2019), attracting, developing and retaining talented employees is one of the most important challenges facing companies around the world today, especially when governments have joined the race. This can give them a great advantage over their competitors, which is very important in the global market. The multiculturalism of global talent in a team facilitates multifaceted options for problem solving.

Creativity. Team members with high intercultural competence may accept and provide

reciprocal influence, fostering cohesion and enabling the development of more creative approaches to solving problems, and attaining cultural synergies. (Baptista, 2022)

Knowledge sharing. It is a terminology used to refer to a wide range of knowledge transfer activities to maintain mutually beneficial co-operation between team members. When knowledge is shared among project team members, it contributes to organisational performance (Shiu-Wan Hung et al., 2020). The diversity of cultures in a team expands the team's knowledge pool due to the different educational backgrounds of team members.

A virtual team also helps improve creativity, facilitates the acquisition and exchange of knowledge, and enables organizations to *respond faster to market changes* (Vìctor M. Garro Abarca et al.2020).

Cultural disadvantages

IVPTs contribute to organizational development, but multicultural differences between team members need to be managed to achieve effective performance (Stocker et al., 2018).

The wave of globalization is gaining strength day by day. More and more markets or investors are looking to explore other markets or engage in projects in other countries to gain more in this endeavor, there is an inevitable problem of intercultural conflicts as a result of different professionals from different countries coming together to work on projects (Taylor Danielle, 2021).

People from different cultural backgrounds may have different views on decision-making, leadership roles, hierarchy and power, and conflict resolution due also to their mentality (Baptista, 2022).

Jacques Fresco, a well-known American futurist and author of the Venus Project, in an interview stressed that the reason for disagreements (conflicts) is that people grow up in different places, in different environments, and they bring with them views and beliefs that are transmitted to them by their environment.

From this we can draw a conclusion, that cultural differences in a team can be viewed not only through the prism of nationality, geographical distance or religion, but also through the diversity of worldview and understanding of universal norms of behaviour.

Technical advantages and disadvantages

On the technical side, the work IVPT is favourable for the company because the exchange of data and messages between team members is almost instantaneous and does not depend on geographical distance. The wide range of *telecommunication technologies* allows to diversify communication and bring it closer to face-to-face communication. (Frost & Duan, 2020). Aiste Kukite (2021) argues that communication in virtual project teams is more

effective and that members of virtual project teams have better skills in document comprehension, formal communication, self-confidence, discipline, and professionalism than traditional teams.

Stimulating organizations to embrace *digital transformation* as an opportunity to expand their capabilities. (Davor Vuchkovski et al., 2023).

However, *dependence on technology development* creates dependence on software updates, technology development, and dependence on changes in requirements for equipment specifications.

The risk of unstable resource consumption. To summarise the technical complexities of working in a virtual environment and the essence of digitalisation in one sentence, the power is in the hands of the person who holds the switch. This means that no matter how hard you try to improve the quality of your workflows, if you turn off the power or the internet, the result will be virtually nil. For example, if you work in the 3D fashion industry or design interior projects, the world will not change if you lose the results of your work. But if we are talking about stock exchange operations, military or medical developments, then the loss of such results can affect society. And the consequences can sometimes be catastrophic.

The main risk factors here will be the degree of globalisation of the project and the strategic importance of its results for a certain segment of society or humanity as a whole. In other words, the more strategic or global the project is, the more issues will need to be analysed: 1) who is the provider of Internet (public or private organisation); 2) the ability of the provider to be flexible with respect to the technical requirements for Internet quality for the project; 3) the type and quality of protection of the communication channels; 4) even who may own the satellites providing the Internet, or how to avoid power outages, etc. This is not a reason to abandon this way of working, but a reason to think about a number of additional measures to ensure a stable supply of electricity and internet. This factor is closely intertwined with the security of the project.

Health protection advantages and disadvantages

Law-abidingness in health care. The situation with Covid-19 showed that IVTPs are able to operate without violating the quarantine recommendations of the WHO and the attributions of governments. Here non-compliance with legislation is considered from the point of view of the company's law-abidingness and the absence of economic sanctions for such violation.

Difficulties in monitoring mental health. In a virtual environment, it is difficult to monitor the well-being at work of team members. Technologies of virtual communication with

the team do not make communication spontaneous and do not allow full monitoring of non-verbal behaviour. As a result, a decrease in the effectiveness of the team as a whole may be the result of prolonged exposure to psychosocial or other risks. And it can take quite a long time to correct the situation. Here the level of trust between IVTP members and the manager is very important. In this case, trust will determine the speed, timeliness of identifying the problem and ways to solve it.

<div align="center"><i><u>Advantages working of IVTP on the societal level</u></i></div>

The impact of IVTP on the social environment has been studied very little. This is a question for future research. Related research was therefore used for the analysis.

Economic benefits

Inclusion. IVTPs can employ people with physical or sensory impairments in virtual workplaces. This has the potential to increase self-employment opportunities for such people more than in conventional settings and improve their quality of life (Shafia et al., 2009).

Development of local infrastructure If an IVTP member works from a place far away from metropolitan areas, it gives an opportunity to develop the economy and infrastructure of the area where they works according to the principle of *demand gives birth to supply.*

Not having to use private transport during peak hours on the way to work and back home relieves *pressure on traffic,* improves the quality of services related to the transport of people or the delivery of products or services.

Economical disadvantages.

No research has been found on the impact of IVTP at the social level, but it can be assumed that working away from the physical office *affects the rental market for office* space in a particular locality, as well as *municipal services* such as public transport.

Geographical advantages and disadvantages

Proper organization of IVTP work allows to work with clients, stakeholders (online support, online consultations, other communication) 24/7 without being bound to local time.

The popularity of the Internet reduces the energy-saving potential. (Zhanbayev et al., 2022). As the geography of Internet coverage expands and its quality and speed improve, the issue of environmental pollution (increased radiation background, carbon dioxide emissions into the environment) becomes more and more serious. From this point of view IVPTs are active participants in environmental pollution.

Cultural advantages and disadvantages

Participation in global social processes. The possibility of attracting teams of workers from underdeveloped countries will improve their quality of life without travelling outside the

country, as well as develop harmonious intercultural relations. "Cultural diversity means harmonious coexistence and interaction of different people, that culture should be regarded as a set of distinctive spiritual, material, intellectual and emotional features of a society or social group and should complement, in addition to art and literature, ways of life, ways of living together, value systems, traditions and beliefs" - UNESCO Universal Declaration on Cultural Diversity.

History shows that there is hostility between groups that differ in culture, ethnicity, religion and language (Dumitrascu & Dumitraşcu, 2019). The legislation of most countries, the corporate policies of very many companies establish the equality of every person in their rights and freedoms. But still virtual discrimination takes place in modern society, and working in IVTP is at risk.

Examples of virtual discrimination are rude and foul language against members of a certain race, displaying racist images on the Internet, making sexist jokes, excluding a person because of their ethnicity or religion, making physical threats on the Internet, making untrue, stereotypical and indirectly discriminatory statements, using hate symbols and showing graphic images or real images of acts of hate (Nurcan Ensari, 2022).

The problem is that virtual work is not limited to the virtual work environment. There are many social networks that allow for informal socialising outside of work. Tracking discriminatory behaviour in a large virtual project team can be extremely difficult, both in terms of time constraints and confidentiality.

Technical advantages and disadvantages

Through technological means, IVPTs can *present their unique results to the wide public*, share practical experience for scientific analyses and research, and develop new directions for development.

The work of almost all IVPT's is done over the Internet. It is working with all kinds of data, the value of which sometimes cannot be measured in money. And the issue of security of such data is critical.

Cybersecurity is one of the fastest growing technology areas not only in the IT sector but also in healthcare, banking, education, military, government and public sector (Dummanaboina & Chakravarthy, 2020). From a social point of view, lack of cyber defence in IVTP operations is the risk of theft, loss and disclosure of such data can cause *irreparable damage to society and humanity*.

Health protection advantages and disadvantages

Experience with Covid-19 has shown that working in a virtual environment promotes

compliance with quarantine norms. This increases human health security during pandemics.

Members of IVPT who work under stress may notice deterioration in their physical and mental health. Diagnosis and treatment of diseases related to virtual work is an additional burden for the medical and social system of authorities.

Advantages working of IVTP on the individual level

Economic benefits and disadvantages

For the employee, working in a virtual environment saves the most valuable resources: time and money spent on travelling to and from work (D. Simpson, 2017). For a representative of underdeveloped countries, it is an opportunity to get a very well-paid job without leaving the country.

If the corporate policy of international companies does not provide, then the costs of Internet, telephone and technical equipment that meets certain standards for work are the employee's own costs.

Due to the global composition of these teams, local team members become representatives and experts in their international market (Chmielecki, Michał, 2021). In the future, such experience significantly increases the value of a specialist on the labour market.

Geographical advantages and disadvantages

No attachment to a single workplace. Virtual work allows to change the place of work at will and not be tied to the boundaries of a city or country. This is a pleasant bonus that has a good effect on the emotional state of the employee.

Remoteness from other team members does not allow to establish full-fledged relations, realize physical team building, which is very important for the microclimate and trust in the team.

Cultural advantages and disadvantages

Working in an IVPT and communicating with foreign colleagues *erases stereotypes imposed by society or personal stereotypes about cultural differences*. It is an opportunity to demonstrate one's abilities, one's culture and a chance to get a prestigious job far beyond the country's borders.

The X-Culture Global Virtual Team Project can be used as an example to analyze the positive experience of such work for students. In this project students join virtual teams from different countries. Their main goal in the learning process is to help them solve real problems in the business environment. As part of the project, they learn about other countries and their cultures and learn how to cooperate online and work in international companies despite cultural differences and time zones, as well as learn the basics of international business (Internet

source: x-culture.org).

Cultural intelligence as a personal quality of an employee. The influence of cultural intelligence of a virtual multicultural team has an impact on employees' personal values (Al-Somaidaee, Mustafa, 2021).

The phenomenon of multiculturalism in an organisation. People with ethnocentric position consider their own culture to be the best, exemplary, to be followed. They evaluate other cultures through the prism of their own, which leads to the perception of these differences as anomalies and deviations from the norm. When the criteria of one's own culture become determinant in assessing the way of life of other cultures, this can manifest itself in surprise, rejection, condemnation and even hostility (aggressive ethnocentrism), as well as a desire to impose one's culture on others because "one's own is the best" (Chmielecki Michał, 2021) This can hinder inter-ethnic communication in the team and lead to conflicts in the team. The presence of its own corporate culture in IVPT contributes to the suppression of cultural values of team members and the development of tolerance towards colleagues from other cultures, as well as the employee's acceptance of the phenomenon of multicultural environment.

No negative cultural effects of working in IVPT were found. It can be assumed that mixing cultures in a team is a possible risk of losing one's own cultural identity.

Technical advantages and disadvantages

Working in virtual mode gives the opportunity to work with unique software, information cloud as a company's resource and to improve one's own level of knowledge.

Your own computer or laptop is a working tool that must comply with technical parameters (the company's security standards in the context of working with data). If a computer or laptop is not provided for by the company's policy, it becomes the employee's own problem.

Health protection advantages and disadvantages

Virtual work is a *personal health safety measure* during pandemics or seasonal illnesses, but it is also an increased *risk of burnout* due to isolation from society, *work-life imbalance, musculoskeletal, visual and hearing impairment* due to the use of headphones.

Aiste Kukite (2021) notes that theoretical literature has not studied the threat of information overload or loss of life-work balance in the VPTs.

A systematic analysis of the advantages and disadvantages of the IVPT operation (Table 1) has led to the conclusion that this form of work is beneficial for the company, society and the individual as an employee.

The disadvantages of IVPT are largely predictable, can be viewed through the prism of

crisis management and can be eliminated or minimized through certain organizational measures. In order to realize the benefits of IVPT, it is necessary to ensure that it is highly effective. To do so, it is necessary to identify the factors that can affect the effectiveness of IVPT and understand their behavior (Dumitraşcu-Băldău & Dumitraşcu, 2019).

Zuofa & Ochieng (2017) argue that the suitability of virtual teams should be considered individually for specific projects. Ford et al. (2017) note that in organizations with international projects, learning how to properly organize effective project management is crucial.

In their research, Zuofa & Ochieng (2017) provide examples (Lau, 2004) that virtual project teams can work better in knowledge and service based projects that involve design, analysis or planning. In the process of analyzing both the IVPT concept itself and its advantages and disadvantages, it becomes apparent that most of the problems with this form of work are related to psychological (interpersonal relationships, workplace well-being) rather than material factors.

Critically important is how the employee perceives the assignment, the team member or manager with whom they have to interact in the course of that assignment, the schedule and mode of communication, and the organization as a whole if all information comes only from a monitor screen.

In addition, it is important to understand what motivates the team member and the team as a whole to work effectively in a virtual environment with project-specific deadlines for reporting team results. This will be discussed in more detail in the Master's thesis.

1.3 Teamwork in international virtual project teams

Working in virtual teams has become commonplace for global organisations. It is becoming one of the successful components of working in the global market (Akinul Islam Jony, 2020). The use of virtual project teams in organisations has shown an upward trend over the past few years, and this growth is expected to continue in the future (Dulebohn & Hoch, 2017). Given that the work of virtual project teams is carried out virtually with the help of technological tools, maintaining a high level of teamwork efficiency becomes a critical task in the implementation of almost any project.

Steve et al. (2021), referring to the results of a Gartner Group study, report that from 50 to 82 per cent of virtual teams fail because they find it difficult to collaborate and develop a common understanding of goals and objectives, as well as overcome problems of trust and social cohesion.

This high failure rate makes companies take the utmost responsibility in hiring virtual

project team members and creating the necessary conditions for their effective functioning. Morgan Lichtenstein (2022) notes that in virtual teams, the focus should not be on hiring, but on finding talent (https://www.huntclub.com/blog/how-to-hire-for-virtual-teams-lead-with-confidence).

The PMBOK defines teamwork as bringing people together to achieve a common goal by building, supporting, and leading a team. At the same time, teamwork is a dynamic process that involves communication and knowledge sharing to achieve the goal effectively (Driskell et al., 2018). This means that if team members, as professionals from different disciplines, are able to combine their individual talents, experiences and skills through work processes and communication, the team will become more effective (Furst-Holloway et al., 2004).

The analysis of scientific literature allows us to consider an international virtual project team as a set of human resources, where each team member must have certain professional skills or other talents before starting work in the project. At the same time, professional skills are only a small part of the overall competencies that a team member must possess. In support of this conclusion, Dumitrascu et al. (2016) point to a diverse range of soft and hard skills that they believe a member of an international virtual team should possess (Figure 3).

A separate challenge is to create the conditions under which a team member is able and willing to integrate this knowledge and skills to achieve an effective outcome for the whole team (Mathieu et al. 2017).

Further, it is proposed to analyse in more detail what is meant by the effectiveness of a virtual team. What exactly should the team strive for, what drives it to success, and how to achieve it.

Virtual team effectiveness is a qualitative indicator. It describes the state of achieving maximum productivity/workload under existing constraints and minimum costs." (Yulia Levchenko, 2021, online source). In the scientific literature, the effectiveness of a virtual team is mostly considered through the prism of two main indicators: productivity and satisfaction. While productivity is seen as the degree to which the team's work meets the required standards or metrics, satisfaction is seen as the degree to which team members perceive the decisions made and agree with the final results (Lin Chad et al., 2008).

However, Raymond Opdenakker et al. (2019) suggest that the effectiveness of a virtual project team can be assessed using a more extended model of four indicators, such as efficiency, productivity, satisfaction, and the ability to record results electronically (Figure 4). The authors note that effectiveness in this case is the ability to achieve the desired result and is measured not directly, but indirectly, through the measurement of work results (productivity).

In fact, measuring efficiency is a difficult task. Even if we want to measure the productivity of an individual team member, a single metric cannot cover all the nuances of an employee's responsibilities and contributions, whether remote, in-person or hybrid. In addition, there are many types of work that are critical to the success of a team, but may not be directly related to overall productivity (Nickman et al., 2021).

Strategic momentum is also used to characterise the effectiveness of IVPT. Here, strategic momentum refers to the sustainability of the virtual project team's strategy, i.e. the actions and behaviour in the virtual project team aimed at achieving certain results. Strategic momentum can be measured mathematically. It is proposed to measure strategic momentum as the ratio of resources offered to the amount of work realized. From this perspective, strategic momentum is differentiated into functional and dysfunctional. (Raymond Opdenacker et al., 2019).

Although IVPT performance measurement methods are not the subject of this article, it should be noted that collecting baseline data at the beginning of a project is crucial to obtaining reliable results. Simply put, in order to measure the effectiveness of a team, it is necessary to determine the point at which to start counting and the point at which to record the desired result. It is very important that all team members and the team leader are equally aware of how the company measures performance and what the evaluation criteria are for each specific project.

Virtual team is a broad concept. Mayar et al (2022) distinguish 6 types of virtual teams: network teams, parallel teams, project development teams, functional teams, service delivery teams, offshore outsourcing teams. Therefore, it is proposed to analyse IVTP teamwork through the prism of a general analysis of virtual teams.

The Hackman and Morris (1975) Input-Process-Output (I-P-O) model is widely used in the scientific literature to study teams and virtual teams. This model allows analysing the factors that influence the work of a team and, accordingly, its results.

Analysing the I-P-O models of virtual teams suggested that no matter how different the models are, they still indicate that team member's competence, communication, coordination, leadership and trust are the main drivers of the team.

For example, in the I-P-O model by Victor Garro Abarca et al. (2021), the team process is represented in two groups, where the factors of trust, communication and coordination are components of the task performance process or socio-emotional process (Figure 5). Raymond Opdenakker et al. (2019) presented a more detailed I-P-O model of virtual team effectiveness in terms of critical team success factors (Figure 6). In his model, communication, coordination,

and trust are also team processes.

The analysis of the IVPT context in the previous sections of this article leads to the conclusion that teamwork within IVPTs is a dynamic process and is limited to the life cycle of the project itself. Mayar et al. (2022) reached a similar conclusion. Authors presented their model of the functioning of a virtual team in the project life cycle (Figure 7).

It can be said that the project team life cycle is a separate process that adapts to the conditions dictated by the project life cycle, but changes in the team life cycle affect the project life cycle and its outcome.

In the scientific literature, the four-stage model of Tuckman (1965) with some later modifications (Tuckman and Jenson, 1977) is used to demonstrate the stages of development of a virtual project team. However, it is worth noting that Tuckman's model has certain limitations, as it was developed for small therapy groups (Quade et al., 2021). The authors (Quade et al., 2021) also argue that the correct analysis of the life cycle of a particular team requires individual adaptation of the model template.

The IVPT life cycle can also be studied in terms of time pressure on team development processes using the Gersick model (Gersick, 1988). The model assumes the existence of two phases of stability, where the first phase ends with a sudden burst of activity halfway to the project deadline. From the perspective of the Edison model (Edison, 2008), the team life cycle should be viewed additionally in terms of function and dysfunction.

Why is it important to understand the team development life cycle and the processes that take place in it? Because it will help to adjust, management interventions for each stage of team development and maintain its effectiveness at a high level over time. In other words, the point is that knowledge of the team life cycle makes it possible to identify performance factors that require management intervention to achieve the desired result (Furst, Reeves, Rosen, and Blackburn, 2004) (Figure 8).

One might assume that a short project life cycle has a negative impact on IVPT's ability to perform to its full potential. This is partly true because in order to become an effective team throughout the life cycle, each team member also undergoes their own transformation. They must adapt to the influence of three force fields: personality, task, and collaboration. Any behavioural change is a complex process (Raymond Opdenacker et al., 2019).

It is a common practice for international organisations to maintain their own pool of talent around the world and engage them in a new project after the completion of a previous project (https://accendotechnologies.com/blog/your-hr-guide-on-best-practices-for-building-talent-pools). In this case, it can be assumed that in order to build effective teamwork, it is

necessary to build on and take into account the existing connections and experience of team members.

The team life cycle is also a dynamic phenomenon in terms of team composition. It is not always the case that a team has the same composition at the beginning and end of its life cycle. This can be due to personal circumstances, as well as organisational and structural changes in the project (employee resignation, team reduction or expansion). In this case, additional factors that will affect the effectiveness of IVPT at different stages of its life cycle are the socialisation of the new team member (Dumitru, 2021).

Returning to the topic of effectiveness, we can say that in the process of achieving effectiveness, the IVPT operates under the influence of various variables. An analysis of the scientific literature shows that these variables are viewed in a positive and negative context. In the negative context, these factors are seen as problems that the team must work with in the process of achieving the effectiveness of its work, for example, as presented in the study by Ünal (2023) (Table 2).

As well as in a positive context, where these aspects are seen as factors that need to be identified in the team, evaluated and developed. For example, the I-P-O model, which has already been presented earlier in this master's thesis.

Based on the above, this master's thesis proposes its own scheme of representation of the factors influencing the effectiveness of the IVPT. In this case, 4 key factors (leadership, trust, communication and spontaneous critical factors) are considered as a set of constantly interacting and intersecting force fields that somehow affect the effectiveness of the team during its life cycle. At the same time, the organisation, team and employee are considered as structural units that interact with each other in the forward and backward directions to achieve an effective result. In the organisation-team-employee direction, the impact is exerted by making management decisions based on the efficiency factor to achieve the planned result. In this case, the team leader is seen as part of the team. In the employee-team-organisation direction, influence is exercised by presenting the results of one's work (Figure 9).

Each of these factors is multi-component. It can be assumed, however, that the interaction of these factors with each other can help identify other influencing factors. Thus, for example, the interaction of the factors "communication" and "trust" identifies the factor "information exchange", and the factors 'communication', 'leadership' and 'spontaneous critical factors' identify the factor 'coordination' etc.

The organisation, team and employee are seen as structures that not only exposed to themselves to such influences, but also exert a constant circular influence on each other

throughout the life cycle.

It is assumed that in the direction of "organisation-team-employee" influence is exercised through the dissemination of organisational culture, organisational decisions and support during project implementation. In the employee-team-organisation direction, influence is exerted through the presentation of their work results, taking into account the same factors as in the employee-team-organisation direction. The following explanation of the diagram is offered to confirm the links between the key factors.

Explanation of the scheme.

1. *Leadership.* Leadership in a virtual project team plays a crucial role in ensuring the high performance and success of the project team. Effective leadership in virtual teams is essential for creating a cohesive and productive work environment, overcoming communication barriers, and facilitating collaboration between geographically dispersed team members (Dube & Marnewick, 2016). The influence of a leader's physical characteristics and behaviour on trust in the virtual leader and trust in the team has also been recorded (Guinalíu et al., 2016). Through communication, leaders can motivate team members to improve their level of performance (Zilkiqi et al., 2020).

2. *Trust* is the process of balancing risk and interdependence in remote teams. For an IVTP member, it means the willingness to accept the other team member's vulnerability and to expect positive behaviour or actions from the other team member towards oneself in circumstances where they have not met or worked together in real life and are unlikely to work together after the project is over (Catalina Dumitru (2021), Lukić & Vračar (2018)). Carlos Flavián et al. (2021) highlight that team performance is influenced by two variables: leadership and trust within the team.

Trust plays a mediating role for team effectiveness (Ben Sedrine Doghri et.al, 2020). Bart de Jong et al. (2020) research has shown a positive relationship between trust and team effectiveness: trust increases team effectiveness and creates a preference for collective over individual interest. Hüseyin Çırpan et al. (2020) note that trust is an important factor in building leadership and team cohesion. Mohammad Alsharo et al. (2017) argues that trust is positively affected by knowledge sharing.

3. *Communication.* In the context of the characteristics of working in IVPT, communication should be seen as virtual interaction in the process of working together with others through technology. Recent research has shown that good communication in a virtual team devalues the negative manifestations of physical distance on team outcomes (Ünal, 2023). Knowledge sharing and the creation of new knowledge are highly dependent on the interaction

between team members and communication technologies (Kneisel, 2019). Communication contributes to the cultural intelligence of the team (Mahadevan & Steinmann, 2023). Cultural intelligence indirectly affects the effectiveness and satisfaction of global project team members (Henderson et al., 2018). At the same time, lack of cultural intelligence generates a lack of trust in global virtual teams (Wengel, 2023). Multichannel communication helps to improve the quality of interaction in multilingual virtual teams (Taylor, 2021). Pustapha (2017) highlights communication as a major factor in team performance because communication is the key to information about the impact of other performance factors. According to her (Pustapha, 2017) assertions other factors (such as leadership, management, trust, conflict resolution and multiculturalism) are centred in the structure of communication.

4. *Spontaneous critical factors.* Under spontaneous critical factors it is proposed to consider factors that arise unplanned, but significantly affect the work of the team. For example, it may be the need to replace a leader or a team member, illness of one of them, bankruptcy of the organisation (if the project team is multi-organisational), situations when part of the team misunderstood the technical assignment and presented completely different results.

Spontaneous critical factors are viewed in a negative light, as the influence of communication, leadership and trust factors can be emphasised to mitigate possible consequences.

As shown in the organisation-team-employee diagram, team performance is also proposed to be viewed through the influence of the organisation. It is proposed to investigate the following impact pathways:

Organisational culture, usually created by the members of the organisation, is a set of values, beliefs and behavioural norms that guide the members of the organisation (Yazici, 2009). Katane & Dube (2017) note that organisational culture, as well as trust, effective leadership and communication, play an important role in the success of a project team. Organisational culture has a positive impact on team performance. Organisational culture acts as a mediator between transformational leadership and change management among virtual team members. (Simranjeet Kaur Bagga et al., 2023).

Organizational support. Drouin et al. (2013), Fossum et al. (2019) investigated the theory of organisational support in project teams and concluded that organisational support has a positive impact on the effectiveness of a distributed project team and success in the project. In their study, they present organisational support as a multicomponent phenomenon that includes:

1) Strategic staffing;

2) Training and tools;

3) Autonomy of decisions made by the team;

4) Top management monitoring.

3. Organizational decisions. Drouin et al. (2013) argue that project behaviour is generally very sensitive to organizational decisions. Due to the temporary and specific nature of projects, decisions can be critical and irreversible. It can be added that an organization's decision-making processes determine how quickly and efficiently decisions are made at the project level. A lack of clear decision-making procedures can lead to delays and confusion.

1.4. Defining leadership in a virtual project team

Leadership in a virtual project team plays a crucial role in ensuring the high performance and success of the project team. Effective leadership in virtual teams is essential for creating a cohesive and productive work environment, overcoming communication barriers, and facilitating collaboration between geographically dispersed team members (Dube & Marnewick, 2016). Thoughba et al. (2021) draw attention to the small number of studies on leadership in virtual environments, as opposed to traditional ones.

At the same time, RW³ CultureWizard (2016), a biennial research on virtual teams, published a new report in which 58% of respondents said that global team leaders are underprepared to lead multicultural teams. At the same time, 96% of respondents who identified themselves as team leaders considered themselves "either 'either effective or highly effective' when it comes to leading multicultural teams." This difference between the opinions of team leaders and the teams they lead (which is 38%) suggests that very little attention is paid to leadership in multicultural and virtual environments, even though expectations for its effectiveness are very high.

Moreover, in the scientific literature, such leadership is described from different perspectives: as a new style of leadership (Aggarwal, 2018) or as traditional leadership using a technological tool (Subrahmanyam, 2019). Therefore, in order to find a rational grain in all this, the study of leadership in IVTP should begin with a definition.

It is proposed to consider leadership in IVTP as a set of the following concepts: leadership is a function of the individual; leadership is a process; leadership in a project team; leadership in a virtual environment.

Leadership is a function of personality, a set of character traits that distinguish a leader from other employees (Nikolaieva, 2021).

Zoran Lukic et al. (2015) identify 4 meanings inherent in leadership: leadership involves the involvement of other people, employees or followers; it is characterised by a willingness to accept instructions and tasks from the leader, giving him/her a certain amount of power over oneself; the ability to use various forms of power to influence the behaviour of followers; ability to exert influence.

It was found (Zoran Lukic et al., 2015) that scholars use two approaches to studying leadership. The first approach involves studying the traits that distinguish a leader from a non-leader. The second approach studies the qualities that distinguish successful leaders from unsuccessful ones. Studies based on the first approach have not yielded significant results. Instead, research based on the second approach has shown that a leader's success does not depend on any particular group of traits or qualities, but rather on how well the leader's actions match the requirements of a particular situation.

This analysis is fundamental to understanding the nature of leadership. Leadership is not the sum of the innate/formed character traits that make up a leader, but the situation in which they can effectively and successfully apply these traits to lead.

Stefanova (2022) draws attention to the nature of leadership, which is that leadership is a process of influence that takes place in the context of a group to achieve goals.

The project manager or project leader is responsible for leading the project team to project completion. They use their knowledge, tools, and management decisions to successfully deliver the project requirements within time and budget, and to the satisfaction of key stakeholders and sponsors (Margaret R. Lee, 2010).

It is important to note that project leadership is primarily time-bound. For a short-term project, effective leadership can be challenging, as much of the time in the early stages of the team's life cycle must be spent building relationships.

Project leadership is a journey of continuously adjusting and improving actions and behaviours, not just mastering a set of skills based on best practices. It remains one of the most debated, if not controversial, issues in project management (Jeevat Ram for IPMA, 2022.Internet source).

Digital technologies have irreversibly changed the way organisations function, altered the way they work and communicate, and created a number of challenges for their leaders (Laura Cortellazzo et al., 2019). Leadership in virtual environments is more challenging than in face-to-face teams, as coordinating teamwork and building trust requires more effort than in traditional teams (Chenwei Liao, 2017). Satya Subrahmanyam (2019) suggests that traditional leadership theories and practices can be applied to virtual environments, with corresponding

changes in the way messages are communicated, the way messages are delivered, and the way performance is measured. From this context, it can be assumed that leadership in virtual environments is seen as traditional with the use of a technological tool. In the scientific literature, the term virtual or e-leadership is often used.

According to Sheryar Khan Tahirkheli (2019) e-leadership and leadership in managing global virtual teams are different because e-leadership is a social influence process, an organisational phenomenon, while leadership in global virtual teams is an organisational task with a well-defined goal. Also, e-leadership differs from e-project management in that the latter definition does not include the definition of leadership, but is based only on the widespread use of electronic technologies for project management (Margaret R. Lee, 2014).

This emphasises the need to introduce a higher level of leadership and management skills compared to traditional teams. (Bouchonsean,2015).

It is important to understand that there is a significant difference between leadership and management. The difference is that leadership always implies responsibility for a group of people, while management is more about being responsible for the execution of a task and does not always imply responsibility for people (Dorun Festeu et. al.2014)

Margaret R. Lee (2020) has described the challenges faced by a leader in a virtual project team in more detail. In her research (Margaret R. Lee, 2020) categorised all the problems into 5 groups: communication, team culture, interpersonal, technological and economic. Carlos Flavián et al. (2021) believe that virtuality creates managerial challenges because remote work communication raises doubts about the leadership abilities of managers and the reactions of team members. Ben Cedrin Dogri et al. (2020) argue that effective leadership requires a constant focus on the goal of increasing trust.

Leadership doesn't work on its own. For it to be effective, it needs to be recognised in the team and in organization. In the context of IVTP, leadership and its recognition in the team is done through technical communication channels. Sinda Ben Sedrine et al. (2020) in their research argue that a leader's credibility determines his or her working style. Moreover, the authors (Sinda Ben Sedrine et al.2020) concluded that in the context of virtual teams the most appropriate leadership styles are transformational leadership and transactional leadership.

1.5. The best styles for leadership in international virtual project teams

"The leadership style you choose (and yes, to a large extent it is an active choice you can make) has a direct impact on the outcome you achieve. It's what makes you memorable to others and fulfilling within yourself." Rebecca Hourston (2013, Leadership Institute, online source).

But does the leader choose? In an organizational context, a leader managing a team must adhere to the policies and set rules of the organization (Aistė Kukytė, 2021). In a personal context, a team leader is initially guided by his or her previous experience of managing and collaborating to achieve results (Chenwei Liao, 2017).

Yes, the leader chooses. The literature review led us to suggest that leadership style is a balance between personal capabilities and organizational frameworks to achieve success. Margaret Lee (2021) argues that there is no one-size-fits-all leadership style for managing remote teams, but virtual project managers have options: transformational and transactional leadership.

However, Eisenberg et al. (2019) describe transformational leadership as less useful for teams with high levels of variance compared to teams that are close together. The authors of the research attribute this to the fact that the degree of variance contributes to the perception of the leader as unrealistic, making it difficult to inspire and motivate them. Michel et al (2011) came to the same conclusion. They proved that compared to transactional leadership, transformational leadership loses out when it comes to tight project deadlines because a lot of time is spent on motivating employees. At the same time transactional leadership proved to be more effective in teams where the focus is on results and task fulfilment Michel et al., (2011).

Behling, Christina J. (2019) argues that leadership behaviour depends on both the skills of the virtual project manager and the organisational support provided to the virtual project manager. Also according to the results of her (Behling, Christina J.,2019) research, transactional, transactional leadership is most often applied to virtual project teams and servant leadership is most often applied by Scrum-masters in the implementation of Agile virtual projects.

1.6. The ways organization's impact on the virtual project team

The success of virtual teams, like traditional teams, depends on organizational support (OS) and the resources provided to achieve goals (Judith Kurz, 2021). OS acts as a direct mediator between critical success factors and project success (Rasool et. al, 2022). Strong OS in a project is able to minimize the negative impact of risks as well as turn them into benefits through the resources and guidance provided (Sadeh et. al, 2019).

Research has proven the direct positive impact of OS on individual components of virtual project team effectiveness (Drouin et al. (2010), Drouin et al.(2013), Zwikael et al. (2019)) as well as on the success of the project as a whole (Çemberci et al., 2022). OS positively influences leadership in GVT, and also the success of the project as a whole (Karin

Väyrynen et al., 2013).

The positive influence theory of OS was first introduced by Eisenberger et al. (1986). Their research showed that there is a definite relationship between the employee and the organization, which is that employees are committed to the organization to the extent that they believe that the organization cares about them. Although the research by Eisenberger et al. (1986) focused on traditional teams, the results of this research were later applied to virtual teams. OS is not a holistic concept; it should be viewed as a multi-component phenomenon. Errichiello & Pianese (2021) emphasize the importance of a holistic approach of OS to workers who work remotely from each other, but also argue that breaking OS into components provides a more complete picture of the impact on expected outcomes.

Fossum et al. (2019) suggest looking at OS in global projects through the prism of the practices used: 1) global project structures - team specialization; 2) global project structures - geographical distribution; 3) selection and training; 4) project management offices (PMOs); 5) senior management support; and 6) global collaboration strategies. In addition, research by Fossum et al. (2019) showed that OS practices in the form of team selection and training have a positive impact on cost savings and project timelines.

It has already been mentioned in this master thesis that Drouin et al. (2013) in their research also considered OS as a combination of factors: 1) strategic recruitment; 2) training and tools; 3) autonomy of decisions made by the team; and 4) top management control.

Orazaly et al (2020) highlight that the degree of OS depends on the specialisation of the project and suggest that OS should be viewed in terms of the processes and critical processes in the project.

Irfan et al. (2021) proved that OS affects work-life balance and project performance. OS expressed in top management support, top management feedback significantly influences the success of the project (Mughal et al., 2018). OS expressed in the creation of a favorable working environment, provision of tools for work, material rewards and recognition of work results forms commitment to the organization and job satisfaction (Bratha et al, 2023). OS promotes employee retention (Ahmad & Cheng, 2018) and consequently reduces employee turnover, which is critical to the success of the project. OS which encourage employee initiative and creativity promotes creativity and innovation (Murat Çemberci et.al, 2018).

The analysis of research has highlighted the critically small amount of research dedicated specifically to OS or leadership in IVPT. Moreover, it is important to note the lack of a systematic approach in analyzing OS in projects.

2. RESEARCH METHODOLOGY

<u>Research methods in the theoretical part of the master's thesis</u>

In the first section of the theoretical part (1.1 Definition and key characteristics of an international virtual project team), in order to find a definition of the IVPT concept, the author analysed literature sources, websites, Internet resources and generalised and formed a single unique IVPT concept on the basis of these data through synthesis. In addition, a comparative analysis was used as a method of empirical research in the approach to characterising the understanding of teleworking. It was assumed that a single concept of IVPT would allow for the most meaningful study of this form of work and a thorough approach to the issue of studying the disadvantages and advantages of IVPT for an organisation.

In the second section and subsections of the theoretical part (Advantages and disadvantages of the international virtual project team), based on the analysed IVPT concept, a search for scientific sources and Internet resources was conducted to identify, define and analyse the advantages and disadvantages of IVPT for an organisation.

The data was classified and systematised. For this purpose, the levels of advantages and disadvantages of a virtual project team proposed by Dorothy Simpson (2017) were used: organisational, social and individual. Also was used the individual characteristics identified by Aistė Kukytė (2021), namely geographical distance, technology, and culture. The literature review allowed to add characteristics such as economic and healthcare.

Thus, the IVPT characteristics such as economic, technological, cultural, geographical and healthcare were considered at the organisational, social and individual levels. The data were presented in the master's thesis in the form of a table, where the advantages were presented first, followed by the disadvantages. At the end of the chapter, the organisations own critical analysis of the data was used to draw conclusions about the benefits of the PSC for the organisation. The chapter also uses statistics published by the global digital platform Statista to analyse one of the characteristics.

In the third section of the theoretical part (1.3 Teamwork in international virtual project team), a search and analysis of scientific literature was conducted, first to analyse the definition of a virtual project team, and then to identify factors that may affect the team's performance.

The study used the already systematised and structured data by Dumitraşcu et al. (2016), Furst et al. (2004), Ünal (2023), conceptual models of effective virtual team performance by Victor Garro Abarca et al. (2021), and virtual team performance factors by Raymond Opdenakker et al. (2019).

Through analysis and synthesis, the main factors of IVPT effectiveness were identified, and the author proposed his own model of the impact of these factors on teamwork. The model is designed to reflect the influence of significant factors such as leadership, trust, communication, and spontaneous critical factors in the form of constant force fields in which structural units (organisation, team, employee) are placed.

Each factor has been analysed by highlighting the main characteristics of the concepts from recent scientific research. In the proposed model, the team leader is not distinguished as a separate unit. This section also systematises team performance indicators based on a study by Raymond Opdenakker et al. (2019).

In the next subsections of the theoretical part (1.4. Definition of leadership in international virtual project team, 1.5 The best styles for leadership in international virtual project teams), the search and analysis of scientific literature was used to study the topic. The synthesis of the concept of leadership in IVPT was carried out by combining the characteristics of leadership as a character trait, leadership as a process, leadership in a project and leadership in a virtual environment. The systematised values of leadership proposed by Lukić, Z et al. (2015) were also used, as well as statistical data provided by RW³ Culture Wizard (2016). Identified the best leadership styles for the IVPT.

Section 1.6 defines the concept of organisational support and the ways in which it influences both the virtual project and its individual components. The search for material was conducted by searching scientific literature, research, Internet resources. The obtained relevant information was synthesised, analysed and summarized.

<u>Research methods in the empirical part of the master's thesis</u>

In the process of analysing the theoretical material on IVPT it became clear that in one way or another IVPT depends on the organisation in which the team members, the leader and the project itself are working. In the first parts of the theoretical work it was more about the resources provided by the organisation for the work of the project (internet, technical support, software, team composition). The last sections of the theoretical part emphasised the influence of organisational support on teamwork, leadership and the project as a whole (decision making, leadership style, formation of interpersonal relationships).

The main research of the master's thesis is devoted to the study of the role of organisational support in IVPT.

The research will use case study method; data collection methods will be semi-structured anonymous interview, secondary documents and open public data study. The case study will be IVPT on software product development in the international charity organization

SOS Children's villages.

The case study research methodology will follow Kumar (2019), but will also take into account the practical recommendations of Yasir Rashid et al. (2019) on the use of this method. Thus, according to Yasir Rashid et al. (2019), when using the case study method, a logical sequence from stage to stage of research is suggested, a so-called checklist of what the student should rely on in the research.

The research will be conducted as follows.

1. The first stage will involve gathering and presenting information about the organization within which the research is being conducted. Open public data as well as secondary documents in the public domain will be used. The organization's values and working methods will be demonstrated, as well as the corporate culture and general methods of organizational support for permanent employees (not within the scope of the project).

2. In the second step, detailed information about IVPT will be presented. To investigate the role of the influence of organizational support, one of the fundamental (in the author's opinion) research studies by Drouin et al. (2013), which confirms the positive influence of organizational support on the virtual project team, is taken as a basis and adapted. The Drouin et al. (2013) research was limited to North American companies and according to the authors' statement cannot be transferred to Asian or European cultures. From this perspective, the research conducted in this Master's thesis can be seen as carrying a unique value.

The choice of the research of Drouin et al. (2013) is not accidental. The analysis of the research literature on the topic of the Master's thesis highlighted that there has been critically little recent research on the topic of organizational support for IVPT. Most of the focus is on virtual teams working in companies on a permanent basis. In the research by Drouin et al. (2013) the impact of organizational support on the effectiveness of virtual project teams was studied through the prism of four factors: strategic staffing, training and tools, team autonomy, and top management monitoring. The degree of dispersion, variety of cultures, variety of work practices, and variety of experience were used as additional contextual variables. In the research, which will be carried out in this master's thesis, the technique of multi-attribute influence of organizational support will also be used.

The following conceptual model is proposed for the possible influence of organizational support on team and leadership in international virtual project teams

Conceptual model of the possible impact of organizational support on the teamwork in international virtual project team (Figure 1)
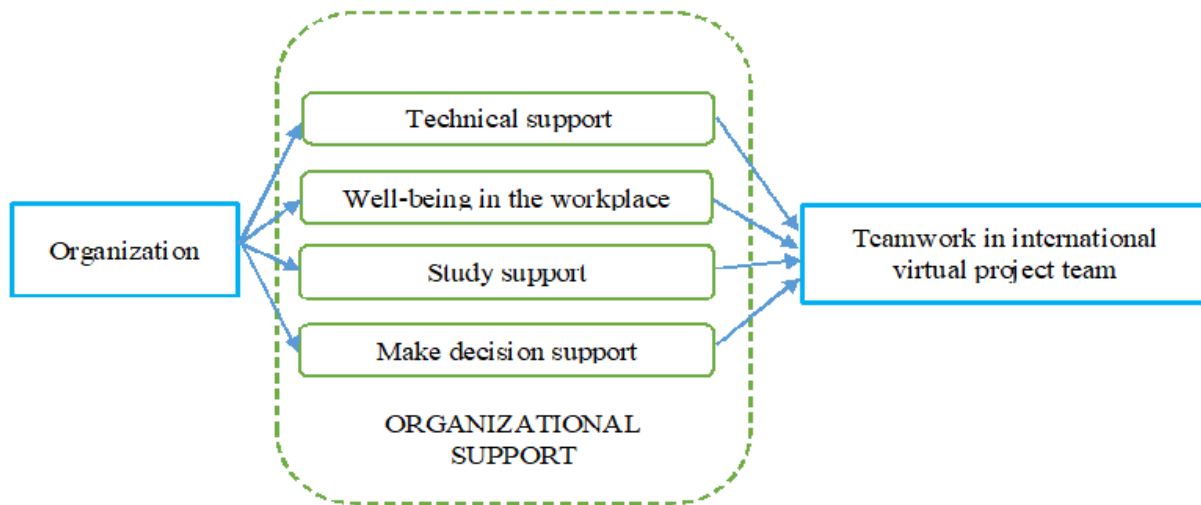
Conceptual model of the possible impact of organizational support on the leadership in international virtual project team (Figure 2)
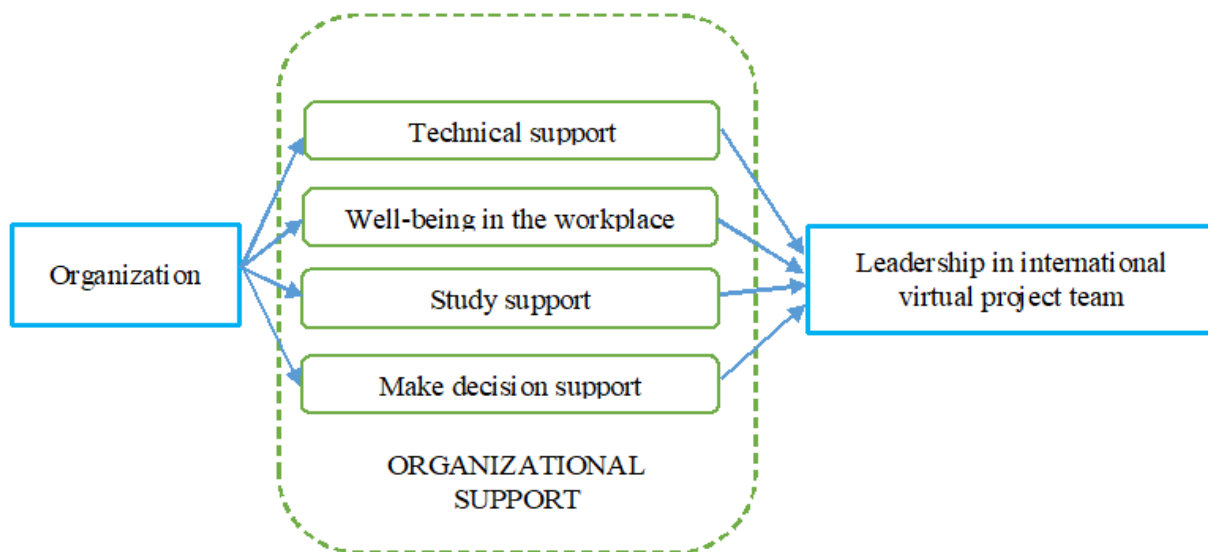
In the model, organization is represented as an independent variable, teamwork and leadership as a dependent variable, and organizational support as a mediator between these variables.

Technical support category includes:

- ensuring the security of the virtual environment;

-storing and recording the results of the team's work;

- providing access to updated software versions;

- providing a variety of ways of virtual communication;

- providing technical equipment in accordance with the project needs.

Well-being in the workplace category includes:

- availability of methods for assessing job satisfaction;

- access to and application of mechanisms for diagnosing and combating burnout, bullying, intercultural conflicts and other types of discrimination in the workplace;

- monitoring of life-work balance;

- participation in teambuilding for senior management;

- the opportunity to present intermediate and final project results to other employees of the organisation and senior management.

Study support category includes:

professional orientation;

support and motivation for learning;

creation of a virtual centre with access to training materials in accordance with the specifics of the organisation's work.

Make decision support includes:

- participation of senior managers in decision-making on project activities;

- feedback and evaluation of interim project results by senior managers;

- support and training of project leadership;

- finance independence.

Considering that the virtual project team in which the research will be conducted is small, the interviews will include a few items from each category of OS. Participants will be asked to answer the following questions in an interview.

Organizational support

Technical support block:

1. At the time of project implementation, did the organization provide security for the virtual environment in which you were working (anti-virus, storage and recording of your work)? Did the organizational security offered by the organization meet your expectations?

2. Please tell, did the organization provide you with appropriate technical equipment and software for the project? How did this affect your work?

3. Please tell, how the organization provided multi-channel virtual communication pathways between team members? (recorded the ways of communication between you, offered additional channels of virtual communication, what channels of communication you used in the process of work and whether it was sufficient).

Well-being in the workplace block:

1. Was there a survey or assessment of your well-being in the workplace during the project period? (job satisfaction, counteracting burnout, teambuilding, informing about health risks related to working at a computer)?

2. Has the organization informed you about the organization's diagnosis and methods of dealing with bullying, intercultural conflict and other types of discrimination in the workplace?

3. Do you work beyond your normal working hours? If yes, how often? How does the organization monitor your work-life balance and does it influence its formation in your case?

Study support block:

1. Did the organization provide training for you in the process and for the purpose of project implementation? If yes, which ones and who initiated the training?

2. Does the organization have a digital platform or other storage space with access to training materials tailored to the organization's specific work? How has this helped you in the process of working in the project?

3. Has the organization motivated you to learn (if yes, how)?

Make decision support block:

1. Were you completely independent from the organization in the decision-making process regarding the project? Were there any cases when actions or inactions of the organization influenced the work process and project results? If yes, how (positively or negatively)?

2. Have you been financially independent during the project implementation process? If no, were there any cases when the organization influenced the work process, project results by its actions or inactions?

3. Have you been involved in interim presentation of the results of your work to senior management? If yes, what role did it play for you and was it important to you?

3. The third stage will present the results of the anonymous semi-structured interview.

4. The fourth stage will analyse all the results obtained.

3. DATA ANALYSIS AND DISCUSSION

<u>Historical background of organization</u>

SOS Children's Villages is an independent, non-governmental, non-profit international organization founded in 1949 (Innsbruck, Austria). The organization provides humanitarian and developmental assistance to families facing difficulties and supports children and adolescents without parental care or at risk of losing it. SOS Children's Villages works with governments, corporations, individuals and institutions to make the greatest possible impact on children, protecting their interests and rights around the world.

The organization has a co-working system and in its 70 years of existence has deployed in 136 countries around the world. For example, in Lithuania SOS Children's Villages Lithuania has been working for more than 30 years.

The results of the activities are astounding. Over the last 70 years, SOS Children's Villages around the world have supported and guided more than 4 million children and teenagers in need into the adult world. This is more than the population of Lithuania. In 2022 alone, the organization was able to reach 2,548,400 people worldwide. Supported a total of 99,300 families; provided 69,200 children and young people with various types of care; responded to 25 emergencies with child protection activities.

<u>Areas of the work SOS Children's Villages</u>

Prevention. Strengthening families

The organization works directly with families at risk of separation to ensure that they receive the support they need and that children remain with their birth family as much as possible. The organization works with communities, local municipalities and national governments to implement measures that prevent children and young people from losing parental care and that strengthen and stabilise families, including during emergencies.

In terms of working with communities, the organization promotes the widest possible public awareness of the challenges faced in strengthening families in difficulty.

The organization works with municipalities and national governments to implement national and international policies to protect children's rights. The organization is also an active participant in the discussion and initiator of changes in national legislation on the protection of families and children.

As a specific set of services for families, the organization offers:
- Livelihood support;
- Seminars for parents;
- Psychological counselling;

- Family problem-solving counselling;

- Support in accessing social and health services;

- Providing parents with entrepreneurial and vocational training to help them become financially independent and establish a stable home;

- Access to education, including school fees, uniforms, learning materials, tutoring and after-school support;

Prevention. Mental health.

The organization attracts and retains a pool of professionals who specialize in providing professional support to children with mental health problems. This preventive measure helps to stabilize the problematic behavior of children, which, under external pressure, is often the cause of separation from parents. In the context of national public policy, the organization complements and empowers families to receive the necessary psychological support in accordance with international law.

Protection. Quality care

If the family breaks down, the family situation is not in the best interests of the child (young person) the organization will provide the child or young person with a quality care and support service. This service is tailored to the experience, culture and individual needs of each situation.

Alternative care provides a range of services in line with the UN Guidelines for the Alternative Care of Children, to which the organization has made a significant contribution.

Alternative care includes:

1. Family-based care, where girls and boys live together in small groups, resembling an autonomous family. The organization provides support so that siblings can live together as a family in the future.

2. Kinship care. Children are looked after by older relatives or family friends according to the family's needs.

3. Foster care. A care arrangement in which a child or young person is formally placed in the care of one or two adults who act as foster carers. The foster family is integrated and supported at SOS Children's Villages in a variety of ways, including:

- Parents in SOS Children's Village families become official foster parents, which entitles them to financial support from the state.

- Establishing and managing networks of foster families, where foster families live either in their own homes or in a home provided by SOS Children's Villages.

- Providing support services to existing foster families, including training and

counselling.

- Working with partners such as community organizations to develop foster family solutions.

4. Caring for small groups of children or young people. This care is provided by professional child and youth care workers working in shifts or rotations. The focus is usually on returning the child or young person to the family.

5. Emergency Shelters. Safe places in situations where a child or young person needs to be removed from the care of his or her family as soon as possible. These are looked after by child and youth care professionals. This is a temporary measure while the reasons for family separation are assessed and addressed.

6. Mother and child shelters. Homes where both mother and child can stay on a short-term basis while the mother is able to adequately protect and care for her child.

7. Transit homes. Facilities where children and young people live while waiting for placement in a suitable alternative care setting or while receiving support in integrating into the community.

Protection. Empowering young people.

The organization works directly with young people to prepare them for the transition to independence, with a focus on empowering young people. For young people, the organization offers:

1. Psychosocial support and career coaching. Organization offer psychosocial support and provide guidance on education and career options, and encourage them to develop their individual interests and talents.

2. Strengthening vocational and entrepreneurial skills. To prepare young people for their transition to independence, organization offer vocational, qualifications and social skills training to increase their employability and entrepreneurship prospects.

3. Providing access to mentoring, training and work experiences. The organization works with partners to create employment and entrepreneurship initiatives and with governments to improve aftercare around the world. Most importantly, organization has the opportunity to connect them with mentors and wider support networks to guide them on their unique path.

4. Innovation through information technology. Organization help young people to build skills for employability and entrepreneurship purposes, and navigate the internet responsibly.

Protection. Education.

This area of work includes:

1. Working with authorities and communities to establish kindergartens, schools and social centers in communities where they do not exist

2. Supporting and creating an inclusive learning environment that is free from all types of discrimination, interculturalism, violence and gender sensitivity.

3. Providing after-school tutoring, speech therapy services and other support to strengthen children's ability to learn.

4. Working closely with partners and schools to provide quality trauma-informed education, including remedial education and extracurricular activities for children and young people whose education has been disrupted by traumatic events such as natural disasters, war, violence or discrimination.

5. Working with national and local governments and community-based organizations to empower communities and parents to develop and strengthen educational programmers and support.

6. Supporting young people through mentoring, coaching and other interventions to develop life skills, promote employment or entrepreneurship, and encourage independence and equal participation in social and economic life.

Advocacy.

The organization works with partners and public authorities to expand, strengthen and protect the rights of the child and young person who is deprived of a family at the national and international levels.

Safeguarding and responding to emergencies.

The organization is mandated to launch international humanitarian emergency response programs when children or young people and their families find themselves in situations that threaten their lives and health.

The vision/mission/values SOS Children's Villages

Vision: "Every child belongs to a family and grows up with love, respect and security. what truly matters is that children and young people have a sense of belonging, of being surrounded and supported by individuals who care for them, whom they can rely on and trust, who believe in them, and who are available when they need someone the most. A nurturing and trustworthy relationship is the cornerstone of the kind of family environment we envision for every child and young person".

Mission: "We build families for children in need, we help them shape their own futures, and we share in the development of their communities. We are here for children and young people no matter their background, experience, culture, heritage, religion, sexual orientation,

political alignment, gender, disability or origin. They are our priority and we do whatever it takes to ensure that they grow up empowered with trust and a feeling of belonging. Our work is adapted to local contexts and customs, as it must be in order for us to reach those who need our support".

Values: "Courage (we take action). Commitment (we keep our promises). Trust (we believe in each other). Accountability (We are reliable partners)".

Organization structure

SOS Children's Villages International is the main office of SOS Children's Villages. As an umbrella organization, SOS Children's Villages International comprises a network of lo around the world and its own regional representation in the UN and the EU.

Figure 10. The structure of organization
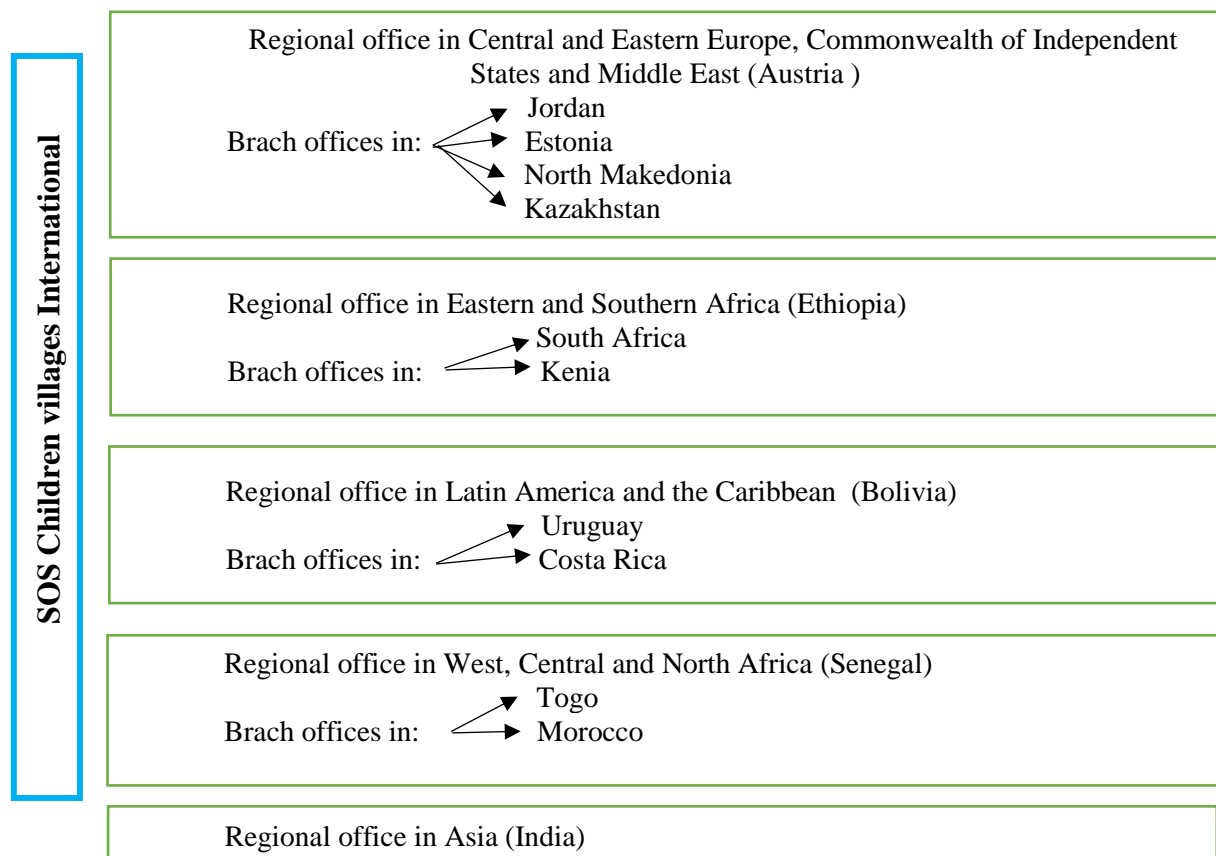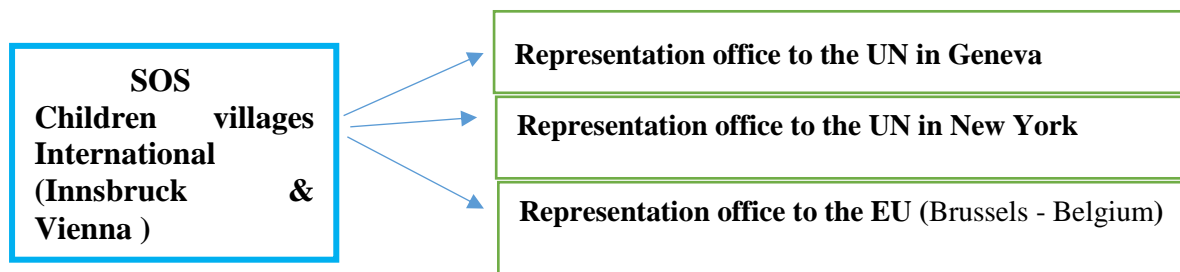
SOS Children's Villages International is a member of many global alliances in humanitarian operations and child rights. To maintain credibility in global relations, it is important not only to consistently demonstrate a policy of integrity, transparency and accountability. It is important to attract, develop and retain staff who will contribute to the achievement of its objectives.

This is why the organization has a strong corporate policy of upholding ethical values, human rights and freedoms, compliance with laws and regulations, financial transparency, social responsibility, and relationships with partners and stakeholders.

<u>Organizational support</u>

Technical support

SOS Children's Villages International provides technological resources for employees to fulfil their work responsibilities. These include the provision of laptops with necessary software and system access, office mobile phones, SIM cards with paid mobile phone and internet access. The organization uses a high level of anti-virus and other specialised software to ensure the security of the virtual working environment and the transfer and storage of data within the organization.

SOS Children's Villages International has its own digital platforms where the organization's staff can share experiences with each other, communicate and learn. In addition, the organisation has digital repositories where staff can record the results of their work and store data.

The organization also promotes technology in the workplace and employees are able to use both updated technical equipment and updated versions of software.

The organization fully funds international business trips and the head office in Austria has its own accommodation for foreign staff staying in Austria during business trips.

SOS Children's Villages International corporate culture provides ways for employees to communicate with each other. In addition, employees are not restricted in their choice of alternative means of communication. Preliminary interviews with SOS Children's Villages International employees revealed that communication among themselves on social networks, but not on work-related topics, also takes place.

SOS Children's Villages International has its own company transport for staff to use when needed and pays for the cost of this.

Well-being in the workplace support

The corporate culture of SOS Children's Villages aims to maintain a positive atmosphere and well-being in the workplace. It also defines a strictly democratic leadership

style with a strictly negative attitude towards creating conflict situations or bullying in the workplace. Upon recruitment, a new employee is familiarized with the Code of Conduct and relevant policies preventing conflict and other forms of discrimination.

The HR department takes an active part in maintaining well-being in the workplace. All employees are familiarized with a large list of instructions and other documents that regulate safety at the workplace, including work at the computer, work outside the office, etc. after employment.

In addition, the HR department conducts an annual survey of employees on job satisfaction, diagnoses the emotional situation in other departments, sends information on the need to maintain work-life balance and counteract burnout in the workplace, decrease level of stress. The organization also has its own pool of freelance psychologists who, if necessary, can be involved as support for the organization's employees.

The organization takes a critical and negative view of internal corruption or other irregularities. There are anonymous channels of communication through which you can make a report. There are internal regulations on the establishment of an independent commission and the procedure for verifying the circumstances stated in the allegation.

The organization encourages the involvement of employees in work processes. Thus, every six months (in some cases more often) departments present themselves and the overall results of their work to other departments. SOS Children's Villages International encourages creativity, so employees can freely choose how to present themselves (in practice, these were presentations, short films and even mini-games in the form of a quest with a questionnaire).

The corporate policy of the organization contributes to the cultural diversity of staff and promotes the development of cultural intelligence of employees through self-presentation during recruitment and during the presentation of the work of departments

The organization ensures the professional orientation of the new employee in the workplace (the so-called induction). Depending on the strategic nature of the position, orientation and training can last up to 2 months, with the appointment of a personal mentor for a new employee. This reduces the stress level of a new employee in the collectible and increases his productivity in the workplace.

The organization funds and actively promotes teambuilding at both the general and departmental levels. The research could not find out how teambuilding activities are conducted in hybrid or fully virtual teams.

Department heads are responsible for and share reports on the involvement of employees in overtime work. Such time is paid for in accordance with the law. The organization

has its own system of employee performance evaluation and bonuses. Separate consideration is given to financial assistance to employees in the event of a critical life situation. The organization provides the following assistance.

Study support

SOS Children's Villages International has its own internal digital platforms for storing documents and videos with educational material. The organization also has its own digital library with different levels of access. This provides access to the documents necessary for training at a convenient time for the employee. The organization refers employees to external educational digital platforms and has agreements with other educational providers for free (partially paid) training of its employees depending on the needs of their specialization.

At the end of the calendar year, each employee submits a plan for their on-the-job training to the HR department for the next calendar year. The manager also has the right to help the employee identify areas that require additional study or deepening of knowledge.

The internal digital platform also allows the organization's regional departments to share experiences with each other and communicate on working topics.

Professional orientation is mandatory for all new employees. As mentioned above, the duration of professional orientation depends on the specifics of the position, but it always includes mentoring.

SOS Children's Villages International promotes the career development of its employees, informs first of all through internal communication channels about the availability of vacant positions.

The organization is open to feedback. Any suggestions regarding the work of the organization will be carefully considered. Suggestions can be submitted directly through internal communication channels without the approval of your manager. The organization helps to minimize bureaucratic processes that interfere with staff efficiency.

Make decision support

In the organization, departments do not have full financial independence, all requests for financial expenditure are received by the accounting department, where the method of payment is determined. The rationality of financial expenditure is agreed with senior management. The practice of consulting with senior management on certain decisions is positive. Managers receive leadership training both on internal digital platforms and are sent to external digital learning platforms.

Implementation of global projects

In its activities, SOS Children's Villages International often implements global projects,

programs and collaborations in a virtual mode. Most often, such project activities are aimed at either the cultural or the social development of children in care. For example, two global projects YouthCan and Digital Villages.

For example, the creation of the *YouthCan* digital platform, which promotes employment and career development for young people without parental care. The project envisages the following scheme of work. After registering on the platform and choosing a field of activity, a young person is matched with a mentor from among volunteers who shares his or her experience and prepares them for further employment. Upon completion of the training, the most suitable employer is selected from among the interested employers registered on the platform. The young person meets with the employer and, if the interview is positive, starts working. In 2021 alone, the project covered 37 countries, almost 1,500 volunteers and 6,500 young people without parental care. By the end of 2024, the project is expected to cover 56 countries and 20,000 young people without parental care.

Digital Villages project aims to integrate children and families under the care of local organizations into digital technologies. The project provides access to the Internet, training in digital skills, cybersecurity in the digital space and the use of information and communication technologies for development through SOS Villages. This primarily concerns countries where access to the Internet and technology is problematic (Africa, Latin America, and Asia). As of 2021, the project has covered 12 countries, 30 locations, and 1,900 children. The main goal of the project is to reach 59 countries, 120 locations, and 21,000 children.

But some global projects are aimed at developing mechanisms for the organization's work, such as the ProDiGi project. It is this project that will be studied further in the master's thesis.

The ProDiGi project

Why?

SOS villages has repeatedly tried to systematize and structure its project and program work in all its locations around the world, as transparency and accountability are the main principles of its work.

However, as of 2017, the organization had several digital platforms to work with (Lusy, GMS) and PRAG (Practical Recommendations for Institutional Funding), which were accepted by only 45 countries.

Despite these efforts, most programming and project management in the federation continued to be done without a consistent approach, often ad hoc and without transparent goals, making it difficult to measure and improve the impact of SOS programs. The new solution is

expected to help harmonize the work of all countries in the world that have SOS villages.

What?

Therefore, it was decided to create a single, unified framework for all countries that would allow for the digitalization of existing projects and programs, structure them in a system, and digitize future programs and projects.

In essence, ProDiGi is an SOS application built on a digital platform that replaces the work of previous digital platforms and a number of collegial decisions made the day before to unify the methods of working with projects and programs in the organization.

The main target group of the ProDiGi app is primarily program managers and field staff.

ProDiGi application functions:

Provide a dynamic platform for local managers of project and program lifecycle, from ideation to closure, for all projects, program investments, emergency projects, construction projects, and programs;

Encourage and enhance project team collaboration through in app and external communication tools;

Aid in monitoring and evaluation of project indicators; providing a place to plan and track indicators for a project over months or years;

Encourage use of recommended project documentation by providing standardized templates and integration with the existing SOS Collaboration Platform;

Improve understanding of projects on local, national, regional, and global levels through reporting and dashboards and data analytics;

Integrate with existing and planned SOS software solutions to share data, including aggregated financial and beneficiary data related to a project, thereby maximizing the value of all systems;

Contribute to federation planning and steering by encouraging regular review of high-quality data on projects within a Member Association.

How? - Plan

Phase 1 Development (October 2018 - January 2020)

- Digitalization of grant management and program planning processes.

- Integrate data from other digitalization platforms and repositories (names of repositories and platforms deliberately withheld).

Phase 2 Development (March 2020 - February 2021)

- Digitized emergency project management tools and update program planning

processes

    - Agreements to launch pilot project

    <u>Phase 3 (March 2021 - July 2021)</u>

    - Implementation of processes and transfer of 'master data' from LUCY

    - Basic integration with D365

    - Improved access for users

    <u>Phase 4 (July 2021- December 2021)</u>

    - Integration with PDB2

    - Digitalization of construction projects.

    <u>Phase 4 (June – December 2022)</u>

    - official launch.

    <u>Advantages of ProDiGi</u>

Systems. There are many benefits to integrating with other systems. There are many systems that SOS Children's Villages uses to manage staff, finances and programs. ProDiGi simplifies all of these processes.

Workflow. The benefits of the system are that it provides a structured workflow, and guides the user through the entire project lifecycle (defining, formulating, implementing and closing), starting with planning. This helps the work to be done step by step, guided and improves the quality of the programs.

Transparency. ProDiGi also provides transparency in collaboration as people from different locations can log in and work on projects at the same time. This allows everyone to get the same information at the same time.

It is means, when you generate new ideas locally and implement them in ProDIGI, you can get feedback from colleagues in national offices and work on improving the quality of what you are planning. Moreover, if you receive international funding, you can ask for analysis and support to improve quality, and others can log in and find out what is going on.

Practice sandbox. While training and working with the ProDiGi system, users can upload data and work in the training sandbox. This is an almost perfect replica of the original system that allows training to watch the data change without affecting the original data.

    <u>Project team</u>

The ProDiGi product was created by specialists who were already working in the organization or were hired by the organization to perform a specific type of work. In general, at various stages of the project, specialists from the Regional Office for Central and Eastern Europe (Austria, North Macedonia), the Regional Office for Latin America and the Caribbean

(Ecuador, Colombia), and the Regional Office for West, Central and North Africa (Senegal) were involved in the work on the product. The team leader is based in Austria (Innsbruck). In total, up to 20 people have been involved in the team at different stages of ProDiGi's development. At the same time, employees working in the same regional office represent different countries and often work remotely, meeting periodically at the location of the regional office.

The project team represented is virtual and fully distributed. Six people (5 team members and a team leader) agreed to participate in the interviews for the master's thesis. Gender of the respondents: all respondents were male. The employees who were interviewed for this master's thesis come from Austria, North Macedonia and Colombia. The real names and positions of the survey participants are coded as respondent 1, respondent 2 ...... respondent 5. The name of the team leader and his answers are coded under the name respondent 6.

Results of the interview conducted.

Organizational technical support for the project

1. At the time of project implementation, did the organization provide security for the virtual environment in which you were working (anti-virus, storage and recording of your work)? Did the organizational security offered by the organization meet your expectations?	*Respondent 1*: Yes! According to the cyber security policy all relevant software was installed and onboarding was provided
	Respondent 2: Yes, the terms of reference required cybersecurity measures and the organization provided them to us. All employees were also trained
	Respondent 3: All our work was carried out through secure communication channels. This is a requirement of the organization's cybersecurity policy. The stored information is also securely protected. During our work in the project, we did not have any problems with security breaches in the virtual environment.
	Respondent 4: Before starting work on the project, we once again familiarised ourselves with the organization's cybersecurity policy and installed the software we had been trained on. Some of us had already undergone such training, while for others it was the first time. But all the staff had to go through it again.
	Respondent 5: We did not have any cybersecurity issues

	during the project. The level of cybersecurity created by the organization allowed us to perform tasks without being distracted by these issues.
	Respondent 6: All technical requirements for cybersecurity of the workspace were created by the organization. Before the project started, special software was installed and the staff was trained accordingly. We did not have any problems with these issues during our tasks.

The answers of the respondents show that the organization extends its cybersecurity policy to the project it is implementing. Before the project started, appropriate software was installed, conditions were created for storing the data that the team worked with, and staff received appropriate training. Respondents' answers also indicate that team members were trained before starting work on the project, regardless of whether they had previously studied the topic or not. This put team members on a level playing field in terms of their knowledge of the organization's and the project's cybersecurity policies.

2. Please tell, did the organization provide you with appropriate technical equipment and software for the project? How did this affect your work?	*Respondent 1:* Yes! Lap-top with relevant software and access to the system was provided when i stared my work. It has enabled smooth and on-time delivery of the tasks.
	Respondent 2: We were provided with laptops with pre-installed applications and access to them during our work. We did not install anything on our own. In addition, the cybersecurity policy prohibits us from working on our own devices.
	Respondent 3: The equipment I was working on did not cause me any problems with the technical tasks. Yes, I can say that it allowed me to complete all tasks on time and without any problems.
	Respondent 4: Yes, I was provided with a laptop and the software installed on it. I did not have any problems with completing the assignments due to inadequate technical parameters of the laptop or software.
	Respondent 5: I already had a laptop provided by the organization when I started working on the project. I gave it to

	them to install additional software and then we were trained on how to use it. Some of us were already familiar with the software and some of us were not. But we were all trained in the same way.
	Respondent 6: All team personnel were provided with the technical equipment and software before the project started. All hardware and software met the specifications of the task assigned to my team. We did not have any problems with timely and high-quality execution of tasks due to hardware or software. I think that if this had happened, the organization would have helped to resolve the issue quickly, as it is in the best interest of SOS.

The analysis of the responses shows that the organization provided the team with the hardware and software needed to complete the task before the project started. In addition, the responses show that staff members who were working for the organization at the time of the project launch donated their devices for testing and installing additional software. The organization made sure that all staff were trained, regardless of their level of knowledge. Perhaps this was a specially created situation for additional communication between team members and exchange of knowledge and experience. The team leader's response indicates that he is confident in the organization's support on technical issues, should they arise.

3. Please tell, how the organization provided multi-channel virtual communication pathways between team members? (recorded the ways of communication between you, offered additional channels of virtual communication, what channels of communication you used in the process of work and	*Respondent 1:* We are using Teams channel and meetings on regular basis. All training sessions are recorder and available at any time. Also, we have weekly meetings to discuss the progress of the project and the product.
	Respondent 2: We communicate via Teams and email. We use Teams more often, and email for writing reports or communicating with management. This is enough for us because it doesn't take much time.
	Respondent 3: The organization provided its employees with communication tools from the very beginning. Immediately after employment, we receive our work email in outlook, and everything we need is already there. Mail and Teams. This is enough.

whether it was sufficient).	My colleagues and I are also subscribed to each other's Linkedin accounts, but this is our own initiative to have access to each other's contacts. In general, we discuss everything in Teams via video conferencing, and meetings are recorded for those who are absent. We've been satisfied with that.
	Respondent 4: We don't need additional communication channels, Teams and email are enough for us. Everything else is personal and not work-related.
	Respondent 5: The organization's policy provides for Teams and mail, that's all we used in our work. Sometimes there was live communication if someone from the project team came to our country, for example, team leader, but it was very rare and communication was more informal.
	Respondent 6: Teams and mail were set up by the organization right away. This is what we used. We agreed right away that all meetings would be recorded and kept for those who were absent. From time to time, when I had to travel to another country for work, I tried to meet some team members in person. But it was more informal communication.

The responses indicate that the organization immediately offered communication channels for staff to communicate formally with each other. Some employees initiated communication via Linkedin or in person, but this was more about informal interpersonal relationships. The vast majority of respondents said that the proposed communication channels were sufficient for working and communicating with each other. In addition, it was decided to record and store video meeting materials for those employees who were absent for some reason. This is most likely also due to the difference in time zones between the team members. There is no time zone difference between Austria and North Macedonia. The time difference between Austria and Ecuador, Colombia is 6 hours (backwards from Austria time). There is a time difference of 1 hour between Austria and Senegal (backwards from Austria time).

Organizational support in well-being in the workplace

1. Was there a survey or assessment of your well-being in the	*Respondent 1:* No, we were not provided such survey, assessment or training.
	Respondent 2: At the beginning of our work in the

workplace during the project period? (job satisfaction, counteracting burnout, teambuilding, informing about health risks related to working at a computer)?	organization, we were introduced to workplace safety, including instructions on how to work safely with computers. We did not receive any additional training for the project. As for job satisfaction or burnout, we received a general newsletter. I did not read it because it did not concern me.
	Respondent 3: If we don't like something or have any questions, we can discuss it with the manager. We have not had any such issues. I did not observe any burnout. I saw the general correspondence in the mailing list, but I did not specifically ask about this issue.
	Respondent 4: We did not receive any training. I think it would be good for general awareness, provided it doesn't take a lot of working time and doesn't affect deadlines.
	Respondent 5: Yes, information on burnout and workplace wellbeing was sent to us by mail. I read it, it was interesting and informative. In the future, I will diagnose what is wrong with me :)
	Respondent 6: Yes, we were sent information about workplace well-being and burnout for review. I filled out the questionnaires. The management periodically asked me about the emotional and general climate in the team. As for team building, we don't have many opportunities when some team members work abroad. But we have enough virtual communication. The atmosphere in the team is friendly.

The respondents' answers indicate that organizations take some measures aimed at informing and ensuring well-being in the workplace, but sending letters is not effective in this case. Only one of the respondents took the letter seriously and read its content, but this was accompanied by his own interest in the topic. It can be concluded that organizational support in the workplace in this case depends on the behavior and attitude of the manager to the problem. The leader and his or her leadership style mediate between the organizational support provided to the project team and the expected result. In this case, transformational leadership is the most effective. Team-building activities are also under-emphasized, but in terms of occupational health, only one respondent confirmed that such training took place at the

beginning of their employment.

2. Has the organization informed you about the organization's diagnosis and methods of dealing with bullying, intercultural conflict and other types of discrimination in the workplace?	*Respondent 1:* Yes, we were acquainted with the Code of conduct and relevant policies that prevent conflicts of other forms of discrimination.
	Respondent 2: Yes, we are familiar with the organization's Code of conduct and policies on this issue. There is even a procedure for reporting anonymously if you are a victim or witness of bullying or discrimination. I have not seen this procedure applied in practice, but it is there and I am pleased.
	Respondent 3: We did not have such situations during our work in the project, but everyone knew about the responsibility for such actions. The organization is not tolerant of such things.
	Respondent 4: The organization made me aware of the code of conduct and other policies on discrimination in employment. There was information about bullying and gender discrimination. I don't remember what else. It was nice that the organization informed me about the cultural make-up of the team. We were warned about the cultural peculiarities of Latin American countries, where some of our team members came from.
	Respondent 5: Before we started working on the project, we were introduced to the code of conduct and other policies. At the first video team meeting, each team member told us about themselves and their culture. In principle, it was clear which topics could be touched upon, even jokingly, and which ones should be avoided.
	Respondent 6: SOS does not tolerate any form of discrimination in the workplace and bullying. We were not introduced to these documents again or additionally during the formation of the project team, but everyone is required to read the code of conduct and other anti-discrimination and anti-

| | bullying policies when joining the organization. |

The respondents' answers show that the organization has a strong policy on bullying and discrimination in the workplace. In this case, the organization's policy also applies to project team members. One of the respondents stated that there is an organizational mechanism for responding to bullying and discrimination in the workplace. Interesting is the practice of informing the organization in advance about the cultural composition of the project team, as well as informing during self-presentation in the team about the topics that should be raised during communication and those that should not. In the latter case, it means that the leader and his team define the boundaries of communication in order to prevent conflicts.

3. Do you work beyond your normal working hours? If yes, how often? How does the organization monitor your work-life balance and does it influence its formation in your case?	*Respondent 1:* Yes, sometimes. I report them to my superior and then I can compensate those in the period ahead.
	Respondent 2: Yes, we do work overtime from time to time, but we inform the management and it is paid.
	Respondent 3: It's rare, but it happens. Everything is paid for.
	Respondent 4: It is in our interest to report overtime because it is paid. I report it to my manager if I work overtime.
	Respondent 5: It doesn't happen very often; we try to avoid such things. But if it happens, we are paid for it. This is the organization's policy.
	Respondent 6: We try to avoid working overtime and allocate time and deadlines for tasks so that they do not exceed working hours. However, if overtime occurs, overtime is paid upon reporting.

The answers provided by the respondents indicate that the organization has implemented a policy of compensation for time spent working overtime. Respondent 6 notes that the distribution of tasks and deadlines in the team is aimed at preventing a violation of the work-life balance.

Organizational study support

1. Did the organization provide training for you in the process and for the	*Respondent 1:* Yes, detailed onboarding programme was implemented in the first 2 month of my work. Beside the Organization strategies, priorities and policies, also the entire project implementation plan was presented.

purpose of project implementation? If yes, which ones and who initiated the training?	*Respondent 2:* I was introduced to the project plan and the functions of my position in the project. I received cybersecurity training, and studied the code of conduct and other documents related to the organization as a whole. As for the work in the project, we studied the features of the installed software. We did not go through anything additional.
	Respondent 3: When we were introduced to our functional responsibilities in the project, we had to take courses on cybersecurity and the specifics of the special software again. I personally did not receive any additional training. Everything was initiated by the organization after my transfer to the project team.
	Respondent 4: After the start of the project, we discussed with the team leader the feasibility of additional training. We did not have any such questions, the training courses we had were enough.
	Respondent 5: I was hired to work on the project, so I had much more training than the others. In 2 months, I completed training on professional orientation, organizational policy and culture, cybersecurity, and training on working with special programmes. I was not offered any additional training, and there was no need for it.
	Respondent 6: At the beginning of the project, all staff received training on cybersecurity and how to work with specialised applications and data. No further training was provided as there was no obvious need for it. The training was initiated by the organization. I personally (meaning the position of team leader) also did not receive any additional training. But the organization has a centralised digital library and links to educational digital platforms. If you are interested in a particular issue, it is fashionable to take the initiative and learn. There were no requirements for self-study either.

The respondents' answers indicate that the organization, when forming the project team,

provided employees not only with training on project work, but also with general professional orientation and familiarisation with the project work plans. One of the respondents noted that it took up to 2 months to get him/her into the position after starting work. Information about special training in project leadership was not confirmed.

2. Does the organization have a digital platform or other storage space with access to training materials tailored to the organization's specific work? How has this helped you in the process of working in the project?	*Respondent 1:* Yes, we have a SharePoint Platform to store documents and Stram platform to store the recordings. It helped a lot in the process of on-boarding, learning and development.
	Respondent 2: We have digital platforms and a common digital library for the organization. It is maintained by the central office and outdated documents are constantly updated there, and it is also possible to leave a comment or like a document. This is very helpful for new employees, and it also helps others to update their knowledge.
	Respondent 3: Yes, we have digital platforms and repositories. Everyone has their own level of access, depending on their position and the specifics of their work. It's great to read something and update your knowledge at your own convenience.
	Respondent 4: Yes, we have digital platforms such as Sharpoint and Stream. You can find everything you need there. Also, when we created user access to ProDiGi, the responsible employees then created a hub with useful information for them.
	Respondent 5: Digital platforms once helped me to navigate the organization's structure and clarify a number of important work-related issues for myself. Yes, it's very useful for project work, too.
	Respondent 6: Yes, SOS has digital platforms for storing training information These are Sharpoint and Stream. The organization has appointed persons responsible for keeping this information up to date. It is accessible 24/7 through their work accounts. This helps to reduce the time required for additional explanations on certain issues. There is

| | also an electronic library for employees, a list of available training courses and materials on other digital platforms. |

The respondents' answers show that the organization provides the project team as well as permanent staff with the opportunity to learn on its own digital platforms. Respondents confirm the usefulness of this information for their work. Respondents confirm that the organization has a digital library with different levels of access to information. It is not clear whether the project team, like other employees of the organization, is required to improve their skills annually.

3. Has the organization motivated you to learn (if yes, how)?	*Respondent 1:* Yes! there are digital training sessions offered for free that can be done during working hours.
	Respondent 2: Yes, there are certain courses that can be accessed for free only if you are an SOS employee. This is a good opportunity to gain such knowledge, and you can also study during working hours and the organization pays for it.
	Respondent 3: Yes, the organization encourages learning, you can get access to rare and valuable materials
	Respondent 4: Yes, the organization offers courses and new areas of study, and pays for the time spent on them. But it all depends on your own desire.
	Respondent 5: Yes, the organization motivates me to study, but I personally don't have enough time for it.
	Respondent 6: The organization has a lot of training materials. In addition, our partners provide us with access to free training for employees, while other students have to pay for it. If the training required by the organization is paid for, the organization can partially or fully reimburse the cost. No such problems arose during the project. Some employees attended training during working hours on their own initiative. The organization paid for this time. This did not affect the completion of the project task, as the training time was agreed in advance.

The respondents' answers indicate that the organization motivates all employees to learn and develop their capabilities, and this also applies to the project team. Furthermore, the

organization motivates its employees to learn by providing free access to materials and courses, as well as paying for the time spent on training.

Organizational make decision support

1. Were you completely independent from the organization in the decision-making process regarding the project? Were there any cases when actions or inactions of the organization influenced the work process and project results? If yes, how (positively or negatively)?	*Respondent 1:* Our system is closely linked to other IT systems, and delays in their work affected our work.
	Respondent 2: As for the implementation of tasks in the middle of the project, our opinions were listened to. I am not aware of any influence of the organization on decision-making.
	Respondent 3: When there were delays in organising the work of other systems, we also experienced delays, because we are closely connected. But there was no significant negative or positive impact. Our project was fully implemented within the planned timeframe.
	Respondent 4: The organization did not interfere with our internal issues regarding the schedule and deadlines. We periodically reported to senior management, but no one influenced our decisions. On the contrary, we were provided with additional assistance, in particular in coordinating with other systems.
	Respondent 5: I am not aware of any significant negative or positive influence of the organization on our decisions in the project.
	Respondent 6: I have consulted with senior management about certain decisions in the project. I was not interfered with or restricted in any way in matters related to the project. Information about the project cost and funding is confidential and cannot be disclosed. I consulted with the team before making any decisions on issues within the project.

The analysis of the responses suggests that the respondents felt independent of the organization in the decision-making process, but dependent on other processes that took place in the organization. The organizational support provided by the organization was perceived positively (respondent 4, respondent 6), neutrally (respondent 2) or not at all (respondent 3, respondent 5). It was not possible to obtain information about the financial independence of

the project from the organization, as it is not subject to disclosure.

2. Have you been financially independent during the project implementation process? If no, were there any cases when the organization influenced the work process, project results by its actions or inactions?	*Respondent 1:* I do not know whether the project was financially independent, I did not observe any financial delays.
	Respondent 2: I do not know nothing about financial independence of the project.
	Respondent 3: As far as I know, all information related to finances is not subject to disclosure, so I do not know.
	Respondent 4: I think we were financially independent, but I cannot say for sure. I have no information.
	Respondent 5: I do not have any information about the impact of o organizational decisions on the project in terms of finances.
	Respondent 6: All information related to the financing and management of project funds cannot be disclosed

From the answers of the respondents, it was not possible to find out information about the financial independence of the project within the organization, as well as the independence of the fund manager in making financial decisions.

3. Have you been involved in interim presentation of the results of your work to senior management? If yes, what role did it play for you and was it important to you?	*Respondent 1:* Yes, I provide regular reports of my area of work. In addition, I've also trained the regional management team to use the system as part of the users in EUCM. It provided platform to freely express my findings and suggestion for improvements of the product.
	Respondent 2: Yes, we occasionally participate in presenting our work to the organization together with the team leader.
	Respondent 3: I regularly provide reports to my team leader, and we periodically reported to the organization on the nature and results of our work. More often than not, it is the team leader who does this, and we are just present to answer any additional questions.
	Respondent 4: Yes, I participate in periodic reporting on the results of our work. Mostly it is a listening role, but if necessary, I can answer additional questions. It is important to

	me because I want to see how the project initiator reacts to the work we have done. It didn't play a significant role.
	Respondent 5: We report to our team leader and above on the results of our work. Everyone reports on his or her own area of work. Sometimes we take part in presenting our project's work to others. But mostly the team leader does it.
	Respondent 6: We constantly reported on the intermediate results of our work to the top management. It is important for the team to hear feedback from the project initiators. Some presentations were attended by the whole team, some presentations were only for the management.

The answers of the respondents confirmed that the team is involved in presenting their work to the top management. Interviewee 1 emphasised the role of previous experience in influencing their own conclusions and suggestions on product development in this project. For respondent 4, it was important to see the reaction of customers. This was confirmed by the team leader (respondent 6).

CONCLUSIONS AND RECOMMENDATIONS

The analysis of the advantages and disadvantages of IVTP work has shown that this form of work is very beneficial to organizations both in terms of cost savings and global perspectives and opportunities. However, remote workers are always a risk to the project and the organization as a whole.

Lack of real communication, cultural differences and geographical remoteness can present many pitfalls that can significantly affect the expected results, especially when it comes to temporary teams such as a project team. In this case, the organization, as the project initiator, should take a proactive stance by facilitating and assisting the team in achieving its goals.

The results of the conducted study showed that the OS provided to IVPT and its manager is perceived mostly in a positive context, but its impact on the work process is not uniform. This is most likely due to the fact that OS was provided as and when requested by the project team and the senior management of the organization did not view OS for the IVPT through the lens of how to influence it. The team members as well as the team leader enjoyed the benefits and rules that were set for others in the organization who were not involved in the project.

This is justified for organizations that involve their colleagues in the project. However, if non-company employees are involved in the project, especially if the international virtual project is also a multi-organizational solution. In such a case, the development of an OS strategy is one of the most important documents, both in terms of a management crisis and in terms of the team's general awareness of ways to take initiative and improve their performance.

It is assumed that OS can prevent unforeseen situations or minimize negative factors that may affect the success of the whole project. In addition, an employee's positive attachment to the organization implementing the project or to the team in which they work may motivate them to participate again in future projects. It is already about retaining a strategic pool of expertise and retaining talent. However, there is very little research on the impact of organizational support on the virtual project team in this context.

The study also found that having an organizational mechanism to support the project team is not enough. It is necessary that this organizational support is first perceived by the team leader, and only then does he or she exemplify the perception of organizational support by the project team members with his or her management style. In such a situation, the team leader is perceived as an intermediary between the OS aimed at the success of the project and the

expected results from this support. For organizational managers in practice, this means that before starting work on a project, the team leader should receive appropriate training on their leadership style, the organizational support mechanisms available and demonstrate participation through their behavior by inviting team members to participate in improving organizational performance where appropriate.

The results of the study showed that the organization provides the same training to project team members regardless of the team members' level of expertise in a particular area. This approach is likely to promote project team cohesion and create an environment for sharing experiences and additional knowledge.

1. Organizations are advised to really assess the specifics, strategic nature, advantages and disadvantages of IVPT work, project implementation timelines and develop a team OS strategy for the project implementation process on a case-by-case basis before launching the project. It is important to consider the moments when the project is multi-organizational or team members are not employees of the company (e.g. freelancers).

2. Given the limited number of publications on this topic, it is strongly recommended to pay detailed attention to the direction of development of OS strategies specifically for virtual project teams.

3. It is sugested to investigate the effectiveness of OS through the I-P-O model, as well as the impact of OS on team performance at different stages of the team life cycle.

4. An important area for future research could be to investigate the impact of organizational support on project leadership and the characteristics of an independent project within a single organization. Therefore, it is recommended to investigate this area in more detail

5. Proposed to investigate the impact of organizational support on the financial management of the project, both when it is financed by the organization and by other financial resources, including budgetary contributions.

6. It is recommended to investigate in more detail the evenness/unevenness of the influence of organizational support on the team and the project leader, if there are several organizations.

7. It is recommended that in future strategies attention should be paid to pre-training of the project leader before the project starts.

8. It is recommended to investigate in more detail the directions of influence of organizational support on international virtual project team and leadership in it for the conceptual model proposed in this Master's thesis.

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ANNEXES

Annex 1

Table 1. Advantages and disadvantages in international virtual project team

Levels / Factors	Organizational level	Societal level	Individual level
Advantages			
Economic	✓ *Savings on costs associated with the organisation of working conditions* ✓ *Access to the cheap labour*	✓ *Inclusion* ✓ *Development of local infrastructure.* ✓ *Participation in global social processes* ✓ *Reducing pressure on city traffic*	✓ *Savings on personal costs related to work g with travelling*
Geographical	✓ *Ability to work across geographical distances and time zones* ✓ *Ability to increase the productivity of the organisation by extending the working day from 8 to 24 hours per day.*	✓ *Possibility of providing services to the population despite geographical distance and time zone differences.*	✓ *No attachment to a single workplace*
Cultural	✓ *Cultural intelligence* ✓ *Access to the global pool of specialists, access to the global talents* ✓ *Creativity* ✓ *Sharing Knowledge* ✓ *Speed of reaction to market changes*	✓ *Impact on local property markets and infrastructure*	✓ *Erasing socially about cultural differences*
Technical	✓ *Instant information exchange* ✓ *Digital transformation*	✓ *Ability to use technology to present their unique results to the wide public*	✓ *Opportunity to work with unique software etc.*
Health protection	✓ *Law-abidingness in health care*	✓ Safety of human health during pandemics	✓ *Personal health safety measure*
Disadvantages			
Economic	✓ *Virtual environment security costs* ✓ *Different labour laws*	✓ *Affection on the local rental market and municipality services*	✓ *Dependence on company's policy*
Geographical	✓ *Limited face-to-face communication* ✓ *multi-organisational affiliation of team members*	✓ *Environmental pollution due to Internet coverage of new territories*	✓ *Inability to establish meaningful relationships with colleagues, physical team-building activities*
Cultural	✓ *Intercultural conflicts that affect the company's expected results*	✓ The risk of discrimination	✓ Risk of losing one's own cultural identity
Technical	✓ *Dependence on technology development* ✓ *Risk of non-stability of resource consumption*	✓ The risk of theft, loss and disclosure of data can cause irreparable damage to society and humanity.	✓ *Dependence on company's policy*

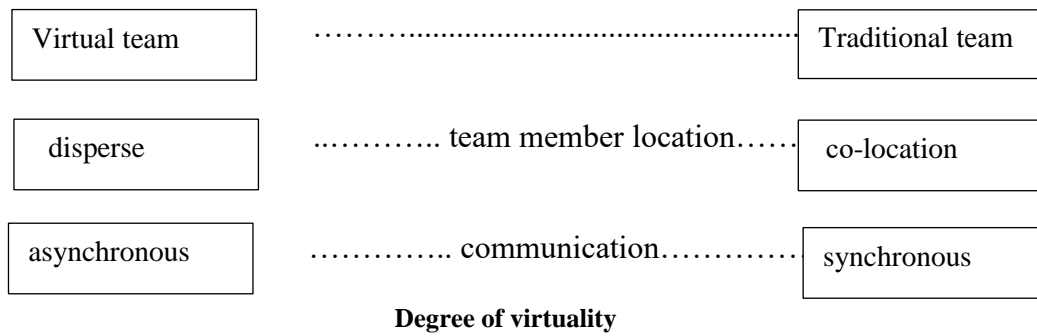| Health protection	✓ *Difficulties in monitoring mental health*	✓ Additional burden for the medical and social system of authorities	✓ *risk of burnout* ✓ *work-life imbalance* ✓ *musculoskeletal, visual and hearing impairment*

Created by author

Annex 2

Table 2. Virtual team issues and their impact on team effectiveness

| Language difference	• Difficulties to understand workplace norms, misinterpretations during group decisions.
Time difference	• Difficulty in working multiple time zones. • Misunderstanding about the time differences. • Delays on the project.
Trust	• Unpredictable communication methods, only a few members are in communication. • Less productivity, more stress on the job.
Cultural difference	• Difficulty to interact/communicate with one another. • The difficulty about holidays across different locations of the team.
Knowledge sharing	• Difficulty on company workflows and processes such as instant messaging service, tools, etc. • Difficulty to use a central platform for all discussions and knowledge sharing (e.g., sharing documents, data, etc.). • Difficulty in using communication project management tools (e.g., Jira, Slack, Trello, etc.).
Distance	• Delayed response because of the distance. • Nonverbal communication such as body language and mimics which are lost. • Difficulty in using the collaboration tools such as video/audio chat apps, screen sharing, file sharing, etc.

Created by Ünal (2023)

Annex 3

Figure 3.   Degree of virtuality

Virtual team	……………..………………………………	Traditional team
disperse	..……….. team member location……	co-location
asynchronous	………….. communication………….	synchronous

Degree of virtuality

Authors: Grosser & Baumöl (2017)

Annex 4

Figure 4.   Geographic distribution and dispersion team
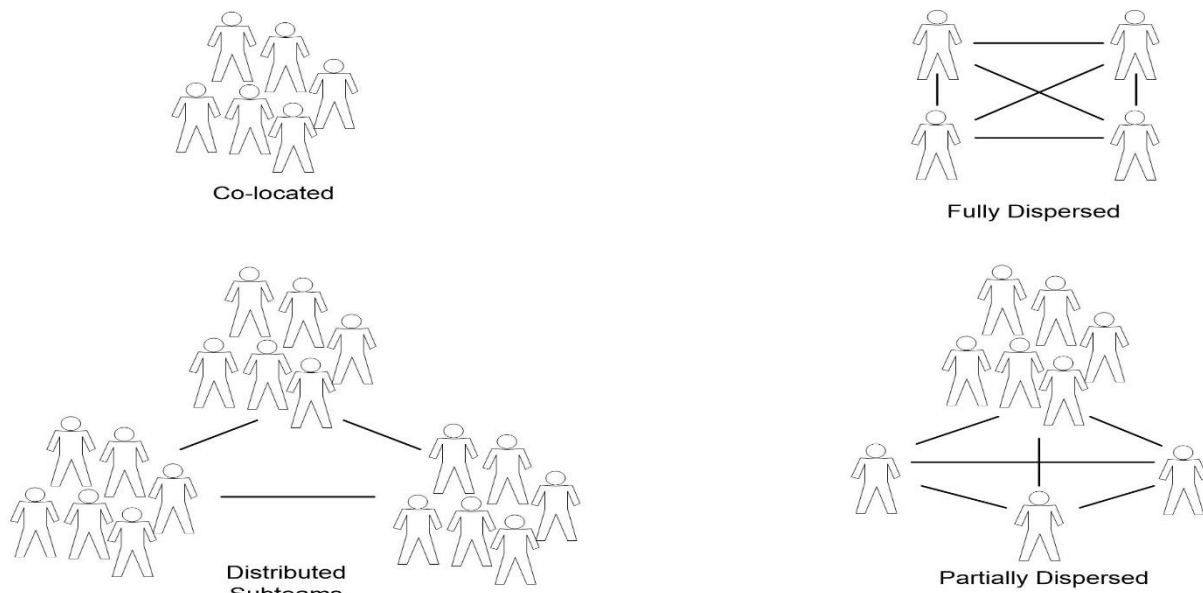
Author: Project Management Institute (2021)

Annex 5

Figure 5. International virtual team member competences
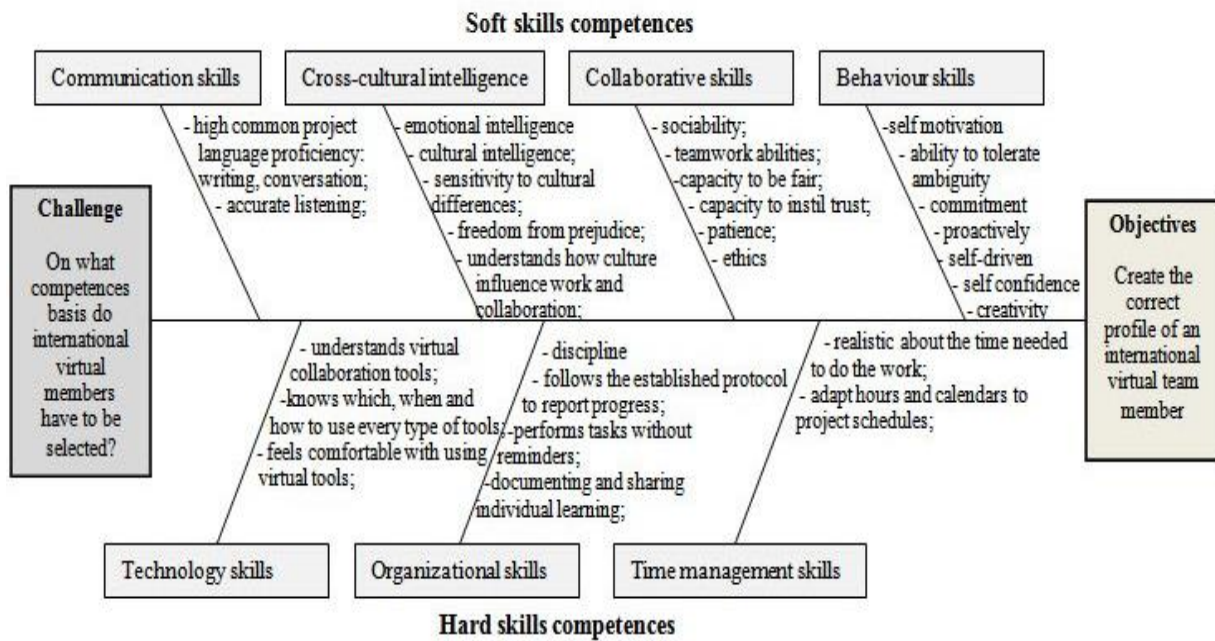
Created by Dumitrașcu et al. (2016)
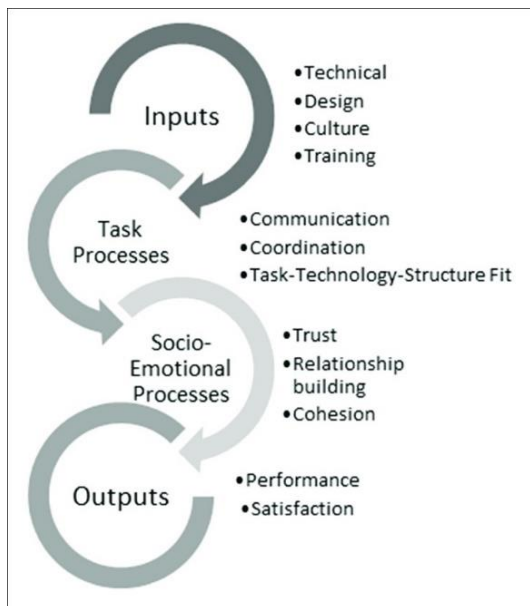
Annex 6

Figure 6. Indicators of the virtual team effectiveness
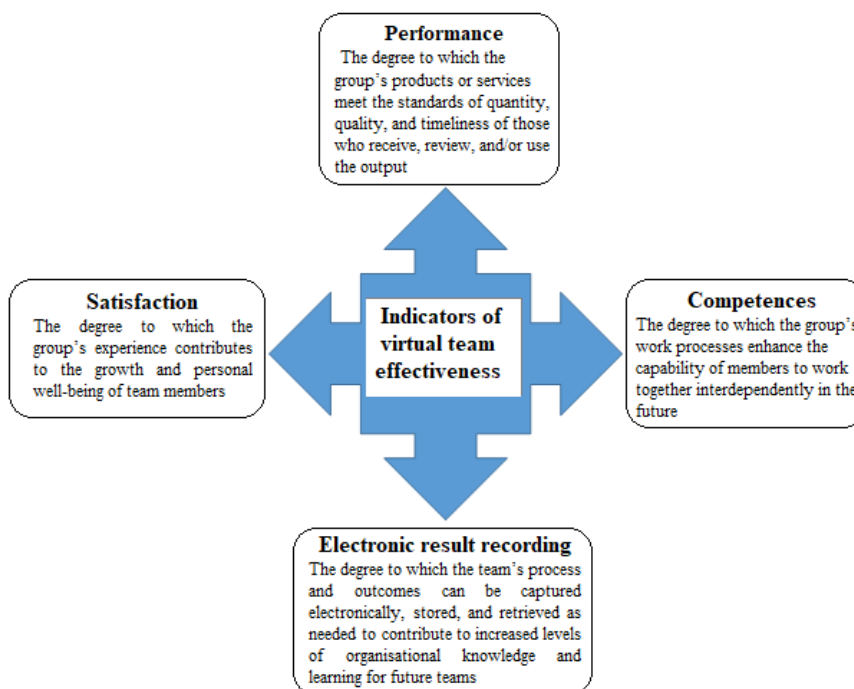
Raymond Opdenakker et al. (2019) Created by author.
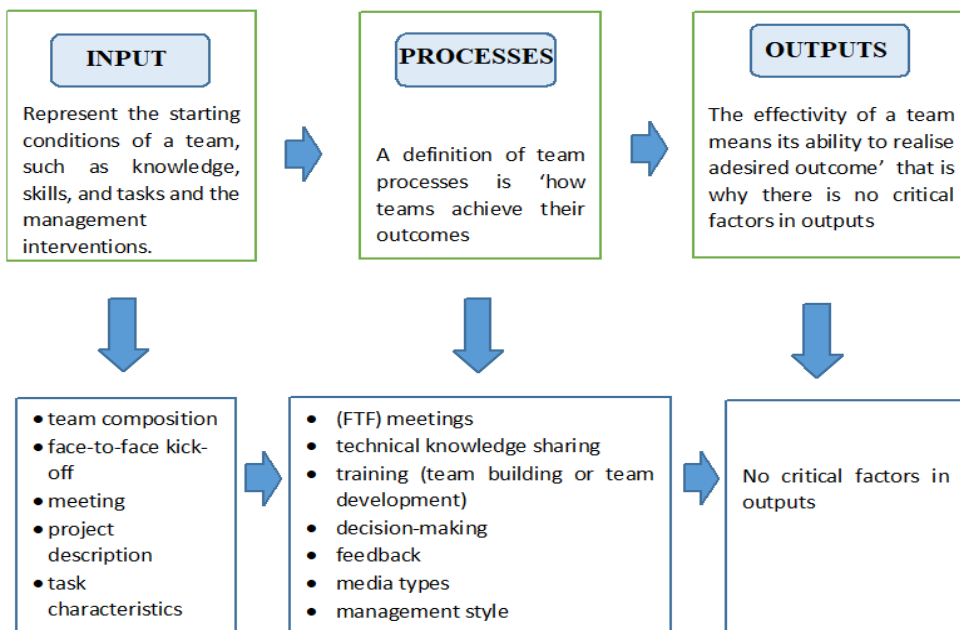
Annex 7

Figure 7. I-P-O model virtual team by Victor Garro Abarca et al. (2021)
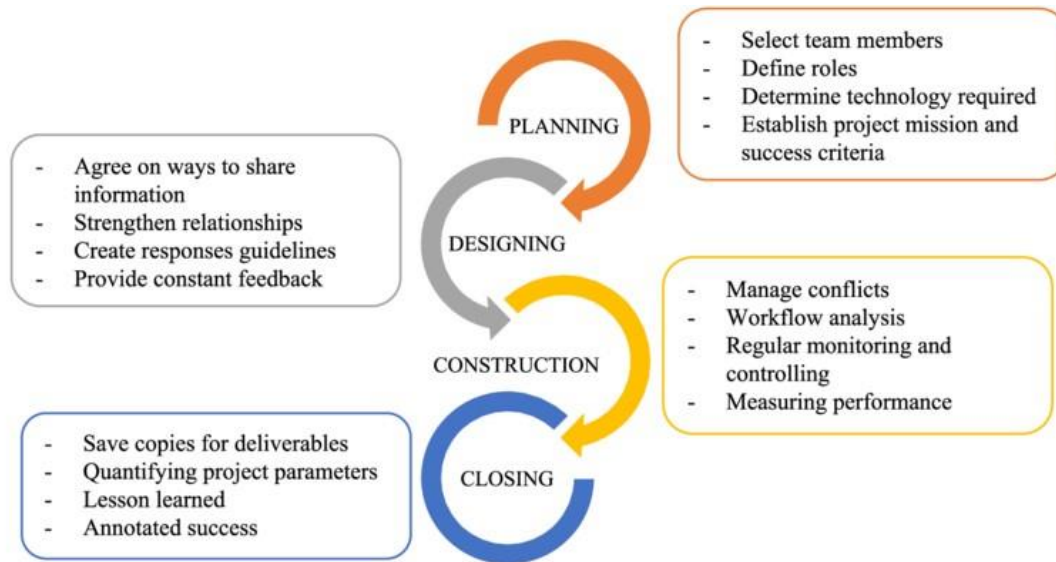

Created by Victor Garro Abarca et al. (2021)

Annex 8

Figure 8. I-P-O model of critical success factors concerning virtual (project)

teams

Raymond Opdenakker et al. (2019) Created by author.

Annex 9

Figure 9. Virtual teams through the project life cycle

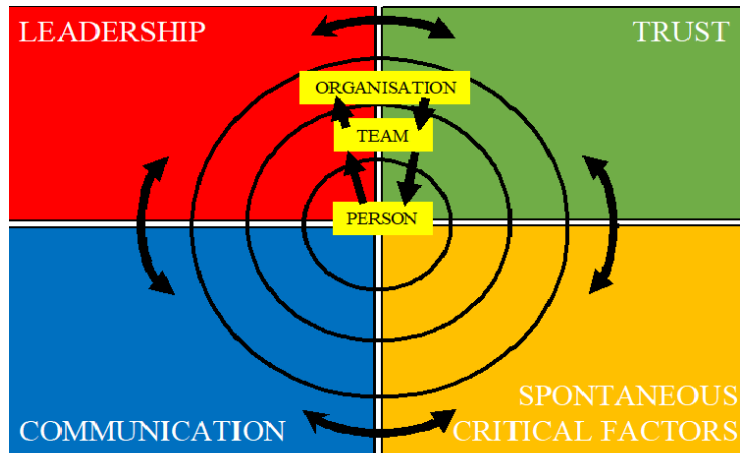Created by: Fekry, Mayar & Eid, Ali & Khodeir, Laila (2022).

Annex 10

Figure 10. Stages of virtual project team development

Stages of Virtual Project Team Development

	Model			
Tuckman: Gersick:	Forming Phase I	Storming	Norming Midpoint Transition	Performing Phase II
Description of Team Behavior During Each Stage	Team members get to know each other, exchange information about themselves and the task at hand, establish trust among group members, and clarify group goals and expectations	Similarities and differences are revealed and conflicts surface as the group attempts to identify appropriate roles and responsibilities among the members	Team members recognize and agree on ways of sharing information and working together; relationships are strengthened, and team members agree on member obligations and team strategy	Team members work toward project completion, actively helping and encouraging each other
Challenges to Virtual Teams	Fewer opportunities for informal work- and non-work-related conversations; risk of making erroneous stereotypes in the absence of complete information; trust slower and more difficult to develop	Reliance on less rich communication channels may exacerbate conflicts by provoking misunderstandings; ease of withdrawing behaviors; diversity of work contexts; reliance on an emergent or assigned team leader	Difficulty in developing norms around modes of communication, speed, and frequency of responding, and commitment to use special software	Vulnerability to competing pressures from local assignments, frustrations over free-riding or non-committed teammates, and communication discontinuities due to asynchronous communication

Created by Furst, Reeves, Rosen, and Blackburn, 2004

Annex 11

Figure 11. Influence of factors on the efficiency of teamwork in IVPT.

Created by author