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EFFECTIVENESS AND CHALLENGES OF VIRTUAL TEAMS IN iGAMING

Master's thesis

Programme Entrepreneurial Management

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Tallinn 2023

I hereby declare that I have compiled the master thesis independently and all works, important standpoints, and data by other authors have been properly referenced and the same paper has not been previously presented for grading.

The document length is 13771 words from the introduction to the end of the conclusion.

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09.05.2023

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ABSTRACT

Covid-19 pandemic has changed the way million of people are working today. Virtual teams are now becoming common in organizations and in business today. Before the pandemic hybrid way of working when the employee works partly from home and partly from the office was allowed on exceptional cases or available only for certain profession or status employees. Yet, today it has entered the work place regardless of the location, position held or industry. Working in a hybrid way during the pandemic period has proved to employers and employees that there are certain advantages to this style of working such as possibility to do uninterrupted, focused work, improved work-life balance, cost savings. After the pandemic the working life resumed in this hybrid work model, combining the traditional style of working with the remote work possibility. However, the pandemic is not the only reason for the virtual team setup. In iGaming field, which this research is focusing on, the operating companies are widely geographically split and the global teams consist of team members being located in different countries. All the employees are office workers, majority being occupied in IT domain and the minority in other operational and supporting departments. Combining office and remote work has changed the interaction and dynamics within the team. Since hybrid work and virtual teams across all areas of business is a fairly new phenomenon and there have not yet been many researches made in igaming and specifically on the virtual team in igaming topic, the aim of this research is to investigate the challenges faced in virtual teams in igaming industry and what are the ways to cope with these emerging challenges.

Based on the qualitative research of this thesis and in accordance to ten participants' feedback it can be said that it takes additional effort and skills to manage a virtual team, a new set of difficulties emerges that one has to be aware of. The biggest challenges of the hybrid work model for the team effectiveness are: communication, trust building, team spirit, onboarding virtually and maintaining work-life balance. The leaders agree that to lead and work in a virtual team they have to do more conscious actions, put extra effort and time when it comes to team building, onboarding a new team member, setting communication guidelines, educating and monitoring employees on work-life balance.

Keywords: hybrid work, virtual teams, hybrid teams, online casino, effective virtual teams, igaming, gambling industry, work productivity

INTRODUCTION

Modern developments in technology have changed the way we socialize, communicate and work. According to Abarca *et al.* (2020) globalization, information and communication technologies, digital culture and the increase in the amount of technology available for online communication mean that more organizations are implementing virtual teams. The growth in the use of virtual teams in organizations has incited researchers to investigate the different aspects, factors and challenges of these teams (Abarca *et al.* 2020).

Crises, wars, disasters and epidemics have triggered or accelerated changes in all types of activities, including the ways we live and work. Globalization, improvements in information and communication technologies (ICT), the increase in the number of remote workers and the emergence of computer-mediated groups, have led to changes in how workers communicate and collaborate in organizations. With current technological advances, the knowledge economy and digital culture, new ways of working are appearing in organizations. This study investigates the type known as virtual teams. (*Ibid.*)

According to Reyes *et al.* (2020) the growth of the virtual teams within organizations have also created challenges. The first issue is that it is harder to establish accountability. Some team members are naturally autonomous but others lose track when they have no supervision. The second issue is that it is challenging to maintain feelings of association with the organization. Team members may begin to feel disconnected from the organization, or isolated from other people, in general, which can take a toll on one's mental health (Reyes *et al.* 2020).

Virtual teams are also a corenerstone in the rapidly growing iGaming industry due to its technological presence and virtuality. Based on Binde *et al.* (2018) the emergence of Internet gambling and its exponential growth has been one of the most significant and contentious developments in gambling over the past two decades. The Internet gambling sector is the most dynamic segment in gambling. Many operators are now licensed in their countries of origin supplying Internet gambling products. Since August 1995, when the first Internet gambling

operator commenced business, there has been an upsurge in the number of gambling websites. Internet gambling appears to be one of the largest sources of revenue generation on the Internet (Binde *et al.* 2018). Since the virtual teams are a common phenomenon in iGaming industry the author intends to research the challenges observed in this field within the virtual teams and propose the ways to overcome them.

This research takes a closer look at the virtual teams in iGaming organizations. Virtual teams face several challenges that impact teams' performance and effectiveness. This thesis identifies the set of the challenges related to virtual teams' effectiveness in iGaming field such as communication, building trust and provides practical tips for team leaders to help their teams overcome these challenges, ensure their success and work together effectively. Thus, this research has two goals: (1) identify challenges faced in virtual teams and (2) provide recommendations for designing better support collaboration in virtual teams.

Through the empirical study the author intends to find answers to the following question:

What are the challenges in virtual teams and what are the ways to overcome these challenges?

The first chapter of the thesis provides literature review and theoretical background on the latest results of the scientific literature. The theoretical part includes the overview of the virtual teams comparison to face-to-face teams, characteristics of virtual teams, challenges and barriers and the presence of remote work in iGaming. The second chapter opens the empirical research methodology and sample selection principles. In the third chapter the results from the qualitative research are analyzed. The data is collected through semi-structured interviews from 10 professionals in the iGaming industry who are team managers, industry leaders or in executional positions and are directly related to virtual teams. Analyses includes author's interpretation of the interviews and direct quotes. Through the research analysis direct connection with theory is drawn and as a result of the thesis, guidelines for the virtual teams managers and companies in the industry are proposed to establish effective virtual team work and eliminate or minimize the obstacles related to virtual team effectiveness.

Theoretical research combined with insights from the conducted interviews provide new and valuable information that could be utilized within the iGaming companies. As being a fast growing industry, the insights and knowledge from current Master thesis is beneficial to ensure effectiveness in virtual team work which further leads to higher productivity, employee satisfaction

rates, overall happiness with the workplace, lower retention and higher profits. From this research the author hopes to gain a better comprehension of the challenges faced in virtual teams and the ways to overcome them, and to be able to further apply the findings in her everyday work.

1. THEORY AND LITERATURE REVIEW

Theoretical part of the thesis gives literature overview of the effective team components and the overview of the virtual team dynamics and challenges. The theory chapter is divided into two parts. The first part looks deeper on the successful team characteristics and its' elements in the traditional workplace. The second part examines the virtual team characteristics and challenges. During the last few years the office work space and the way we have used to communicate at work have changed tremendously as a consequence of technological advancement and as a result of Covid-19 pandemic. The hybrid and virtual work environments have entered companies and is considered as the new normal. The majority of the companies, employers and employees are no longer following the traditional 9-5 office working hours approach. Instead we have new ways of working in place. Either it is a hybrid working model with three days at the office and two days working remotely or working completely remotely, it has led to teams having to communicate and collaborate in a completely different way. As a general rule there are a lot of advantages that this new way of working brings as flexibility, reduced costs, healthier work-life balance, it can boost the productivity, however there are also some disadvantages to be considered that can prevent effective team work and can rise a new set of challenges.

As the author explores the topic specifically in the igaming industry, it is important to have a closer look at this field and the relation it has to virtual teams as such. Since online gaming is a digital industry that is per se international, to increasing levels of internationalisation, the industry has a variety of different nationalities with majority jobs related to software development which allows the staff to perform the job from home. Furthermore, igaming companies don't need a physical space to meet their clients.

1.1. Virtual teams vs. face-to-face teams

To further research on the virtual team on how are they different from face-to-face teams, based on Brewer (2015) findings many resources from the 1990s forward have compared the

characteristics of virtual teams with those of face-to-face teams and then differentiated between them. They have often claimed that a team is a team, and therefore, many of the characteristics and strategies that have been observed in face-to-face teams have been transferred to virtual teams. Such a transfer of strategies from face-to-face to virtual teams has helped facilitate virtual team communication, but the effectiveness of this transfer has limitations. In fact, today, many practitioners and researchers find it more useful to compare low-performing virtual teams to high-performing virtual teams. Why? Virtual teams have become common in the workplace, and many teams combine both face-to-face and virtual communication; thus, the lines between face-to-face and virtual are often blurred (Brewer 2015).

Table 1. Virtual and face-to-face teams share some characteristics but many differences

Characteristics That Virtual Teams Share with Face-to-Face Teams	Characteristics That Virtual Teams Do Not Share with Face-to-Face Teams
<p>They share a common vision of the work or project.</p> <p>They cluster activities around core competencies.</p> <p>They work jointly in groups.</p> <p>They process information quickly through systems in real time.</p>	<p>They cross boundaries of space, culture, time, organizations, and hierarchies.</p> <p>Most communication is mediated by technology.</p> <p>Team members often bring very different cultural assumptions to the group.</p> <p>Problems are often more difficult to identify and resolve.</p> <p>Communication cues are greatly reduced.</p> <p>Trust takes longer to develop.</p> <p>They spend more time in asynchronous than in synchronous communication.</p> <p>Individual tacit knowledge is not as easily converted to group tacit knowledge.</p>

Source: Brewer, 2015

As demonstrated in literature (Bergiel *et al.* 2008, Townsend *et al.* 1998), organisations may benefit from using virtual teamwork in many ways. Firstly, team members geographically dispersed can mutually work on the same project without physically being at the same location. The benefits of such collaborations can include enhanced productivity, increased competitive

advantage and improved customer service. Another benefit worth mentioning is reduced cost; working in virtual teams may facilitate travel budget reduction in organisations. In addition, virtual teams have potentials of bringing together multiple perspectives, thereby facilitating greater levels of innovation and synergy (Townsend *et al.* 1998). They also support highly flexible working patterns which make managing personal circumstances less cumbersome, as certain technologies can enable team workers to operate remotely. Finally, by using virtual teams, organisations can react quickly to more dynamic business and client requirements. (Zuofa and Ochieng 2017)

Research shows that the COVID-19 pandemic conspicuously accelerated this transition, shifting 35 percent of U.S. workers and 80 percent of global corporate remote work policies from primarily co-located and face-to-face interactions to virtual and hybrid forms of collaboration within a few weeks (Brynjolfsson *et al.* 2020). Nor has this sudden transition been temporary. Nearly two-thirds (64%) of organizations report that “remote working is a permanent change they have made due to COVID-19,” with a similar proportion (69%) reporting that at least 75 percent of their workforce works effectively when remote. Increasingly, individuals and organizations see the “liberating” potentials of distributed work as it grants them newfound flexibility. (Meluso *et al.* 2022)

1.2. Characteristics of virtual teams

A virtual team is one in which a significant amount of team work takes place using technology to communicate rather than using face-to-face presence to communicate. Many researchers from the mid-1990s until now have defined the characteristics of virtual workplaces, but regardless of the fine points, virtual teams often or always work in a shared space that is created by technology rather than in a shared space that is physical. In addition, virtual teams and their work are referred to in many other ways; here are a few possible synonyms: virtual office, computer-mediated communication, online communication, distributed teams, distributed work, virtual workplace, virtual computer-supported teams, remote project teams, computer-supported cooperative work (Brewer 2015). As also stated by scholars Ebrahim *et al.* (2009) a virtual team is defined as a group of people or stakeholders working together from different locations and possibly different time zones, who are collaborating on a common project and use information and communication technologies (ICTs) intensively to co-create. It can be seen that one of the main characteristics is virtuality, which implies physical and temporal distance between members and a shared purpose (Ebrahim *et al.* 2009).

Study conducted by Brewer (2015) also brought out that as companies seek to leverage virtual teams to develop value for their stakeholders, it is natural that they draw upon what is known about face-to-face teams for virtual work assignments. Some of these assumptions can work but with limitations. Once communication becomes mediated by technology, many communication and team concepts are altered (Brewer 2015).

Successful virtual teams exhibit these characteristics:

- They exhibit efficiency, effectiveness, and satisfaction.
- They place purpose at the center of team communication.
- They accomplish goals.
- They exchange information clearly and precisely in an appropriate social space.
- They communicate regularly and within acceptable feedback timeframes.
- They communicate with few misunderstandings.
- They create a good impression on teammates with the use of online cues.

Accomplishing team purpose and satisfying team members are critical to success in a virtual team. (*Ibid.*)

In the recent study done by Tietz (2021) it was pointed out that effective knowledge sharing is a key process for the success of virtual teams. Several specific challenges like the information technology used, the geographical distribution and the lack of personal contact between team members make it difficult to share knowledge. Current studies on influencing factors of effective knowledge sharing in virtual teams focus either mainly on technical or social factors. In contrast, little attention has been paid to the role of social presence as an interdisciplinary construct. Social presence means the individual or joint experience of a sense of togetherness despite physical distance, which arises in the interaction between the team members while using the existing technology (Tietz 2021).

Based on the research by Ebrahim *et al.* (2009), it appears that several components are needed to produce a successful virtual team. These include the right team make-up, the right size, the right clearly defined roles (Montoya-Weiss, Massey, & Song 2001), the right leadership, the right technology (Ferrazzi 2014) and the right organizational culture. Underlying these components are knowledge sharing, collaboration (Alsharo, Gregg, & Ramirez 2017) and building trust (Ford,

Piccolo, & Ford 2017). Trust should be paramount as it is the glue that holds team members together (Ford et al. 2017).

1.3. Remote work in iGaming

iGaming is an online industry where the staff can perform their work duties remotely. When talking about iGaming industry, it is important to note that the majority of companies are registered on the island of Malta. As the research made by Borg (2021) indicates during the pandemic, the Malta Employers Association (MEA) carried out a series of surveys amongst employers between March and September 2020 on the issue of Telework. Companies operating in the iGaming, finance and the Insurance sector reported the highest incidence (91%) of having teleworking systems in place. Also of a significance is a fact that due to the Scandinavian influence on the industry, and the high number of Nordic employees who dominate the sector, employers are open toward family-friendly benefits such as remote working and flexible working hours to support parents with work and family life. As stated by the scholars Gupta *et al.* (2008) the Nordic countries are considered the forerunners in designing family-friendly policies.

With the geographic expansion of gambling it has provided an extensive selection of operators across the globe. Based on the study by Manzin and Biloslavo (2008) we can establish that online gambling is a global activity, from both a technological and an organizational viewpoint. In terms of technology, this is understandable because it works via the internet; in terms of organization, this is less evident. The cause of such an ‘organizational globality’ rests in the indeterminacy of the legal operating of online gambling. Due to the lack or even absence of regulation, online casinos have discovered means of operating out of several countries simultaneously. As certain authors indicate (Cabot 2001; McMillen 2003; Balesta and Cabot 2002), online casinos often carry out their activities such that they have their headquarters, server for games and support centres dispersed over various locations in several countries, depending on the regulations of each individual country (Manzin and Biloslavo 2008).

Considering the global aspect, technological presence and virtuality in iGaming field the author intends to explore how are the virtual teams coping with the emerging challenges within the teams, are there similarities with the challenges faced in other industries and what are the ways to cope with these issues.

1.4. Challenges in Virtual Teams

While acknowledging the benefits from virtual teams, it is important to highlight that they also bring unique challenges. Krumm *et al* (2016) indicated that organisations face several challenges when implementing virtual teamwork. Some of these challenges include the lack of physical interaction with its associated verbal and nonverbal cues and the synergies that often accompany face-to-face communication. Cascio (2000) further opined that the lack of physical interaction breeds issues related to trust. Henttonen and Blomqvist (2005) have stated that in virtual teams trust is influenced by communication behavior, timely responses, open communication, and feedback (Henttonen and Blomqvist 2005).

Furst *et al* (2004) identified the relative lack of opportunities for virtual team members to engage in social or other non-work-related activities as another major challenge. As stated by Virdee (2021) virtual teamwork results in a greater physical distance from other team members, resulting in challenges with maintaining communication and building new relationships. Moreover, the study uncovered the fact that early formation of face-to-face contact and familiarity remains important for building trust. However, it was also seen that frequent communication and audio-visual communication technologies can help deliver more personal meeting experiences and thus increase the presence of social cohesion and trust within virtual teams (Virdee 2021). Interestingly, irrespective of these challenges associated with virtual teams, Martins *et al.* (2004) observed that virtual teams have become common place in large organisations.

Simultaneously, millions of people struggle with “flexible” work arrangements. Even prior to the pandemic, information and communication technology (ICT) adoption frequently yielded unintended or “dual” consequences (Majchrzak *et al.* 2016) — the mixed effects of hybrid collaboration that increasing numbers of people now experience. For example, while some people view Slack as a flexible lifeline amidst remote work isolation, others find its incessant notifications insufferable. People also report experiencing “Zoom fatigue.” Although video conferencing certainly has helped people to stay connected with loved ones and colleagues, spending all day in video meetings can feel particularly exhausting, probably because of increased cognitive load, self-evaluation, sensations of intimacy, and reduced mobility (Bailenson 2021). Of course, both of these examples assume that people have sufficient or consistent enough internet access to collaborate remotely in the first place—a particularly challenging reality in many rural communities and developing nations (Bailenson 2021).

Challenges to virtual team performance and communication are plentiful; as such, virtual teams that are formed without planning and structure are likely to experience serious incidents of costly miscommunication, or they break down entirely. 10 common challenges that most often impact the performance of virtual teams, whether international or not:

1. gaining trust
2. engaging in social communication
3. understanding communication patterns of other team members and applying that understanding
4. avoiding misattribution
5. establishing shared interpretations of language
6. establishing shared expectations of technology
7. communicating clear boundaries
8. negotiating time zones and perception of time
9. identifying clear leadership roles (Brewer, 2015)

With regards to onboarding new colleagues Settle-Murphy (2013) has stated that many virtual teams have members that frequently come and go. Creating an entry or exit strategy is particularly challenging for teams whose members work virtually. The reason is that unlike their co-located counterparts, virtual team members have fewer opportunities for the kind of informal impromptu conversations by which much vital knowledge is shared and context provided. As mentioned also by other scholars that there's little guidance on how to initiate new members into such teams and how to overcome the learning curve (Fagerholm *et al.* 2013).

Dyer *et al.* (2013) suggested as a rule of thumb virtual team leaders should plan to allocate 50 percent more of their time to the project than if their team was collocated with the same problem. Their rationale is virtual leaders must invest more time to intentionally plan and organize meetings and team activities since communications occur electronically and often need to be spelled out to avoid misunderstanding. Virtual team leaders may also need to dedicate extra time to monitoring team morale as well due to conflicts that result from miscommunications. According to Levi (2017), virtual teams have higher levels of conflict and are less likely to resolve conflicts and achieve consensus due to the lack of social pressure and perceived anonymity of team members in a virtual space.

2. RESEARCH DESIGN AND METHODOLOGY

The following chapter of the thesis presents the methodological approach of the study. The first subsection describes the qualitative research method that was applied for this study. The second subchapter describes how the sample was formed, and the third subchapter opens the process of the data analysis.

2.1. The online gambling industry overview

The gambling industry has grown into a global business in the 21st century (Salkunen *et al.* 2021). According to Gainsbury (2015) Internet gambling (a term largely interchangeable with interactive remote and online gambling) refers to the range of wagering and gaming activities offered through Internet-enabled devices, including computers, mobile and smart phones, tablets and digital television. This mode of gambling, facilitated by technological advances, increased Internet availability and ownership of Internet-enabled devices, is not a separate type of gambling activity. Rather it is a mode of access that is distinct from gambling in person at terrestrial or land-based retail outlets and placing wagers over the telephone. As such, it is a largely automated activity that could be conducted in private, at any time and location, using high-speed Internet connections enabling rapid placement of bets and notification of outcomes (Gainsbury 2015). The most important differences between online and traditional casinos are given in table 2.

Table 2. Characteristics of online and traditional gambling

Characteristics	Online casinos	Traditional casinos
Language	Multiple languages can be used.	Usually operates in one language.
Currencies accepted	Various currencies can be used, depending on which country the gambler is from.	Normally operates using only one currency.
Means of payment	A wide variety of payment options, various cards are accepted.	The usual means of payment is cash; a limited number of cards are accepted.
Money used	Online gamblers play with real money (they are not required to exchange the money for chips on entering the casino).	Gamblers always exchange money for chips.
Dress code	No requirements, you can play anywhere, wearing whatever you want to.	There are policies and regulations about the dress code; players wearing inappropriate clothing are not allowed to enter.
Free gambling	A definite possibility, usually included in the offer, mainly as a means of attracting players.	A faint possibility, only on special occasions.
Variety of games	A large variety of games.	A limited choice of games.
Accompanying costs	Only includes internet costs.	Includes transport, accommodation and meal costs.

Source: Manzin and Biloslavo, 2008

As stated by the Global Betting and Gaming Consultants (2011) Internet gambling is growing rapidly in terms of popularity, market share and products offered. The online global gambling market was valued at €6.1 billion in 2013, with expected annual growth of 10.1 % in 2018. As it was described in PR Newswire (2021) where igaming was compared to ecommerce in the early days of ecommerce can be traced back decades, sluggish until the 2000s, then accelerating rapidly over the last 10-plus years. Online gaming is on a similar trajectory. Analogous to what Amazon and Alibaba did for ecommerce, online gaming has deep roots that go back decades and now has entered a growth stage that many believe will chart like a hockey stick. There are different approaches to capitalizing on what appears to be parabolic growth across the industry. More merchants than miners became millionaires during the California gold rush, and servicing the

companies that provide consumer gaming just might be one of the best ways to cash a ticket (PR Newswire 2021).

2.2. Research method

The author choose the qualitative research method in this study to get insights and gain deeper understanding of the respondents' experience, concerns, observations on the subject of the virtual team work effectiveness and challenges faced in the work places. As scholars have noted, qualitative methods are probably always a necessity to understand social phenomena (Malina *et al.* 2011) and it offers deeper understanding of human experiences, context and social phenomena (Finn *et al.* 2022).

The data for the research was collected during the interview process. The data was collected using semi-structured interview method, which was afterwards analysed in order to find any connection to the theory and similarities or differences within the responses of the participants as well as to potentially find a new emerging phenomemon or new patterns. Semi-structured interviews contain pre-set, open-ended questions, with further questions emerging from the discussion (Denny and Weckesser 2022). Face-to-face and online interviews with various professionals in the field took place to gather the inside information. Study population was chosen and selected mainly based on their relation to the business and their involvement in virtual team work as well as based on the ability and availability of the interviewees. Interview guide was created based on the results retrieved from the theoretical background, please see the Appendix 1 and the interview content is opened in the sub-chapter 2.3. All interviews were recorded on audio with the permission of the respondents and the recordings were transcribed on paper.

2.3. Sampling procedure and sample size

The interviews were conducted with 10 representatives from the iGaming field. As the goal of the research was to determine the challenges of virtual teams and the ways to deal with them, the sample has been selected using the following criteria:

- 1) hybrid / virtual work is used;
- 2) working in iGaming company;

- 3) leading or being part of virtual team.

In order to gain broader insight on the phenomenon, leaders and professionals from various organizational ranks and levels of management were selected for the sample to provide insights mostly from managerial side and employees in executional positions. The sample size included 10 representatives in total from which 8 were managers and 2 employees were in executional positions coming from various international global iGaming companies. The author was interested to find out if there are similarities in the statements of different representatives coming from the same field but from the different companies. The full list of the participating companies and leaders can be found in Appendix 2.

Purposive sampling was chosen to select the information-rich respondents since there was no publicly available list of potential interviewees and the criteria was very specific to the particular industry. As stated by Check and Schutt (2012) purposive sample may be a “key informant survey,” which targets individuals who are particularly knowledgeable about the issues under investigation. The sample pool of respondents was compiled using author’s personal and professional network and applying search techniques in professional social media platforms based on whether the participants worked in the iGaming industry and had a relation or work experience in virtual teams. The potential candidates were initially contacted by e-mail or by phone prior the interview took place. The purpose of the research was explained during this initial contact and the author also secured the willingness of the candidates to participate. Since this specific research method was used, the results of this thesis could not be generalized or applied to wider population.

2.4. Method and data analysis

In this research the author used semi-structured interview to gather the data to gain the understanding on the researched topic. Since the respondents were sharing with the insights from their own experience and observations, a semi-structured interview allowed them to express their own thoughts and opinions freely. Open ended questions were used during the interview process. At the same time, it also provided the flexibility to the author to ask additional questions in the process that might not have been planned and included in the initial interview guide. Semi-structured interviews are superbly suited for several valuable tasks, particularly when more than a few of the open-ended questions require follow-up queries (Newcomer *et al.* 2015). The interview

consisted of 26 questions (see Appendix 1) that were divided into 4 main categories: respondents position held and relation to virtual teamwork, challenges observed or experienced working with virtual teams, consequences or results of those challenges, possible adjustments and virtual teams' effectiveness, productivity. Interviews were conducted either face-to-face or via online conference calls, e.g., MS Teams, Zoom, Google Meet. Interviews took place during the period of March 2023 (from 3rd -25th March). The author contacted 15 candidates intentionally selected and 10 from them agreed to participate in the interview. Each interview was scheduled to last on average of 1 hour. Every respondent was explained the reason behind the interview and the research, and the author asked for their permission to record the conversation. Despite the different nationalities, geographic locations and time zones of the respondents, interviews were conducted in English as all the participants represented international global companies and their employer company obliged them to work and communicate in English daily (see Appendix 2). To preserve the respondent's anonymity and identity, abbreviation INT was used in the analysis part. The interviews were recorded with the consent of the respondents. The audio recordings were transcribed and uploaded in MS Word format in Google Docs, the link to the interview transcriptions is available in Appendix 3. The audio files were listened several times and the transcriptions corrected in the process. The audio files from the interviews were uploaded and transcribed to paper with the help of transcription applications, such as Trint and Speaker.

The essential findings from the interviews were taken out and arranged in Excel table (see Appendix 4). Also, the author highlighted the direct quotes from the interviews which reflected the respondents' ideas or thoughts the best, which can be seen in the interview transcriptions in Appendix 3. The author highlighted meaningful findings, identified similarities and differences, defined the categories, and compared to the existing theoretical knowledge to formulate a conclusion. During the data transcription process findings from the interviews were organized in blocks of 1) challenges of effective virtual teams, 2) results and consequences due to challenges and limitations of virtual teamwork, 3) adjustments and improvements taken to mitigate the challenges of virtual teamwork 4) positive effect of virtual teamwork. During the data analysing process the author combined the findings from the interviews and the theoretical background. The direct quotes from the respondents were mentioned in the final part of the research because valuable insights on the topic were gathered from the real conversations and it helped to portray these insights visibly and clearly. The method used for content analysis was coding framework method. As stated by the scholars Galleta and Cross (2013) engaging the participant provides some

degree of reciprocity between the researcher and participant, between data and theory, and it contributes greatly to the generation of major coding categories and the interpretation of the data.

3. RESULTS AND DISCUSSION

The following chapter presents the results gathered from the interviews by the author. In the following chapter the author will discuss the empirical findings from the interviews in relation to the theoretical information presented in the Chapter 1. In the research 10 industry professionals participated in the one-to-one meetings face to face or via online virtual video calls. Interview guide was taken as the basis for the interview questions to investigate deeper the research topic of the virtual team challenges that prevents the virtual teams from effective collaboration and the ways to overcome them. The results of the interviews are coded to ensure the anonymity of the respondents in the following format: INT 1, INT 2, INT 3 and so on. The author focused on analysing and identifying the key issues of the challenges faced and the ways to overcome them to make the virtual team more effective, on findings from the respondents' observations about the positive, negative, and non-relevant experience in relation to virtual teams' effectiveness. The following chapter consists of four subchapters where chapter 3.1 identifies the respondents' working framework arrangements.

Chapter 3.1 describes the main challenges observed in virtual teams, chapter 3.2 covers the positive side that virtual work environment brings, and the chapter 3.3 covers the support and guidelines that the author proposes for implementation for effective virtual teamwork. The details to the coding table used for summarizing the findings are available in the Appendix 3 and the summarized details of the research are available in the Appendix 4.

3.1. Challenges faced in virtual teams

This research looked to explore the main challenges faced in virtual teams and how to overcome them. The author asked about the main themes as challenges discovered in the theoretical part of the research described in the Chapter 1. In addition to the most obvious challenges being discussed

the author also asked about other aspects and additional information that surfaced during the interview process. Based on the answers given during the interview process and from the theoretical literature sources a few main identifying challenges presented themselves being of importance to most of the respondents. In the following five subchapters the author will be exploring each of these challenges closer and in more details. Each main challenge will be described in a separate subchapter. During the dialogue process the author also asked the participants about the ways to overcome these challenges unless it wasn't revealed by the respondents themselves organically during the conversation. These findings were then collected and summarized in the Chapter 3.3.

3.1.1. Communication issues

Based on the interview results one of the most underlying issues that kept resurfacing was communication within the virtual team setup. 7 out of 10 respondents mentioned it to be a problem and that it requires constant working on and maintaining because the communication flow in hybrid and virtual work environment is so much harder to maintain than in face-to-face communication with two persons mentioning it to be the biggest problem. Several respondents acknowledged that it is so much harder to communicate via chat or virtual calls rather than in real life, that the nonverbal communication is lost, it is harder to read the person and their emotions, and that it may create misunderstandings, delayed responses, and difficulties in information sharing. (INT 1): "There might be communication issues like you don't get some people sometimes. If you talk to someone face to face, you feel the atmosphere and you feel the emotions of the other person. This kind of online working, it's more difficult, especially if it's not through teams call but by chat." (INT 3): "If we have some people within a team within a location and then somebody remotely, then there are remote meetings. Those have a different dynamic because the people in the same room can easily talk to each other, but so much harder to engage the other person behind the screen so that requires sort of discipline and a learned behavior. There are times when if everybody's very busy then trying to contact somebody remotely is much harder than just going to see them, if I see them sitting in their office, I go knock on the door, get the two words in and I'm out and I get to see that they sort of heard it." (INT 7): „I feel like that it would be easier to get the info across when you have everyone in the office, in person. You literally can't just get everyone's attention and get the point across at the same time you address all the questions through chat or email. I think in that sense it's more efficient maybe to have in person set up. Our work

depends on us working together, sharing with the information, tackling some issues together, it all comes down to a teamwork, of course we can fulfill the tasks independently but that communication is constantly happening between us. I think it's sometimes you will be really struggling with someone in written format while if you call them up actually you hear the tone of voice and their emotions a bit better, you can read in my opinion and you get through to the points so much faster, so much more efficiently.“ (INT 10): „So the information flow I find is delayed. If this is maybe something that you can just on the go say that this happened and that happened because sometimes you just need time as well to write it and to e-mail it to everyone. So I feel sometimes you need to wait till someone else reads your message and replies. And sometimes I feel that when we would be all together in one office we would just kind of exchange ideas much quicker. I've worked in a different environment where all the team members were local and if someone had a problem, we just kind of quickly asked around. So it was much quicker. So there was no delay in information. And even if something came from upper management, it was shared immediately.“

Two respondents mentioned also the language barrier issues that affect the communication flow in the virtual work environment between the team members. (INT 10): „Of course, the differences of the language skills I would say as well because not everyone is on the same language level of English or some people speak business English and the others not. And you kind of finding your way through the whole thing.“ (INT 9): „So language is an issue. That is always tricky when someone's first language is not English and if they're not really proficient in English, not 100% and so I'm not always 100% sure that they understand me fully and I need to also learn to slow down.“ As also mentioned in the studies by Duran and Popescu (2014) communication in collaborative virtual teams is not based on language or body language. In this case, very easily misunderstandings can become a difficult problem.

Only a couple respondents stated that the communication part does not seem as a problem for them, the reasons given that either they have a very good team interpersonal relationships and trust between each other, constant established communication flow virtually and they know each other very well or that the job itself doesn't require day-to-day close communication to the other team members. (INT 5): „It's quite easy if we need to face to face the call or just a quick huddling slack to explain exactly what's needed. Obviously we get on really, really well.“ (INT 8): „Our team

consists more of individual contributors. We don't have to speak every day. However we communicate in chat a lot, it's quite quick usually."

Several respondents also stated that the virtual communication needs special attention and extra effort. (INT 3): „It's just that there's some small behaviors that you need to do that are slightly harder. Small adjustments need to be made.“ These remarks are also with the correlation with the studies made by Aquino *et al.* (2022) fostering connection, communication and productivity on virtual teams requires specific skills and deliberate practice that differ from in-person teamwork.

3.1.2. Trust

The results of the research show that another major challenge to virtual team effective collaboration lies upon trust, it is one of the most important components for a successful teamwork. Trust can be built through relationships between people. Only having the solid foundations of trust the teams can collaborate effectively. Half of the respondents admitted how important the trust is as a foundation in the virtual team setup that they do observe issues related to trust within their virtual teams. (INT 4): „One of the things that I have been struggling with maybe is that people disappear. You know, some people are not so responsive. So you do not know what they are doing behind the screen. It is important to have that visibility.“ (INT 6): „Mutual trust is important. And it has to be again both ways from employer side. If we have a virtual team member who is located somewhere else, we need to trust that they do their work the best they can and that they do it. With responsibility and also the employee who works virtually, has to have that trust towards the employer. Knowing that if there is going to be a problem, that he or she can come and talk to their manager, to the HR team, or whoever they see as their trust person.“

Although half of the respondents admitted having trust issues or just even having doubts sometimes about their team members doing their job and fulfilling the responsibilities, some of the research participants also pointed out that they completely trust their team members. (INT 7): „Because sometimes I have had the situations where I'm having doubts. So that's how we like to keep track of their productivity properly. I think in that sense, I do trust my team overall so far. I would hope so that we have made a good selection of the hires that we've decided to take on board with us so far.“ (INT 5): „It is absolutely important, now I need the guys to work well with me and together with each other. They're all good at working on their own as well. So, I don't have to

watch them or be hovering around them all the time because they just get on with the job. And if I assign them something to do, it's done. And I don't have to chase them for it.“ (INT 10): „We do catch up and say whatever was happening and every two weeks we have a stand up and we have our own one to ones. So we constantly talk about what is happening and gathering new information. But I feel empowered that I've been left and trusted with the whatever I do. So I feel good with the current situation.“

As many respondents from the interviews noted there is a huge importance of having a trust within the team. It impacts the job performance, information sharing more freely, it's empowering and improves personal wellbeing and it stems from having trusting relationship and effective communication. As also mentioned by various authors previously trust is the bedrock for many employee outcomes, such as job performance and satisfaction (Zhu et al., 2013), organisational commitment (Miao et al., 2014), organisational citizenship behaviour (Mushonga et al., 2014) and psychological safety (Frazier et al., 2017).

3.1.3. Onboarding

The question about the onboarding in the virtual environment or/and remotely appeared to be one of the biggest problems in the current hybrid work models across all companies and for all respondents. Depending on respondents' experiences and observations it proved to be a challenge from all aspects, having been a challenge on the new starter, an additional strain on the whole team and also on the hiring manager.

Respondents admitted that it is more challenging on the team to take in a new team member virtually because training and getting the person up to speed in a virtual environment is so much more challenging than in face to face situation. (INT 1): „For the people who are already in the team and who are more knowledgeable about the work processes, it's a bit more draining to train them virtually then if this person is sitting besides you in the same office.“ (INT 3): „It is harder because it's so much harder to share the collective sort of tacit knowledge how we work. What's the project, what's the domain? What do we do and and sharing that. Through the Internet borders, it is harder to do. It's just harder to take on for the new guy. And it's harder to give it up to the others. That can be solved because it's a specific onboarding process, but it takes more energy due to that remotely. In the conversation, it happens naturally. But it doesn't just happen in the virtual

room. You have to put some effort and like conscious thought into it. I mean the biggest issues that we have to put extra effort into is during onboarding new people. We have to pay attention to all the sort of small signs that could this be a part of a bigger problem that we need to that we need to proactively resolve before it becomes a big thing. During on boarding process we have to be very careful to be sure that people get the culture and how we work very clearly that there are no misunderstandings of what is normal because if that is kind of gets stuck in, it's very hard to then change it later, so that's when we have to be more careful.“

One respondent was going through the onboarding process herself fully remotely, admitting it was the hardest experience for herself in this whole virtual team environment. Due to the lack of process, procedures and the support from the manager and the peers, the responded admitted eventually leaving the company due to the unpleasant experience. (INT 2): „And it made me feel really unwelcomed there. And during the onboarding process I felt like really isolated. During the onboarding my manager did not cover this part of properly introducing me to people and building this initial contact and the base for further relationship.“ And also other respondernts were of the same opinion that for the new starter remotely it has been a challenge. (INT 8): „I'm everyday in the office but we are in different locations and so don't get to see face to face. And as she is just beginner I can imagine that when you are starting to work in some company and everything is new, its challenging.“ (INT 1): „I think it's more like a challenge for new people. So if you're already in the team, it's easier but to come and learn things, maybe it's a bit more difficult in this sense. You have to really push yourself to write in teams or in chat or in e-mail that you need help with this to someone you actually don't know too much yet. You need to have self-discipline so that you really don't get lost in this fact that you don't have someone who is standing by your back and looking over and checking if you're doing something or not and telling you what exactly and how to do.“

Three respondents mentioned that their onboarding process is exclusively done on site, or at least 90% in one respondent's case. (INT 5): „Everything has been face to face. All the interviews, everything we did was face to face. So that is the time I spent most of the week in the office, we went through and did the interviews. I wouldn't like to do it remotely and much prefer to do that type of thing face to face for sure.“ (INT 6): „We for 90% we don't do them virtually, we buy the plane tickets and get the candidates in the office. So the new employees come to one of our office premises, we have done some virtual on boardings once in a while because sometimes it happens.

However, as a rule we always want the person to come to the office to get the sense of how the office feels. It is the culture and so they know what is the physical space where they're attached to through their work. So yeah, 90% we do on site onboarding.“ (INT 10): „People who are joined through the screen and they have never met their team, felt as well little bit more detached because obviously they didn't build their relationship. So we are trying to whoever is starting here is always a face to face on boarding situation. The new person is expected the first three months into the office, so they do not have the hybrid model from the beginning.“

Respondents who were directly involved in the onboarding process, training the new candidates also stated that it is so much more of an issues to do it remotely comparing to when it is possible to do it in the real life. (INT 7): „Overall training someone new, which is also something I have to do recently and it's definitely challenging when you have to do it remotely.“ (INT 9): „So I'm onboarding and training everyone, all the newcomers, all the new hires basically. I think the onboarding remotely is much more difficult, yes it is. It is much easier to do in person to be honest. I have to say that in the last two cases I had, there was also the issue and this makes the training so much more difficult if the person is remotely. The real issue is when someone starts completely new and only working from home office from where they are, and that is really the biggest challenge. So even if I would go there, I would go to his home and train him there. No, I cannot do that. That was really the most, most difficult one. “

Of course in part the issue with the virtual onboarding is also different based on the job characteristics and team structure. Those respondents who are mostly working in the IT departments or relevant teams claimed that it is easier than those respondents coming from HR, Marketing or Operations domains. (INT 4): „There is a process in place, of course we can improve it. We have some challenges as well. The fact is that the remote onboarding is always a challenge. But again in the programming community world, you can actually do it remotely because at the end of the day they are looking at the code and technical things and you can do it online. I'm trying to put the buddy for the new hire, let's say a partner.“

The majority also stated that they have already or are implementing onboarding processes and special requirements to be in the office for the first few months. (INT 10): „So we are trying to whoever is starting here is always a face to face on boarding situation. The new person is expected the first three months into the office, so they do not have the hybrid model from the beginning.

Only after three months. So we are making sure that at least any one of us is in the office and guides the new person and has contact with ourselves for the first two weeks, like intensively. And then we follow up with training sessions. We have a feeling that it is more approachable and the person learns much faster when it's face to face.“

The majority of the respondents agreed that the on-boarding within the virtual teams is a challenge for them, training, teaching company culture and creating relationships are difficult virtually. Only 2 out of 10 said on-boarding is not really a problem for them because they are strictly doing it on site. The positive side of it is that in many companies the onboarding processes are being improved and worked on and they are starting to introduce the requirements that the first few months during the onboarding and training are needed to be spent on site. The majority admitted that they would prefer to do it on site but in some cases due to the location limitations or job task specifications it is not always possible.

3.1.4. Team spirit and engagement

Another major issue that the participants observed in the virtual teams was related to team spirit and engagement. How to bring people together, get them to connect, build relationships and trust and get them engaged when they do not see each other and do not have a chance to communicate face to face. (INT 6): „When we look from teams perspective and from manager's perspective, the biggest challenges to get all the employees in present and meet them in present face to face and that's related both to the fact that some of them are remotely working but also to the fact that we are located in different countries.“

Firstly, the communication over the virtual team channels needs to be created and maintained a little bit artificially, mainly by the manager and also by the team members putting more thought and effort into it otherwise if it is not organized, it rarely just happen by itself. (INT 1): „For the manager I think it's much more difficult to manage the team. I think the manager has to work a lot more to create this kind of one team feeling and safety. I think how well the team works together, it's exactly about the team dynamic. And so if it doesn't work in the real life, it doesn't work virtually as well. I still think that this kind of 1 to 1 conversations and not talking about work and just like making jokes or talking about life, asking more personal things or sharing more personal things. This is what creates this kind of team feeling. It happens more easily when you're just like in the same place. So over this virtual kind of working thing, you have to more artificially create

these kind of bonding things. Have this kind of setup. Setting up this kind of opportunities for these things to happen.“ (INT 9): „And also then I need to find a way to bring across our values as a company and our expectations. I mean this is part of the training, the cultural work environment of the company. Again I find this is easier if it's in person, and it's much more difficult to do it virtually.“ (INT 4): „We try to synchronize each other quite often. Everyday calls and trying to get to know each other. We exchange information. We meet each other too and it creates connection, because I also feel that if I don't see this person we go lower in communication flow. The synchronization of things, it disappears. We get to go with different ways in the sense. We have this culture in the company that if you see someone that is struggling or having bad times, you ask if they need something.“

Secondly, the virtual communication does not provide the human touch and social proximity to other people. (INT 10): „I think it's the human touch. If everything is electronic, you need time to time to see each other, you break the ice because obviously if everything would be fully remote, we would never see each other. Yes, it's nice to see each other through the Internet and the technology has advanced, but it's still a difference if I call you like that or I see you in person. I think there's still the human aspect. I think because you don't get to see the person face to face, I just feel that the human aspect is missing and it is so important. The human aspect kind of thing, you get to know the person. I think bonding is important through human interactions.“

On the other hand, companies and management are tackling this issue by trying to bring people together as much as possible. For social events and activities, implementing team games that can be played online, organizing trips and visiting other locations. (INT 6): „We target at least once a year ideally twice a year, but once a year we have managed so far to bring the teams together in one location. And that's very important for building the team spirit, for ensuring that each team member feels a part of the team and a contributor, and somebody who's been listened to and who can give his or her opinion in present. Another thing that we work on also constantly is how to ensure that virtual Team members participate in activities. We've noticed that there is a tendency for remote employees to have less participation.“ (INT 3): „How do we keep the team feeling if we are not seeing each other that often? Even if we come to the office, but we are still location split. And how do we keep that feeling? How do we keep the feeling that we have the same goals, that I know this guy and I can just poke him. How do we keep that feeling present? And that's another challenge with the remote and hybrid setups because that comradery that comes from

having a united goal that we work towards and the feeling is what usually keeps people in a team, even in a different location. Again, there are ways of trying to overcome it with virtual meetings and travels to just occasionally have that.“

3.1.5. Work-life balance

Last but not least challenge mentioned by the participants of the research was a challenge of work-life balance. Whilst the majority enjoy the flexibility that comes along the hybrid working model, there are concerns about setting boundaries and being able to separate the work from private life and knowing when to pause and stop with the work tasks and switch off. (INT 3): „Then there's an additional layer of questions around that we have to be careful of the other side - obviously for the people's themselves, if they have problems separating leisure time and work time. They might burn out quicker because they will continue to work after work hours because they like it. They want to and they just continue doing it. So as a manager you or as a leader you have to be careful about that, that you have a good overview and chats with people, can they actually relax, can they actually put down the stuff and finish working? Do they have the procedures in place? It's not that people will just slack off at home and not work. But also they might work too much and then you'll lose somebody to overworking. So there is different a number of things to consider here.“ (INT 9): „I think my work life-balance is ok overall but it fluctuates a lot. So there are weeks which are quite relaxed and then there are weeks where I give training for 5 hours a day + having to fix upcoming issues on the side and then it becomes very challenging and I am completely exhausted at the end. I try to balance it out in my free time, eat healthy and exercise and meditate. All these help but can be difficult to stick to these activities when time is tight. I have not felt the need to bring this up with management and I feel I have the freedom to schedule my sessions as I see fit, so far no one has ever told me that I need to fit in more trainings per day for example, it is more that I push myself too much sometimes, wanting to get someone ready as quickly as possible in their role.“

Even though the respondents admit to the work life balance being an issue for some employees and team members, they also mention about the activities that the companies put in place to educate staff on these matters, to really pay attention to their own self-management and have the tools in place to prevent burnout. (INT 6): „What we also do in our company, we have an application that is installed on all our laptops where you can follow your daily activities. So you can see what time

you started work, what applications have you been using. When have you had pauses from work? When you have taken your lunch? So it's a very good tool for employees to follow on how their work day goes and where their time goes and they can manage it easier. I think what is also important is ensuring work life balance for virtual team members. And we constantly remind team members that you need to isolate your work from your home, even if you work from home, you need to start your working day. Speaking more about work life balance and how to not overwork, so things like you're opening your window and letting the fresh air in, making sure that you stop the work for 15 minutes every 1, 2 or three hours just to rest.“

However, although it is a topic of concern and definitely to be paid attention to for the majority of the respondents this was not of a primary problem. By now we have so got used to virtual team environment that people seem to be enjoying more the flexibility and improved life quality that this specific working style provides than dealing with overworking and burnout. Several respondents also attribute it to having a good recreational and relaxing activities in place. (INT 5): „There's no really major issue with that. I have quite a good system in place, I workout, I relax in my free time, we meet with the guys plenty outside work to socialize. Some periods for sure are more intensive at work but its periodic and after that you can work more calmly again“

3.2. Positive aspects of virtual environment

During the conversation with the respondents apart from the issues that were observed the participants also shared what is positive in virtual work environment and with virtual teams. Participants were asked to bring up what do they appreciate the most about having to work virtually. Flexibility was one of the main topics that were mentioned as the positive side to virtual team setup, being more flexible and ensuring better life-work balance, being able to choose the location to work from and schedule your day according to the emerging needs and priorities. (INT 4): “ For me it is working well, I like the flexibility that it provides, that if I need to do something else important I can arrange to work remotely that day and get it done, maybe it is something at the house that I need to meet the constructors for or in relation to family or pets.“ (INT 6): „So me, myself, yes, I like very much, because it helps me to ensure that I can keep my work life balance. I have three kids and they're attending various after school activities. And there's logistics that is related to that. And I'm very thankful that I can work from home sometimes and make sure that they attend those activities and bring them there, etc. So for me personally, this is a huge

advantage.“ (INT 1): „Well, for me, flexibility is really important because sometimes I go for a run during the lunch time and then you do your work around other hours. Go surfing during the day when the weather is good. And then I do more work before or I do more later. So from the office it would not be possible.“ (INT 3): „It is easier to manage your own time. You can be more flexible with whatever is going on in your life and you get to work done. It doesn't matter if I do it between eight and five, it matters that it gets done. If I take a break here because my dog is sick, and I need to deal with it. Fine. But I can manage that. I don't have to think about how I transfer to the office and back which is another hour in my day to take care of that. But I can just deal with it and I know that I can later still get my stuff on because I want to get it done anyway. That flexibility that comes from that is a huge benefit.“ (INT 1): „For me the transportation is not a problem, but people who have a long commute to work, it is not productive. If you really see that today you much rather use this time for working than just stay working from home. You start the day maybe at the same time but you are not tired from getting up early, getting ready, coming to the office or driving or being in traffic.“

Generally, people also admitted as a positive aspect with hybrid work model that it provided better opportunity to really focus on work and do deep work from home. Being separated from the office and office hustle and bustle provided less distractions and instead the concentration on work related tasks improved. (INT 3): „The time to focus on deep work that you get from being more separated from the rest of the group is so much valuable than the socialization. Socialisation and the sort of group feeling is important too, sure. But the time to actually do deep thinking and uninterrupted chunks of work that you can do remotely is even more valuable. So having a deep focus time is invaluable and that is a really good thing that comes out of this.“

Being able to do the deep thinking and really focused work from home with less interruptions that one would normally have in the office also consequently improved the productivity of one's work. (INT 1): „So I think it increases the productivity and also one thing that increases the productivity is that when you can choose the location where you work from. So for me this true. For some tasks it's much better to do it from home because I can concentrate much more. So therefore I am more productive.“ (INT 3): „We lose so much time to trying to get back on what we were thinking of when, when we are interrupted by these distractions. We not only spend time, but we also make mistakes by quickly reacting to a topic that came up.“ (INT 7): „That's definitely I could see my productivity increase working in silence, focused at home.“ (INT 10): „At home I can sometimes

start at 8 already. I'm coming out of bed and I don't need to get ready because no one will see me, so I can just start working to my emails, prepare coffee in the mean time. So I'm just kind of more productive. I feel like more productive for sure.“ (INT 9): „I like that there is this hybrid possibility, it is working out. Because there are those tasks that I do really need full concentration, I need my space.“

Working in a hybrid way also provides a possibility for the employees to save expenses at least to some degree. The participants admitted that they do see it as a benefit but that it is not the major factor as flexibility. The cost saving can be seen both on individual level and on the company level. (INT 1): „For lunches for sure you save, you don't go out to eat during lunch. If you commute then it's like a totally different thing, because then you have to park, for example, our offices in the city center. So people who are coming by with the car, they have to park, it's quite expensive.“ (INT 3): „That's a small but still relevant aspect about the cost. The flexibility is bigger benefit than cost saving for me. Because even if I you know use a bike to come to work, it doesn't matter. Yeah it's still the time that matters even if it's not the actual cost so but that is helpful but it's not the immediate value that I would say.“ (INT 10): „To be honest, I enjoyed the time when they locked us down because there was less washing, getting ready, my hair, my makeup and stuff, I've saved so much money.“ (INT 7): „On a company level, there are definitely cost saving related things. And on individual level certainly also. Parking here is expensive and hard to find if you have to come by car. There is a possibility now clearly to save more money on that. When we were strictly from the office we had the lunch offered to us for free 3 days of the week. Nowadays that they don't have all of us coming into office everyday it's like 5 days a week. So clearly some funds are being saved over there.“

A sizeable proportion of respondents also claimed that they see the benefit in having virtual teams because it brings diversity to the team, having international talent, a different perspective and insights. As well as if the team members are working in different times zones, it can provide greater availability on terms of service. (INT 1): „Another positive about this is it that you can have a really diverse team. So it's not that you know you always have to find people from the same locations with the same knowledge or background or competencies, but you can hire people from other places that fit your team. So I think this is something really good.“ (INT 10): „And there's always someone there so 24/7 because if you think about the time differences, so if there's anything in the evening, you can quickly go into teams and see who's online, maybe some from the

Venezuela team or whoever. So you could just get help or advice if needed whereas before it would be everybody just shuts down the computer and home.“ Interestingly that as much as it can be seen as a benefit in some respondents’ experience it can also create cultural differences and different approaches to work. (INT 9): „So for me these are these small things but I feel that culturally I see a difference in how people approach the job, especially a new job.“ (INT 8): „But we have different nationalities. So we have our Baltic mentality and we have Italian and Greek and Spanish teams , so we always get that buzz from them. Well, we do socialize on our office days as a team but we're much more focused on work and not maybe chatting that loudly and that expressively. So that's also maybe the cultural difference.“ The respondents observations also collerates to what is found in the scientific literature as based on Holmes (2021) studies at its core, our work robustly shows the positive effects to both individuals and organizations when leaders foster positive diversity and inclusion climates within their organizations. These effects seem to be particularly relevant when racial ethnic diversity increases within organizations. That is, leaders should make strategic, identity-focused investments as necessary (e.g., employee resource groups, leadership pipeline programs, etc.), affirm all their employees’ important social identities, respond to identity threat occurrences appropriately, increase their own and their employees’ cultural competencies/humility, create psychologically safe work environments, and ensure that a diverse group of employees, particularly members of underrepresented groups, are recruited, hired, promoted, and supported in their organizations (Holmes 2021).

3.3. Support guidelines

In the following final chapter of the given research the author will summarize the main challenges of the virtual teamwork given by the participants and the tips and recommendations of what would make a virtual team effective based on the observations and the information shared by the respondents. Table 3 provides guidelines and support to team leaders, managers, industry leaders and management teams to increase virtual teams’ effectiveness and overcome challenges faced along the way.

To sum it up, the iGaming industry leaders, managers, team leads agreed that there are challenges undoubtedly to virtual team effectiveness like how to keep people engaged and foster the team feeling, communication and collaboration within the virtual team, onboarding issue amongst the few. Largely all respondents agreed that employees are satisfied with the hybrid work model and

the productivity does not suffer because of the remote work, and that in some situations it even increases the productivity and the deep, focused work. It does, however, depend on the specifics of the role, tasks and team structure. The main areas that need special attention and extra effort intentionally are team building, training about work life balance to ensure that people don't burnout, management training about leading teams in the virtual workplace and guidelines on digital behaviour.

Table 3. Key challenges and guidelines for effective virtual team collaboration.

Challenge	Recommendations for the managers and leaders
1. Communication issues	<ul style="list-style-type: none"> • agree on response times, establish SLA response times • general guidelines on virtual communication style • define what language to be used • set guidelines and principles for virtual meetings • agree on the expected digital behavior (camera on) • define the communications channels to be used • implement team video calls, 1to1 video calls, 1 screen per person policy • hold company wide information sharing meetings, all-hands meetings • create constant communication flow/ schedule in meetings on purpose • guide the team members and managers to share with the information • educate managers on virtual team management
2. Engagement and team spirit	<ul style="list-style-type: none"> • management training on team building in virtual environment • clear goal setting, working towards common purpose • guidelines for different virtual team activities, e.g., virtual coffee or lunch break, games, challenges, fika etc. • organize non-work interaction: discussions about hobbies, interests, life, books etc. • organize outside work activities (dinners, bowling, hikes, quests, cooking together etc.) • occasional travel to meet all team in person

	<ul style="list-style-type: none"> • managers to be inclusive, ask for everyone to speak up, for everyone's opinion in the meetings • maintain psychologically healthy and safe team environment • monthly/quarterly knowledge sharing, experience exchange meetings • make people feel proud, once a month meeting for everyone to express what they are proud and happy for • acknowledge people, celebrate big milestones, birthdays, anniversaries etc. • create team traditions • culture sharing meetings, presentation about people from other cultures • team training and learning courses by university professors, certified coaches and outsourced companies <p>(invest and grow your talent and knowledge will stay in the company)</p>
<p>3. Onboarding virtually</p>	<ul style="list-style-type: none"> • have a clear recruitment process, outline what exactly will be expected from the new hire, what is the work environment and how it is maintained • plan how to integrate new team member into existing virtual team • welcome to the team call, introductions of the new hire, process in place how the new hire is met • interviews, onboarding to be done on site • probation period to work from the office • technical equipment to be set up and provided • three days of company culture induction, overview of everything on a high level • create onboarding, induction, training plan • assign a buddy at work, colleague to shadow • if/when the new hire working remote, have a camera window open with the buddy all day • manager to have constant 1to1 follow up calls, daily or weekly
<p>4. Ensuring work-life balance to avoid burnout</p>	<ul style="list-style-type: none"> • agree on working hours, response times • guidelines and training managers about EI, how to pay close attention and notice if people are ok in virtual setup

	<ul style="list-style-type: none"> • managers to hold regular 1to1s with employees, have a good overview if people do relax, paying extra attention to wellbeing and early burnout signs • educate team members about work-life balance, mental health • provide useful practical, easy-to-do tips • invite guest speakers, do webinars, meditation sessions • install time tracking app to make sure people take breaks and switch off • provide sports allowance, yoga classes • educate on healthy eating habits, invite chefs, cooking together, provide healthy office benefits
<p>5. Gaining trust</p>	<ul style="list-style-type: none"> • set guidelines on what is expected • regular catch-ups, information sharing • visibility, camera-on • transparency, information sharing • support and understanding from the management, HR • one-to-ones with manager to build trust • foster collegial relationship between team members • ensuring communication flow • recognize team members' achievements and job well done • support employee wellbeing, show care for people

Source: Author's summary based on the conducted interviews.

CONCLUSION

The remote work during the pandemic covid-19 has led to new changes how companies approach work. Post pandemic widespread hybrid work has entered the majority of the companies world wide and the iGaming industry is only one of the fields where it has become a commonplace. Also the technological advancement have strongly contributed to the way people work, commute, socialize. Teams within the companies are now working in a hybrid work model. Many teams are also location split. This leads companies and the team managers to re-evaluate how teams are managed, how to ensure the connection and productivity in a virtual space. Leading virtual teams is fairly new phenomemon for most companies in iGaming and it raises new challenges that need addressing, awareness, additional skills, attention and effort.

The aim of this study was to find out what are the main preconditions and challenges to effective virtual team and what are the ways to deal with these challenges. With the end goal being coming up with a set of supportive guidelines for the managers to learn from and implement within the virtual teams.

According to the aim of the research the author had a main research question:

What are the challenges in virtual teams and what are the ways to overcome these challenges?

To commence the research the author explored the characteristics of virtual teams based on the latest empirical theory researches and studies and the challenges faces in virtual teams. The author also looked into comparison between virtual and face-to-face teams. Based on the theory discoveries the main challenges faced in virtual teams were identified which were used as the main groundwork for the qualitative research. During the qualitative research the author also gained insights into the ways how companies and leaders cope with these challenges. The author intended to gain in-depth information on the subject with the help of semi-structured interviews by interviewing 10 iGaming industry experts from various professional backgrounds. Interviews took place in face-to-face and online video calls using Microsoft Teams, Google meet or Zoom platforms taking place from 3rd-25th March 2023, each interview averaging up to one hour. The

answers from the interviews were analyzed by the author using qualitative content analysis method.

The main findings from the interviews highlighted the fact that the hybrid work has become a new way of working and it is here to stay according to the participants of the survey. The respondents agreed that the employees have the flexibility choosing the dates when they work remotely or in the office, with one respondent having completely remote setup due to different location. The majority admitted seeing the benefits and upside of having the hybrid work model with only one respondent being sceptical about hybrid work and wanting to return to pre-covid work arrangements.

Respondents admitted amongst the main benefits that the hybrid work model brings is flexibility and improved life quality. It gives people more freedom, autonomy, productivity and opportunity to do deep, focused work from home with fewer distractions and stresses associated with office life and commuting. Also the diversity and the international talent that the virtual teams bring along with the possibility to hire people anywhere in the world. As well as the cost saving that comes along with hybrid work style. However, despite the many advantages there are numerous challenges appearing when it comes to virtual teams and effective team work. According to the survey data the main challenges faced in virtual teams are communication issues, team building and engagement, onboarding virtually, work-life boundaries and gaining trust. These challenges were the most frequented ones amongst the replies and at least one of those was the most critical one for each participant. Interestingly that apart from the most obvious challenges such as communication and team feeling, virtual onboarding proved to be just as acute of a problem when it came to integrating a new person into the already existing virtual team.

Most of the companies and leaders are actively addressing these challenges or have already overcome them. The respondents shared with their experience when it came to diminished team feeling and cohesion between the team members. To improve the team spirit, it needs to be addressed with additional attention as the team feeling and relationship building is so much more difficult in the virtual space and it needs to be nurtured and created with extra effort. The respondents shared with the activities they are implementing such as virtual non-work related meetings and discussions on various topics to get to know each other better as people, different virtual games, organized virtual events such as wine evenings, cooking with the chef, sports

activities and challenges. It was mentioned also that it is of utmost importance to try to bring the teams together in one place, in one location at least time to time for group activities including all people being present and creating that bonding opportunity. Educating employees and providing additional training and guidelines to managers how to manage a virtual team was also mentioned as the key strategy amongst a few respondents. There is also additional effort and attention required from the manager in managing virtual teams to conduct additional one to one meetings with the employees, to assess their wellbeing working virtually, to notice any early burnout or overworking signs and to create a positive, safe working environment. Trust is a key foundation for any effective team collaboration. And it can be gained through the communication and relationship building over time.

Virtual onboarding turned out to be one the major issues in the current hybrid work environment, with the main difficulties being integrating the new hire into the team virtually, conducting the training through the screen without the physical presence, miscommunications, relationship building and teaching the new person about the company culture and values. Respondents admitted facing trial and error phase initially but as a positive learning out of that came a conclusion that the onboarding process should ideally always be conducted face-to-face. The majority of the respondent companies have now implemented this strategy and have a special onboarding process in place which is constantly being improved.

Based on the survey results the communication in the virtual environment is so much harder to maintain than in face-to-face communication. The non verbal communication is lost in the chat and in the emails and through the conference calls it is much harder to read non verbal clues. Moreover when the language barriers and cultural differences come into play, it can easily create miscommunication and misunderstandings. Well defined processes and communication principles help to set the standard and expectations for the communication flow in the virtual space. It is important to add that the communication happens much more organically and smoothly for the already well established teams where people know each other well and have the relationship and connection between each other. Therefore the team building and bringing people together is so important for the managers to implement, all parties will benefit from the improved team spirit.

To be productive in the virtual work environment it is important to ensure work-life balance, respondents mentioned that for some employees it can be more of a challenge to set clear

boundaries when the work starts and ends and they may tend to overwork which leads to burnout and health problems. It is necessary that employees have good self management skills in place. There are also additional activities that respondents mentioned that the companies can undertake to educate their employees about work-life balance by organizing trainings, workshops, inviting guest speakers and life coaches, providing practical guidelines and tips. Managers and employees need to have clear boundaries and set processes in place based on the expectations and job requirements. Further it is important that managers are conducting regular one to one sessions with the employees with extra attention to the person's wellbeing; some companies additionally have provided special guidelines for the managers on what questions to ask specifically to assess the employees' mental and psychical health working in a virtual environment.

Based on the research findings the author considers that the main research question has been answered and the research aim was accomplished. As a result of this study we have now a better overview of the challenges that are faced in virtual teams in iGaming or other IT fields and practical tips and recommendations how to improve the virtual team effectiveness and overcome those challenges that can be used and implemented within the mentioned industry. To develop this topic further the author would propose to look more deeply on the employee level and investigate the challenges experienced in virtual team from the team members' perspective. It could provide another aspect of the study or reinforce already currently found results. As the current study focused mainly on the industry leaders and managerial side experience and observations, knowledge of the team members' perspective would help to create more holistic view on the topic.

LIST OF REFERENCES

- Abarca, V., Palos-Sanchez, P., & Rus-Arias, E. (2020). Working in Virtual Teams: A Systematic Literature Review and a Bibliometric Analysis. *IEEE Access*, 8, 168923-168940. <https://doi.org/10.1109/ACCESS.2020.3023546>
- Agarwal, P., & Farndale, E. (2017). High-performance work systems and creativity implementation: The role of psychological capital and psychological safety. *Human Resource Management Journal*, 27(3), 440-458. <https://doi.org/10.1111/1748-8583.12148>
- Alsharo, M., Gregg, D., & Ramirez, R. (2017). Virtual team effectiveness: The role of knowledge sharing and trust. *Information & Management*, 54(4), 479-490. <https://doi.org/10.1016/j.im.2016.10.005>
- Aquino, J., Riss, R., Multerer, S., Mogilner, L., & Turner, T. (2022). A step-by-step guide for mentors to facilitate team building and communication in virtual teams. *Medical Education Online*, 27(1), 2094529. <https://doi:10.1080/10872981.2022.2094529>
- Bailenson, J. (2021). Nonverbal overload: A theoretical argument for the causes of Zoom fatigue. *Technology, Mind, and Behavior*, 2(1), Technology, mind, and behavior, 2021, Vol.2 (1). <https://doi.org/10.1037/tmb0000030>
- Bergiel, B., Bergiel, E., & Balsmeier, P. (2008). Nature of virtual teams: A summary of their advantages and disadvantages. *Management Research News*, 31(2), 99-110. <https://doi.org/10.1108/01409170810846821>
- Binde, P., & Romild, U. (2019). Self-Reported Negative Influence of Gambling Advertising in a Swedish Population-Based Sample. *Journal of Gambling Studies*, 35(2), 709-724. <https://doi.org/10.1007/s10899-018-9791-x>
- Brewer, P. (2015). *International Virtual Teams* (1st ed., IEEE PCS Professional Engineering Communication Series). New York: Wiley. <https://doi.org/10.1002/9781118886465>
- Brynjolfsson, E., Horton, J., Ozimek, A., Rock, D., Sharma, G., & Hong-Yi TuYe. (2020). COVID-19 and Remote Work: An Early Look at US Data. *NBER Working Paper Series*, NBER Working Paper Series, 2020. <https://doi.org/10.3386/w27344>
- Borg, A. (2021). The impact of the Coronavirus on the world of work with a focus on teleworking. In L. A. Fiorini, (ed.), *Centre for Labour Studies : Biennial Report : 2019-2020*, 44-50.

- Cascio, W. (2000). Managing a Virtual Workplace. *Academy of Management Perspectives*, 14(3), 81-90. <https://doi.org/10.5465/ame.2000.4468068>
- Carmeli, A., & Gittell, J. (2009). High-quality relationships, psychological safety, and learning from failures in work organizations. *Journal of Organizational Behavior*, 30(6), 709-729. <https://doi.org/10.1002/job.565>
- Check, J., & Schutt, R. (2012). *Research Methods in Education*. Los Angeles: SAGE. <https://doi.org/10.4135/9781544307725>
- Denny, E., & Weckesser, A. (2022). How to do qualitative research?: Qualitative research methods. *BJOG : An International Journal of Obstetrics and Gynaecology*, 129(7), 1166-1167. <https://doi.org/10.1111/1471-0528.17150>
- Duran, V., & Popescu, A. (2014). The Challenge of Multicultural Communication in Virtual Teams. *Procedia, Social and Behavioral Sciences*, 109, 365-369. <https://doi:10.1016/j.sbspro.2013.12.473>
- Dyer, W. G., Dyer, J. H., & Dyer, W. G. (2013). *Team building: Proven strategies for improving team performance* (5th ed.). Jossey-Bass.
- Ebrahim, N., Ahmed, S., & Taha, Z. (2009). Virtual teams: A literature review. *Australian Journal of Basic and Applied Sciences*, 3(3), 2653–2669.
- Edmondson, A. (1999). Psychological Safety and Learning Behavior in Work Teams. *Administrative Science Quarterly*, 44(2), 350-383. <https://doi.org/10.2307/2666999>
- Edmondson, A., Bohmer, R., & Pisano, G. (2001). Disrupted Routines: Team Learning and New Technology Implementation in Hospitals. *Administrative Science Quarterly*, 46(4), 685-716. <https://doi.org/10.2307/3094828>
- Edmondson, A., & Lei, Z. (2014). Psychological Safety: The History, Renaissance, and Future of an Interpersonal Construct. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 23-43. <https://doi.org/10.1146/annurev-orgpsych-031413-091305>
- Fagerholm, F., Johnson, P., Sanchez Guinea, A., Borenstein, J., & Munch, J. (2013). Onboarding in Open Source Software Projects: A Preliminary Analysis. 2013 IEEE 8th International Conference on Global Software Engineering Workshops, 5-10. <https://doi.org/10.1109/ICGSEW.2013.8>
- Ferrazzi, K. (2014). Getting virtual teams right. *Harvard Business Review*, (2014), Harvard business review, 2014 (2014).
- Finn, G., Dueñas, A., Kehoe, A., & Brown, M. (2022). A novice's guide to qualitative health professions education research. *Clinical and Experimental Dermatology*, 47(12), 2090-2095. <https://doi.org/10.1111/ced.15381>
- Ford, R., Piccolo, R., & Ford, L. (2017). Strategies for building effective virtual teams: Trust is key. *Business Horizons*, 60(1), 25-34. <https://doi.org/10.1016/j.bushor.2016.08.009>

- Frazier, M., Fainshmidt, S., Klinger, R., Pezeshkan, A., & Vracheva, V. (2017). Psychological Safety: A Meta-Analytic Review and Extension. *Personnel Psychology*, 70(1), 113-165. <https://doi:10.1111/peps.12183>
- Hannah B. Love, Jennifer E. Cross, Bailey Fosdick, Kevin R. Crooks, Susan VandeWoude, & Ellen R. Fisher. (2021). Interpersonal relationships drive successful team science: An exemplary case-based study. *Humanities & Social Sciences Communications*, 8(1), 1-10. <https://doi.org/10.1057/s41599-021-00789-8>
- Henttonen, K., & Blomqvist, K. (2005). Managing distance in a global virtual team: The evolution of trust through technology-mediated relational communication. *Strategic Change*, 14(2), 107-119. <https://doi.org/10.1002/jsc.714>
- Holmes, O., Jiang, K., Avery, D., McKay, P., Oh, I., & Tillman, C. (2021). A Meta-Analysis Integrating 25 Years of Diversity Climate Research. *Journal of Management*, 47(6), 1357-1382. <https://doi.org/10.1177/0149206320934547>
- Hunter, S., Bedell, K., & Mumford, M. (2007). Climate for Creativity: A Quantitative Review. *Creativity Research Journal*, 19(1), 69-90. <https://doi.org/10.1080/10400410709336883>
- Gainsbury, S. (2015). Online Gambling Addiction: The Relationship Between Internet Gambling and Disordered Gambling. *Current Addiction Reports*, 2(2), 185-193. <https://doi.org/10.1007/s40429-015-0057-8>
- Galletta, A., & Cross, W. (2013). Mastering the semi-structured interview and beyond : From research design to analysis and publication (Qualitative studies in psychology).
- Global Betting and Gaming Consultants. *Global Gaming Report* (6th ed.). Castletown, Isle of Man, British Isles: Author; 2011. <https://doi.org/10.1007/s40429-015-0057-8>
- Gupta, N., Smith, N., & Verner, M. (2008). Perspective article: The impact of Nordic countries' family friendly policies on employment, wages, and children. *Review of Economics of the Household*, 6(1), 65-89. <https://doi.org/10.1007/s11150-007-9023-0>
- Krumm, S., Kanthak, J., Hartmann, K., & Hertel, G. (2016). What does it take to be a virtual team player? The knowledge, skills, abilities, and other characteristics required in virtual teams. *Human Performance*, 29(2), 123-142. <https://doi.org/10.1080/08959285.2016.1154061>
- Levi, D. (2017). *Group dynamics for teams* (5th ed.). Sage Publications, Inc.
- Newcomer, K., Hatry, H., & Wholey, J. (2015). *Handbook of practical program evaluation* (4th ed., Essential texts for nonprofit and public leadership and management). Hoboken, N.J.: Jossey-Bass, A Wiley imprint. <https://doi.org/10.1002/9781119171386.ch19>
- Majchrzak, A., Markus, M., & Wareham, J. (2016). Designing for Digital Transformation. *MIS Quarterly*, 40(2), 267-278. <https://doi.org/10.25300/MISQ/2016/40>

- Malina, M., Nørreklit, H., & Selto, F. (2011). Lessons learned: Advantages and disadvantages of mixed method research. *Qualitative Research in Accounting and Management*, 8(1), 59-71. <https://doi.org/10.1108/11766091111124702>
- Manzin, M., & Biloslavo, R. (2008). Online Gambling: Today's Possibilities and Tomorrow's Opportunities. *Managing Global Transitions*, 6(1), 95.
- Martins, L., Gilson, L., & Maynard, M. (2004). Virtual Teams: What Do We Know and Where Do We Go From Here? *Journal of Management*, 30(6), 805-835. <https://doi.org/10.1016/j.jm.2004.05.002>
- McClay, R. (2009). 10 Steps to successful teams (10 steps series). Alexandria, Va: Association for Talent Development (ATD).
- Meluso, J., Johnson, S., & Bagrow, J. (2022). Flexible Environments for Hybrid Collaboration: Redesigning Virtual Work Through the Four Orders of Design. *Design Issues*, 38(1), 55-69. <https://doi.org/10.2307/3069399>
- Miao, Q., Newman, A., Schwarz, G., & Xu, L. (2014). SERVANT LEADERSHIP, TRUST, AND THE ORGANIZATIONAL COMMITMENT OF PUBLIC SECTOR EMPLOYEES IN CHINA. *Public Administration (London)*, N/a. <https://doi:10.1111/padm.12091>
- Montoya-Weiss, M., Massey, A., & Song, M. (2001). Getting It Together: Temporal Coordination and Conflict Management in Global Virtual Teams. *Academy of Management Journal*, 44(6), 1251-1262. <https://doi.org/10.2307/3069399>
- Mushonga, S., Thiagarajan, P., & Torrance, C. (2014). Fairness in the workplace: The mediating role of trust in the relationship between supervisory justice and work outcomes. *S.A.M. Advanced Management Journal* (1984), 79(3), 17.
- PR Newswire. (2021). Digitization Reshaped Ecommerce First, Now Moving to Online Gaming. PR Newswire US, PR Newswire US, 2021.
- Quinn, R., & Dutton, J. (2005). Coordination as Energy-in-Conversation. *The Academy of Management Review*, 30(1), 36-57. <https://doi.org/10.5465/amr.2005.15281422>
- Reeves, S., Xyrichis, A., & Zwarenstein, M. (2018). Teamwork, collaboration, coordination, and networking: Why we need to distinguish between different types of interprofessional practice. *Journal of Interprofessional Care*, 32(1), 1-3. <https://doi.org/10.1080/13561820.2017.1400150>
- Reyes, D., Luna, M., & Salas, E. (2021). Challenges for team leaders transitioning from face-to-face to virtual teams. *Organizational Dynamics*, 50(2), 100785. <https://doi.org/10.1016/j.orgdyn.2020.100785>
- Sulkunen, P., Babor, T., Cisneros Örnberg, J., Egerer, M., Hellman, M., Livingstone, C., . . . Rossow, I. (2021). Setting Limits: Gambling, Science and Public Policy—summary of results. *Addiction (Abingdon, England)*, 116(1), 32-40. <https://doi.org/10.1111/add.15241>

- Schein, E., & Bennis, W. (1966). Personal and Organizational Change through Group Methods. *Journal of Extension*, 4(2), 127.
- Settle-Murphy, N. (2013). Sizing Up, Onboarding, and Mobilizing Your Virtual Team. In *Leading Effective Virtual Teams* (pp. 34-47). United States: Auerbach Publications. <https://doi.org/10.1201/b13703-7>
- Stacie A. Furst, Martha Reeves, Rosen, B., & Blackburn, R. (2004). Managing the Life Cycle of Virtual Teams. *Academy of Management Perspectives*, 18(2), 6-20. <https://doi.org/10.5465/ame.2004.13837468>
- Tietz, S., Kneisel, E., & Werner, K. (2021). Successful knowledge exchange in virtual teams-how important is social presence? *Zeitschrift Für Arbeitswissenschaft*, 75(4), 424-437. <https://doi.org/10.1007/s41449-021-00280-9>
- Tipton, A., & Patton, J. (2022). Secrets to successful teams in drug delivery. *Journal of Controlled Release*, 347, 615-619. <https://doi.org/10.1016/j.jconrel.2022.05.015>
- Townsend, A., Samuel M. De Marie, & Hendrickson, A. (1998). Virtual Teams: Technology and the Workplace of the Future. *Academy of Management Perspectives*, 12(3), 17-29. <https://doi.org/10.5465/ame.1998.1109047>
- Virdee, S. (2021). Transitioning to the New Normal: How Has the Transition to a Virtual Workplace Been and How Do Employees Handle Working Full-time in Virtual Teams?
- Zhu, W., Newman, A., Miao, Q., & Hooke, A. (2013). Revisiting the mediating role of trust in transformational leadership effects: Do different types of trust make a difference? *The Leadership Quarterly*, 24(1), 94-105. <https://doi:10.1016/j.leaqua.2012.08.004>
- Zuofa, T., & Ochieng, E. (2017). Working separately but together: Appraising virtual project team challenges. *Team Performance Management*, 23(5/6), 227-242. <https://doi.org/10.1108/TPM-06-2016-0030>

APPENDICES

Appendix 1. Interview guide

Introduction
Introduction of myself and the purpose of the interview. Asking for the permission to record and informing the interview could last up to 1 hour. Confirming confidentiality of interview answers.
I Background questions
<ol style="list-style-type: none">1. What are the general work arrangements?2. What are the reasons behind there arrangements?
II Relation to virtual team framework
<ol style="list-style-type: none">3. What is your relation to virtual teamwork?4. How big is the virtual team you lead or/and being part of?5. What is the importance of the virtual team to your job?6. What are the benefits of the virtual team to the industry?
III Main challenges and limitations observed to effective virtual team work
<ol style="list-style-type: none">7. What are the main challenges related to effective virtual team work?8. Trust issues?9. Communication & Collaboration?10. Work relationships and connectedness to other colleagues?11. Engagement?12. Feelings of isolation?13. Technological issues?14. Clear rules, boundaries, language?15. On-boarding of new employees?16. Opportunities for promotion?17. Are there any other challenged observed?
IV Consequences of the challenges faced
<ol style="list-style-type: none">18. What are your observations about the consequences of those challenges?19. How do you evaluate your own wellbeing in leading or being part of a virtual team?
V Adjustments and improvements

20. What actions were done to overcome these challenges?
21. How conscious are you yourself about virtual team work?

VI Positive outcomes from virtual team work

22. What positive aspects have you discovered about virtual team work and team's effectiveness?
23. Work-life balance?
24. Increased productivity?
25. Reduced costs?
26. More flexibility?

Appendix 2. Respondents' info file

No	Company	Location	Position held	Team	Subordinates	Method	Date
INT 1	Entain	Estonia, Tallinn	Marketing Manager	11	0	face-to-face	09.03.2023
INT 2	Flutter	Estonia, Tallinn	Product Marketing Manager	10	0	online	10.03.2023
INT 3	Betsson Group	Estonia, Tallinn	Head of IT development	46	7	online	10.03.2023
INT 4	Zecure gaming	Estonia, Tallinn	Head of IT gaming	60	60	face-to-face	10.03.2023
INT 5	888holdings	Latvia, Riga	Head of Studio	10	4	online	17.03.2023
INT 6	Playtech	Latvia, Riga	Director of HR	24	5	online	20.03.2023
INT 7	Leovegas	Malta	Customer Support Lead	200	15	online	24.03.2023
INT 8	Betsafe	Lithuania, Vilnius	Head of Marketing	6	5	online	24.03.2023
INT 9	Starcasino	Malta	Training Manager	24	0	online	25.03.2023
INT 10	Mr Green	Malta	Regional Manager	15	10	online	25.03.2023

Appendix 3. Link to transcriptions' files and coding table

Link to the folder with transcribed coding table:

https://docs.google.com/spreadsheets/d/19cLJ3I3U4MqcPc1_QNWIoGYEWhlrzD4BaB_vYsj_r1Y/edit#gid=0

Link to the folder with transcribed interviews:

https://drive.google.com/file/d/1ELEBgXNexE6sy_TK37z1R_INJbl1Oyxm/view?usp=sharing

Appendix 4. Summary of findings

Main category	Generic category	Sub-category 1	Sub-category 2	Sub-category 3
Framework for work arrangement	1. Hybrid	Required at least 2 days in the office, days are not fixed, flexible (5)	Required 2-3 days in the office, days are not fixed flexible (2)	
	2. Remote	Fully remote, different location (1)	Mostly remote, hybrid only when required (1)	
	3. Office	Practise hybrid work only when required (1)		
Main challenges of hybrid work	1. Communication	Poor interpersonal relationship is reflected on the work (7)	Team cohesion needs intentional care and activities (5)	Lack of social connections influences company culture negatively (2)
	2. Trust issues	Trust and visibility a is a big concern (3)	Mutual trust is important, it needs to be nurtured and maintained (2)	Absolute trust is required (2)
	3. Tech related issues	Lack of sufficient IT knowledge (1)	Technical issues do occur but are not critical (2)	Lack of information sharing (1)
	4. Onboarding	The main challenge, needs extra work, process, attention (9)	Difficult for the whole team (2)	Extra work is needed from the manager (4)
	5. Isolation	Lack of support, lack of interaction, detachment (3)	Depending on the tasks, job, personality (4)	

Other challenges	6. Productivity	Productivity decreased (3)	Productivity remains stable (3)	Productivity increased (4)
	7. Work-life balance	Maintaining work life balance, avoiding burnout is of a concern (2)	High self management and discipline is required (3)	Provides more freedom and autonomy(4)
	8. Burnout	Management training on mental wellbeing, management support (5)	Self management, psychological hygiene (4)	No clear boundaries between work and personal time (1)
	9. Team spirit, engagement	Relationship building, team building, maintaining engagement (4)	Recruitment, choosing the right people for the job (2)	Lack of contact, lack of motivation (3)
	10. Getting promoted/ noticed	Actual work, deliverables matter (1)	The location is irrelevant as long as there are results and relationships (1)	Lack of visibility (1)
Consequences, results	Common results	Relationships and connectedness suffer (4)	Collaboration, communication is more difficult (4)	Engagement, motivation (2)
Adjustments/ actions taken	Communication, information sharing, channels	Established digital communication flow and channels (7)	Constant ongoing communication flow (1)	
	Improvements, actions taken	Improved recruitment process, onboarding re-designed (8)	Management changes (1)	Management training (1)
	Team activities, team building	Virtual and face to face team activities introduced (5)	Face to face activities pushed (4)	No actions taken for the team building (1)
	Digital behaviour	Guidelines for meetings, calls, management training (1)	Well adapted to virtual communication (1)	Improved digital manners/cameras on (3)

Positive outcomes of hybrid work	More efficient, productive	More autonomy and independence (2)	Less distractions, more focus (4)	Depends on the task and team structure (1)
	Cost savings	Transportation, gas, parking (4)	Saved on eating out and other expenditures(1)	Not immediate factor (3)
	Flexibility, quality of life	Hybrid and virtual work provides more flexibility, freedom autonomy, better life quality (7)	This flexibility leads to less stress (1)	
	Diversity, internationalism	Virtual teams also mean more diverse and international talent (4)	Virtually remote teams can provide 24/7 coverage and availability (1)	Substitute for the lack of local talent (1)

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