Master's thesis

Liiketoiminnan kehittäminen

2021

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THE ROLE OF LEADERSHIP IN BUILDING TRUST IN MULTILINGUAL VIRTUAL TEAMS

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The purpose of this master's thesis is to study the impact of trust on the performance of an international virtual team and in particular the role of project manager in building trust between team members. International virtual teams are very common in organizations today. Research questions are answered by existing theories presented in the scientific literature, as well as by analyzing the open answers of a pre-survey. The theoretical framework of the thesis deals with virtual team trust building and the impact of project manager actions on it. The purpose of the work was also to find out, with the help of a pre-prepared survey, how the building of trust in a virtual team can be promoted.

The study involved 104 people from different fields who have worked in international virtual teams. The survey was conducted with an online questionnaire in both Finnish and English. The pre-survey included multiple-choice questions and two open-ended questions regarding the building of trust in virtual teams, and these answers are analyzed in this thesis.

The results of the study reveal the central role of the supervisor in building trust in virtual teams and the challenges of leadership when building trust in a virtual work environment. The results show that trust building is influenced by many different things and that people's different background variables influence the factors they perceive as important in building trust and which factors increase trust in a virtual team. According to the study, the biggest contributors to trust building were open discussion and consideration of others, while the challenge of building trust in a multilingual virtual team is virtuality and facelessness in human communication itself, where gestures and tone of voice affect how another team member's words are interpreted. The project manager has an important role to play in creating an open discussion and choosing the right kind of communication methods, as well as managing cultural differences so that trust can be built.

Milka Leppäkoski

JOHTAMISEN ROOLI LUOTTAMUKSEN RAKENTAMISESSA MONIKIELISISSÄ VIRTUAALITIIMEISSÄ

Tämän opinnäytetyön tarkoituksena on tutkia luottamuksen vaikutusta kansainvälisen virtuaalitiimin suorituskykyyn ja eritoten johtamisen ja projektipäällikön roolia luottamuksen synnyssä tiimin jäsenten välillä. Kansainväliset virtuaalitiimit ovat nykypäivänä organisaatioissa hyvin yleisiä. Tutkimuskysymyksiin vastataan jo olemassa olevaa tieteellisessä kirjallisuudessa esitettyjä teorioita, sekä ennalta tehdyn kyselyn avoimia vastauksia analysoiden. Opinnäytetyön teoreettisessa viitekehyksessä käsitellään virtuaalitiimin luottamuksen rakentumista ja esimiestyön vaikutusta siihen. Työn tarkoituksena oli myös selvittää ennalta laaditun tutkimuksen avulla, miten virtuaalitiimin luottamuksen syntymistä voidaan edistää.

Tutkimukseen osallistui 104 henkilöä eri aloilta, jotka ovat työskennelleet kansainvälisissä virtuaalitiimeissä. Kysely toteutettiin online kyselylomakkeella sekä suomeksi, että englanniksi. Ennalta tehty tutkimus sisälsi monivalintakysymyksiä ja kolme avointa kysymystä, koskien luottamuksen rakentumista virtuaalitiimeissä ja näitä vastauksia analysoidaan tässä opinnäytetyössä.

Tutkimuksen tuloksista ilmenee projektipäällikön keskeinen rooli virtuaalitiimien luottamuksen rakentamisessa ja erilaiset johtamisen haasteet, kun luottamusta rakennetaan virtuaalisessa työympäristössä. Tulosten mukaan luottamuksen syntymiseen vaikuttavat monet erilaiset asiat ja että ihmisten erilaiset taustamuuttujat vaikuttavat tekijöihin, jotka he kokevat tärkeiksi luottamuksen rakentumisessa ja mitkä tekijät lisäävät luottamusta virtuaalitiimissä. Suurimpia luottamuksen syntymiseen vaikuttavia tekijöitä oli tutkimuksen mukaan avoin keskustelu ja toisten huomioiminen. Luottamuksen rakentamisen haastena kansainvälisessä virtuaalitiimiissä koettiin itse virtuaalisuus ja kasvottomuus ihmisten viestinnässä. Projektipäälliköllä on tärkeä rooli avoimen keskustelun luomisessa ja oikeanlaisen viestintämenetelmien valinnassa, sekä kulttuurillisten eroavaisuuksien hallitsemisessa, jotta luottamus voi syntyä.

CONTENT

1 INTRODUCTION

1.1 Background of the thesis

When thinking about our society today globalization, information and communication technology and virtually functioning teams are strongly featured. Due to the exceptional situation and the current pandemic, many companies have largely switched to virtual people-to-people interaction (Melin 2020).

Today, leadership typically takes place in complex environments and there is a rapid pace of change in supervisory work driven by new technology. Anticipation, knowledge management and motivation play an important role in leading a virtual team. Supervision work is hectic, fragmented and complex, so leaders must withstand pressure and ambiguity as well as often conflicting expectations. (Saarinen 2016, 28.)

Kähönen (2016) states that building trust begins immediately when a team is established and requires work from each team member. Building trust should begin at the latest at the project kick-off meeting, where team members will be introduced. In a virtual project team, trust is a key factor in creating a positive atmosphere and a good team spirit. Without trust, team members are less likely to express development ideas, opinions and in problem situations they may be afraid to ask questions. In the worst case, the team's grievances or problems are not brought up but are tried to be swept under the rug. Trust between team members is therefore absolutely essential right from the start of the project. (Kähönen 2016.)

Above mentioned changes have lead to significant growth in computer-mediated communication (CMC) and thus increased interest especially in trust in VTs.

Also this thesis will focus on trust in VTs and is supported in part by the Erasmus+ Mupic-project (multidisciplinary projects in an international context), project no. 2018-1-CZ01-KA203-048151.

1.2 Goals and methodology

The aim of this thesis is to is to explore how team members perceive trust and based on these give suggestions on how the project manager can influence the creation and

maintenance of trust in the virtual team. The thesis analyzes the open questions in an electronic survey conducted 23APR-4JUN2020, related to trust in virtual teams. The study involved 104 people who have worked in an international virtual project team.

The following questions were selected as research questions:

- Which factors positively contribute to building trust in virtual team?
- What are the challenges to building trust in virtual team?
- How can a team leader improve and maintain trust in an international virtual team?

In this study, electronic -questionnaire was used, analyzing the responses of the respondents. The survey addressed the importance of communication and the building of trust in a multidisciplinary virtual project team. The questionnaire consisted of multiple-choice questions and two open-ended questions. This study focuses on the data gathered from the open questions. Altogether 104 respondents participated in the survey.

2 2 VIRTUAL TEAMS

2.1 Virtual multicultural project teams

Projects offer the opportunity for flexible operations. They can be launched and assembled to meet a specific need, after which those resources/people can be redirected to new tasks. Projects accelerate the responsiveness of organizations by creating an increasingly dynamic operating environment (Mäntyneva 2016).

A virtual team on the other hand, refers to a team in which team members work independently to achieve common goals through technology. Working in a virtual team means working across cultural, geographical, and social boundaries so that at least one team member works in a different location than other team members (Dávideková & Hvorecký 2017, 99; Dulebohn & Hoch 2017, 569).

In fixed-term project work, which includes the beginning, end and other different phases of a project, virtual work is now more the rule than the exception as a virtual environment is better able to connect people regardless of location. In an international project team, virtuality is also more flexible, cost-effective, creative, and different competencies can be combined effectively (Browne et al. 2016, 41; Fuller et al. 2016, 166; Dulebohn & Hoch 2017, 569; Gupta & Pathak 2018, 786–787).

2.2 Project team development

In today's society, most of the work and projects are carried out as project work as a result of the contract. The purpose of project work is to achieve a pre-defined goal within a certain time and schedule. Projects are set up because the goal is to do the work with the help of a project team. The work performed on projects and assigned to project team members usually differs from the normal day-to-day work of employees. Each project is unique in its implementation and includes its own special features and challenges in it's different phases. It is very important for the progress and success of the projects that the implementation of the project is given to the main responsibility of one person, ie the project manager. This is important to know who to turn to if the project is not progressing as expected or if there are problems with the project. Only the project manager has the practical responsibility to ensure that the project uses the resources allocated to it

effectively so that the objectives set for the project can be achieved. (Mäntyneva 2016, 90-97.)

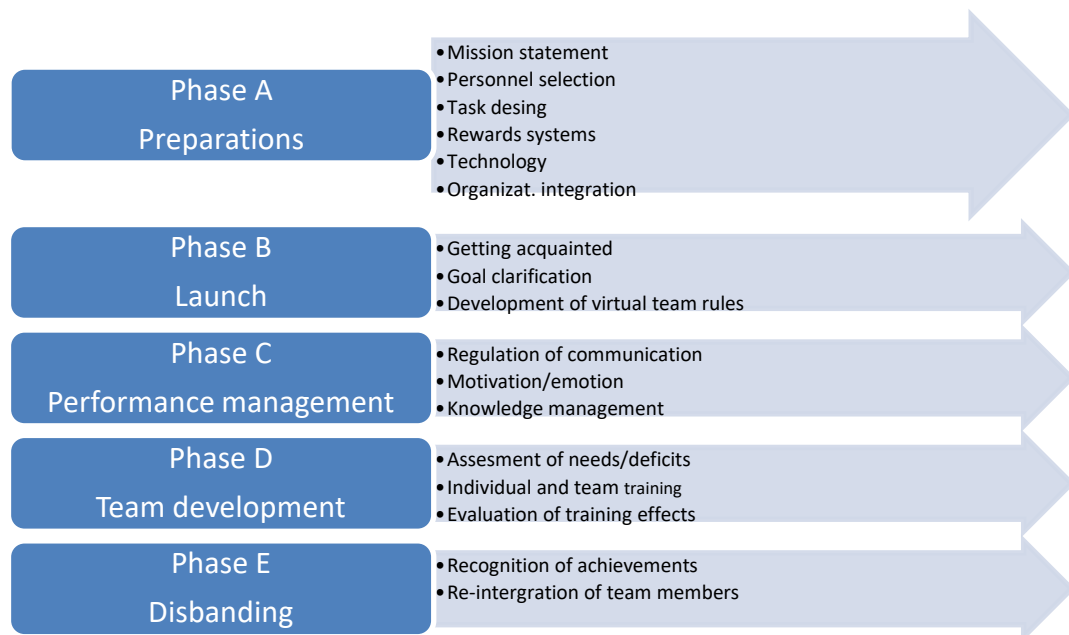| Phase A Preparations	• Mission statement • Personnel selection • Task desing • Rewards systems • Technology • Organizat. integration
Phase B Launch	• Getting acquainted • Goal clarification • Development of virtual team rules
Phase C Performance management	• Regulation of communication • Motivation/emotion • Knowledge management
Phase D Team development	• Assesment of needs/deficits • Individual and team training • Evaluation of training effects
Phase E Disbanding	• Recognition of achievements • Re-intergration of team members

Figure 1. Key activities in the lifecycle of a project team. (adapted from Hertel, et al. 2005, 73.)

The first phase, preparation, involves going through the tasks and decisions that are necessary when designing a project team for an organization. At this phase the role of the team, the selection of team members and the diversity of the team are defined, as well as the planning of the tasks, the selection of the reward system, the definition of the technology to be used and the integration of the team into the rest of the organization. That is important because according to Hacker et. al (2019) video meeting tools have been considered the most appropriate when teams meet for the first time to build trust. (Hacker et. al 2019, 1-36; Hertel et al. 2005, 73.)

The second phase, launch, describes the points needed for the virtual team to begin working. The steps are to agree on a kick-off meeting, get to know other team members, clarify goals and develop internal team rules.

The third phase, performance management, focuses on team leadership through, among other things, goals and feedback, improving team internal communication, team motivation, and knowledge management.

In the fourth phase, team development, the team processes and activities are evaluated together with the team and through training, and potential new members are connected to the team. Team development includes assessing team needs and gaps, training individuals or the entire team and monitoring the results of these interventions. In the fifth and final stage, disintegration, the team's achievements are reviewed and new goals and teams are formed (Hertel et al. 2005, 73.)

In addition to the phase model mentioned above, there are other models, such as the punctuated equilibrium model, which in turn focuses more on how the team functions in a particular task. The phase model on the other hand focuses on the overall development of the team. The phase model was selected, because it focuses more on the micro level and the punctuated equilibrium model more on the macro level so it is easier to compare the factors influencing confidence building step by step. (Dennis et al. 2019, 6.)

3 TRUST IN VIRTUAL TEAMS

3.1 Different forms of trust

Trust is an abstract concept and individuals experience it differently. It is quite tricky to measure, but it inevitably occurs in interactions. According to Harisalo & Miettinen (2010) trust has been described by comparing the definition of time as follows: "Before I was asked, I knew what time was. Now that I have been asked that, I cannot say what time is "(Harisalo & Miettinen 2010, 29).

In virtual teams, the opportunities for individuals to create the conditions for effective collaboration in terms of similarity, similar backgrounds and experiences are more limited than in local teams, as virtual teams have less opportunities for individuals to communicate and interact than local teams. Thus, in virtual teams, trust between people is a prerequisite for effective team collaboration. (Zhu & Lee 2017, 31-38.)

Lojeski (2015) has studied virtual teams and their communication. When asked by the U.S. Army Admiral about his feelings about working with people between email, computers and smartphones, he received a metaphor for the novice pilot in response. Although a pilot knows the exact altitude, speed and distance of his aircraft, he cannot land safely without a vision of depth. In complete darkness, one cannot see in front of him and the vision of depth disappears completely. This is also what he thinks about communicating with people online. Central communication among team members can be seen as becoming more difficult as the distance experienced by individuals increases. Often when talking about virtual teams, the challenge is seen as geographical dispersion, but experiencing the magnitude of distance and thus also behavior, success and innovation are also influenced by many other factors such as temporal, technological, social and cultural dimensions. (Lojeski 2015, 2-5.)

According to several studies (Hacker, Johnson, Saunders & Thayer 2019; Reittinen 2019) trust increases the feeling of security in interpersonal relationships, as well as improves the open and meaningful exchange of information. Trust reduces operational costs and negotiation costs and also facilitates the achievement of goals, promotes adherence to schedules and improves flexibility. It also facilitates the handling of conflicts. (Hacker, Johnson, Saunders & Thayer 2019; Reittinen, 2019.)

According to Jaakson, Reino, & McClenaghan (2019) trust, both between individuals and between teams, is a flexible concept that supports relationships by acting and by measuring how much people allow themselves to be vulnerable to each other without losing the expected outcome of another person's expected behavior. Trust also weighs how much team members care about each other (Jaakson, Reino & McClenaghan 2019).

Another perspective on trust in a virtual team is presented in a study by Kauffmann and Golan (2019) where virtual team trust is seen as a function and in order to trust the other party, take risks, and be vulnerable, teammates need to build social relationships with each other. Trust is seen as a sensitive resource because it is demanding and time-consuming to build, but it can be broken down easily and quickly (Kauffmann and Golan, 2019; McAllister 1998, 473-490).

3.1.1 Cognitive and affective trust

McAllister (1998) divided trust into cognitive and affective trust. Cognitive trust refers to trust based on team members 'perception and awareness of other members' qualifications and performance. Cognitive confidence is based for example, on another person's technical ability, knowledge from another member, or first impression. Based on all this, a team member assesses whether he or she can trust another person to perform as expected. (McAllister 1998.)

Affective trust on the other hand is based on emotion and caring for others emotional attachments. How much a person wants to bring out personal things about themselves when building relationship-based trust is very individual. The key thing to note is that trust which based on emotion and relationships does not arise without a certain amount of knowledge-based trust. (Meyerson, Weick, & Kramer 1996, 166–195.)

A person's trust thus consists of two different perspectives based on knowledge, i.e. cognitive trust, or through caring trust, i.e. affective trust as explained in the figure below.
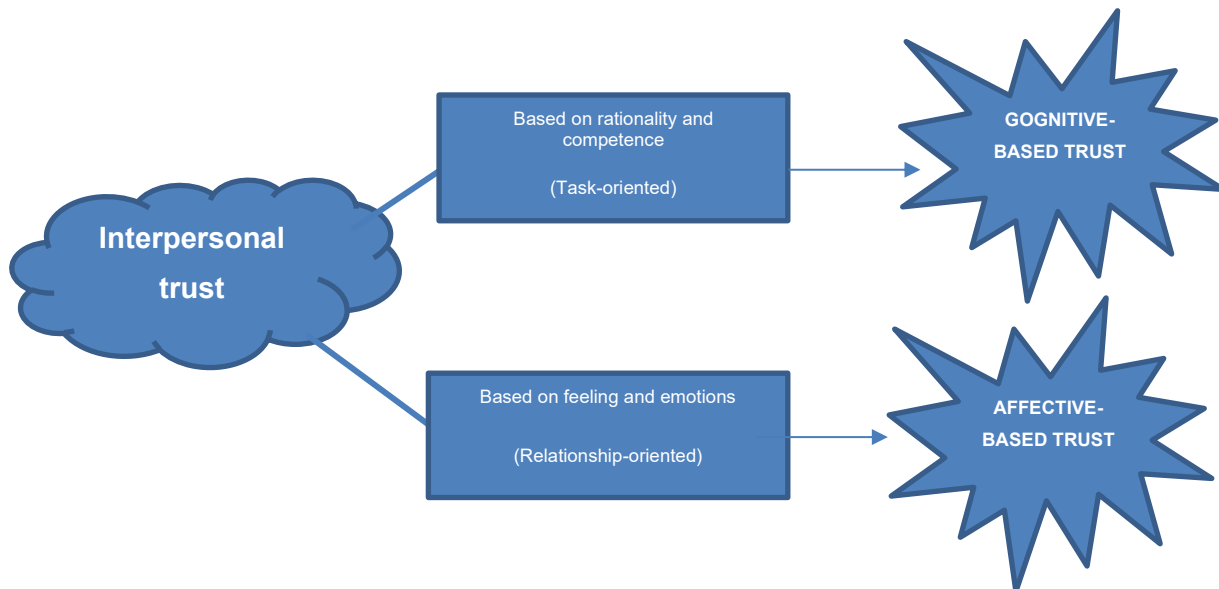
Figure 2. Cognitive-based and affective-based interpersonal trust (adapted from McAllister 1998.)

According to Morrison-Smith & Ruiz (2020) virtual groups rely more on cognitive than affective trust. Thus, trust between members of a virtual group is best described by cognitive trust because members of a virtual group initially trust cognitive or knowledge-based trust more easily than emotional affective trust. (Morrison-Smith, S. & Ruiz, J. 2020).

3.1.2 Institution-based trust

According to Shapiro (1987), institution-based trust refers to trust between team members based on trust in an organization's rules and standards. When an organization's situation is stable, it creates a sense of security in employees, which in turn helps build trust. The feeling of security on the other hand, is facilitated by fair management, which is especially important when building trust. Institutional trust refers to a subjective belief where members of an organization jointly assess that conditions conducive to business success exist. In general, an organization believes that its "impersonal structures" support the likelihood of a successful event. (Shapiro 1987, 623-650.)

According to McKnight et al. (1998) there are two types of institutional trust: normalcy and structural guarantees. Normalness of a situation means believing that success is expected because the situation is normal. Structural guarantees on the other hand, refer to beliefs that favorable outcomes are likely due to contextual structures such as guarantees, contracts and regulations (McKnight et al. 1998, 478).

3.1.3 Computation, knowledge, and assimilation-based trust

Trust can also be built on a process basis. At first, trust is usually based on computation, as people do not yet know each other and therefore they are insecure and afraid of negative things like conflicts. Because of that, people tend to secure their backs and the continuity of cooperation through computational behavior. People are afraid of negative consequences, which makes people behave confidentially. The benefits of trust sustain this use. At the calculation stage, trust is easily broken and trust includes control as well as the possibility of punishment. (Den Hartog 2003, 129; McAllister et al. 2006, 1; Harisalo et al., 2010, 36.)

The process then progresses to knowledge-based trust, where people have already gotten to know each other better. In this case, trust begins to be based on knowledge rather than calculation, which in practice means that members begin to learn each other's habits and predict their behavior. This phase of trust requires regular communication and shared experiences. The more consistent the information that members receive from each other, the more likely it is that trust will be built. Regular interaction, transparency and an accepting atmosphere strengthen knowledge-based trust. (Den Hartog 2003, 130; Harisalo et al. 2010, 36; McAllister et al. 2006, 2.)

In the third stage of trust, trust is formed on the basis of assimilation. It is based on common goals, a broader understanding and appreciation of the expectations and needs of others. Group trust develops as team members begin to identify with team goals, which is directly related to the sense of belonging to the group. People categorize each other into different social categories, and trust between individuals belonging to the same social category tends to arise more quickly. Classification-based identification is thus, in practice, partly cognitive trust. (Den Hartog 2003, 130; Harisalo et al. 2010, 36—37.)

3.1.4 Swift trust

Jaakson, Reino, and McClenaghan (2019) state that trust is explained in virtual teams as swift trust. In a virtual group it is difficult to get information about each other's motives and direct experience of their actions. So, when individuals do not have the opportunity to get to know each other but need to trust a common task, trust is built on role expectations such as expertise and professionalism (Jaakson, Reino, and McClenaghan 2019, 30-46).

The results of a study by Zakaria & Yusof (2020) show that swift trust is temporary, fragile in nature and so-called long-term process-based trust requires more time to develop. On the other hand, swift trust depends on the personal circumstances of each team member and his or her willingness to trust. The results show that swift trust enables the process-like development of trust in decentralized teams and thus similar levels of trust as are experienced among teams working in the same location. Swift trust is not as strong as trust based on knowledge and cognitive assessment. According to the results of Jaakso, Reino & McClenaghan (2019, 41), swift trust is a characteristic feature of decentralized teams throughout the team life cycle. (Zakaria & Yusof 2020, 7; Jaakson, Reino & McClenaghanin 2019, 41.)

3.2 The influence of culture in building trust

In addition to his or her workforce, a new employee always brings his or her culture and origin to the workplace. The workplace combines the workplace's own culture, the culture of the local area and the culture of the minority group. When these things meet, tensions or at best, new perspectives, tolerance and innovation can arise. Multiculturalism and diversity should be reflected throughout the organization. Top management by its own example shows the model that recruitment should be open to anyone with the necessary education and knowledge, regardless of a person's cultural background. (Dalluay & Jalagat 2016, 663-668.)

According to Hofstede (2016), intercultural valuesaffect leadership differences between countries much more than leadership practices that have changed over time. This contributes to the perception of how ingrained the practices, values and attitudes of different cultures are and how difficult it is to change them. It is important for team

members to remember that the condition for avoiding conflict is not to change cultures, but rather to understand and adapt to them (Hofstede 2016, 29).

According to Lewis (2006), the team manager must take into account cultural differences in building trust, as trust is not built in the same way everywhere. There are cultures where the tendency to trust one is more sensitive than in other cultures. Team members may have culturally specific habits or weaknesses that can lead to a misunderstanding of a colleague's motives. National customs must be taken into account when building trust in the international work community. There is no single international motivation method that a team leader could use to maintain team motivation and trust. Failure to motivate foreign workers leads to dissatisfaction, resistance, frustration, isolation, and ultimately a dead end. For this reason, it is important to prepare clear instructions for the team and communicate them effectively, as well as looking for user-friendly tools and listening to team members 'suggestions.

Finns are outspoken people who do not have small talk skills, Swedes are slow to make decisions, the lack of confidence of Russians and the lack of organizational skills of Africans are examples of things that can cause confusion in a multicultural work community. In addition, the roles of women and men differ in different cultures. Although building trust is more challenging in a multicultural work environment, the strengths and weaknesses of different cultures are resources for a team to succeed. (Lewis 2006, 136–141.)

According to Jaakson, Reino, & McClenaghan (2019), trust, both between individuals and between teams, is a flexible concept that supports relationships by acting and by measuring how much people allow themselves to be vulnerable to each other without losing the expected outcome of another person's expected behavior. Trust also weighs how much team members care about each other (Jaakson, Reino, and McClenaghan 2019).

Another perspective on trust in a virtual team is presented in a study by Kauffmann and Golan (2019), where virtual team trust is seen as a function and in order to trust the other party, take risks and be vulnerable, teammates need to build social relationships with each other. Trust is seen as a sensitive resource, because it is demanding and time-consuming to build, but it can be broken down easily and quickly (Kauffmann and Golan, 2019; McAllister 1998, 473-490).

Through communication tools, building trust can be difficult and thus the cultural diversity of virtual team members can even be highlighted and their communication behavior can increase the susceptibility to conflict arising from communication in a global context. Locals may begin to behave according to their own norms rather than following common rules. Cultural communication styles operate within two extremes, low and high contexts. In low-context cultures, messages are expressed accurately and directly and problems are approached in a solution-oriented and fast manner. In high-context cultures on the other hand, the actual thing may be covered up in circular expressions because one does not want to offend another and decisions are also made more slowly. These extremes again have an effect on which means of communication are suitable. (Henderson, Stackman & Lindekilde 2018, 954–967.)

3.3 The role of the leader in building trust in virtual teams

Organizations rely heavily on virtual groups due to technological advances and thereby try to achieve the organization's goal. However, virtual group leadership is a greater challenge because the literature on virtual group leadership does not turn directly into the leadership context. Almost every organization in the current era operates in a virtual environment, either in part or in full, and multinational companies, for example, depend on it. While it is not difficult for a company to set up a virtual work environment because of the easy availability of software, it is really difficult for leadership to perform in such an environment on an ongoing basis. Virtual group leadership therefore requires good leadership skills. It is a challenge to coordinate team members from different geographical areas, skills and cultures. The leader's first responsibility is to build an employment relationship where team members are allowed to work freely and share their own expertise and knowledge with others. In this way, they feel a sense of belonging and also make their best contribution to the success of the team. (Mehtab, Rehman, Ishfaq & Jamil 2017, 183-193.)

Ziek & Smulowitz (2014) list three essential issues that also affect team effectiveness through leadership. These include the team leader's ability to ask questions, a combination of cognitive skills and creativity, and the ability to create and set a clear vision and goal. However, there are more virtual leadership challenges ahead in the international team. The "three-tool kit" grows into a total of nine abilities. According to

Ziek and Smulowitz (2014), these abilities are necessary for the leader of an international virtual team and trust building;

- Teamwork leadership skills
- Motivation and inspiration
- Ability to show direction
- Ability to set goals
- Communication and communication skills
- Delegation
- Stretching borders
- Mentoring skills
- Resource acquisition skills

Researchers considered the most important of these abilities to show direction and set goals. (Ziek & Smulowitz 2014, 106–107.)

4 IMPLEMENTATION AND RESULTS

4.1 Aim and methods

The aim of this thesis was to explore how team members perceive trust and based on that, give suggestions on how the project manager can influence the creation and maintenance of trust in the virtual team. This topic is also very topical, as due to Covid-19, many teams have had to move to a virtual work environment and therefore it was chosen as the research topic.

An electronic questionnaire was used in this study to analyze respondents 'responses. The study addressed the importance of communication and trust building in a multidisciplinary virtual project team. The questionnaire consisted of multiple-choice questions and two open-ended questions. This study focuses on data collected from open-ended questions involving 85 respondents. A total of 104 respondents participated in the survey.

With the help of a survey, extensive research material can be collected and at the same time many different questions can be asked from a large number of people. The carefully prepared questionnaire can be processed in a quick-to-save format, making it easier to analyze the results.

The data were analyzed by means of content analysis. (Hirsjärvi et al. 2010, 195; Tuomi & Sarajärvi 2002, 109-116.) According to Braun & Clarke (2006) and King (2004), thematic analysis does not require detailed and technical knowledge of other qualitative approaches, it also provides an easier method of analysis, especially for researchers for whom qualitative methods are still quite unknown. Thematic analysis provides a highly flexible approach that can be tailored to the needs of many studies, providing rich and detailed information on the topic under study (Braun & Clarke 2006, 77–101; King 2004, 257–270). For this reason, thematic analysis has also been used in this study.

4.2 Data collection

The data collection method of the study was an electronic questionnaire, which included multiple-choice questions, as well as two open-ended questions. In this study we focus only on the data in opren questions.

The open questions were: "What actions increase trust among virtual team members?" and "What could prevent virtual team members from trusting each other?"

The questionnaire has been translated into both Finnish and English by linguists. After the questionnaire was tested to fit, respondents were sent an invitation to participate in the survey online, through various social media channels such as Twitter and Linkedin. The invitation included a link to the survey itself and respondents were also asked to forward the survey in their own intros. The message also included a privacy statement informing users that the study will use personal data to collect research data. The answers of the respondents are used only in this thesis, and they are archived without direct tags at Turku University of Applied Sciences. A total of 104 respondents participated in this survey in April-June 2020. Because multiple social media channels were used and messages were reposted, the total number of recipients and response rate cannot be identified.

The answers were examined through content analysis of the open-ended questions from three different perspectives, as there were respondents from several different countries and their age distribution and experienceon virtual project teams varied. According to Tuomi & Sarajärvi (2002), qualitative research can be largely internalized to content analysis (Tuomi & Sarajärvi 2002, 109-116). Therefore, the answers were compared between people who speak Finnish as their mother tongue and those who do not, under 40 years old and those over 40 and 40 years old respondents, and the answers of people who have more experience with those who have less experience working in a virtual team.

The description of the respondents is shown in Table 1. Altogether 85 of 104 respondents answered open questions. A total of 13 different nationalities participated in the study, 69% of whom spoke Finnish as their mother tongue. Altogether 17.6% of the respondents were 40 or over 40 years of age, when 24.7% of respondents rated their virtual team experience as less than 5 points, on a scale of 1-10.

TABLE 1 Descriptive variables of the open question respondents (n=85)

Variable	
Language	N
Speaks Finnish as mother tongue	59
Speaks other language as mother tongue	26
Age Group	
Under 40 years old	15
40 and over 40 years old	70
Experience in working in international virtual project teams	
No/ Some experience (less than 5 points)	21
Experience (more than 5 points)	64

The age group has been chosen to be under 40 years old and 40 years old and over because people over 30 years of age also know how to use and utilize technology, and the age range that has grown in technology and the age group who have only learned to use it as adults are therefore wanted as comparisons. Although age groups are not reliably comparable due to their size differences, the result can be considered indicative

4.3 Results of the survey

This chapter addresses the core theme of the whole study; the factors that promote trust building and the factors that undermine it in an international virtual team, from the perspective of different background variables. At the general level, respondents perceived common rules, clear objectives, open discussion and the contribution of each team member to achieving the goals as trust-building factors, while at the general level,

confidence-reducing factors were considered to be insufficient language skills, poor technical skills, member inactivity in meetings and poor quality of technical equipments.

Table 2. The main points that promote and undermine trust in the multicultural virtual team from the perspective of the respondents.

Factors that promote trust	Factors that undermine trust
➔ **Common rules and clear objectives** ➔ **Open, free-form discussion** ➔ **The contribution of each team member to achieving the goals** ➔ **Using the camera in meetings**	➔ **Insufficient language skills** ➔ **Poor technical skills** **Inactivity** ➔ **Poor quality of technical equipments** ➔ **Facelessness**

4.3.1 Comparison of the results based on the mother tongue

People who speaks Finnish as their mother tongue (n=59) raised factors that they believe increase trust in the virtual team. These five factors were; common rules, transparency in communication, clear responsibilities, members handling of their own part of the work, and free-form discussion.

"Rules and common goals."

"Regular and open communication."

"People's understanding of the task, their own goals and overall goal, and that everyone is doing their job as agreed."

"Free-form acquaintance and transparency."

Respondents who speak other languages as their mother tongue (n=26) also emphasized free-form discussion. In addition, professionalism, staying what agreed, activity in conversations, and labels in virtual communication became key factors.

"Being available, even online, openness and visibility of actions. Open communication."

"Initial even brief face to face meeting."

"Etiquette. When it comes to communicating in a virtual environment, etiquette (e.g. muting, being on time…) is critical to ensure trust in the online meetings. Professionalism, taking online meetings seriously (as it's the case with face-to-face ones) is also relevant."

As factors hindering trust, those who spoke Finnish as their mother tongue considered poor technical skills, as well as poor language skills, lack of honesty and breaking the rules.

"Poor technology, poor communication skills."

"Poor/ lack of communication."

"Language problems, non-compliance with agreed rules, bad behavior."

"Facelessness and poor language skills."

Respondents who speaks other language as their mother tongue highlighted disapproval of the work of others and passive participation in discussions as a trust-hidering factors. In addition, prejudice against the culture of others, as well as incompetence, were seen as a detrimental factor.

"If virtual team members don't share info and if they are passive during the virtual meetings."

"Silence in discussions, disrespect for the work of others."

"Prejudices due to different cultures and language skills."

"Incompetence of some members."

Summary of these findings is shown in table (3) below.

Table 3. Comparison of the answers of those who spoke Finnish as their mother tongue and those who spoke other languages to the open questions.

Mother tongue	Promote trust	Undermine trust
Finnish	- common rules of the game - transparency in communication, - clear responsibilities - members handling of their own part of the work - free-form discussion	- poor technical skills, - poor language skills - lack of honesty - breaking the common rules
Other languages	- free-form discussion - professionalism - staying what agreed - activity in conversations - labels in virtual communication	- disapproval of the work of others - prejudice against the culture of others - passive participation in discussions

4.3.2 Comparison of the results based on the age

Under 40s (n=70) considered transparency, common goals, staying on schedule, and doing their own job as key factors in increasing trust, while those 40 or over 40s (n=15) listed face-to-face meetings, informal discussion, and common rules and goals as these factors.

Responses from respondents under 40s:

"Regular and open communication."

"Staying on schedule and agreed, preparing for meetings."

"To be present and get the job done."

Responses from respondents over 40s:

"Rules and common goals."

"Free-form conversation and transparency."

"Camera."

"Using the camera, free-form 'warm-up'."

Factors detrimental to trust were considered by those under 40s to have different levels of proficiency technically and linguistically, while those over 40s or 40 considered these factors to be poor quality or lack of technical tools, as well as insufficient language skills as shown in the table below.

Responses from respondents under 40s:

"Poor and broken connections, 'facelessness', different levels of language skills."

"Poor technology, poor communication skills."

Responses from respondents over 40s and 40:

"Lack of language skills if not given space for discussions, IT problems."

"Facelessness and poor language skills."

Table (4) summarizes these findings.

Table 4. Comparison of the answers of under 40s and 40 or over 40s to the open questions.

Age	Promote trust	Undermine trust
Under 40s	- transparency - common goals - staying on schedule - doing his/ hers own job	- lack of technical proficiency - lack of linguistic profiency
Over 40s and 40	- face-to-face meetings - informal discussion - common rules	- poor quality of technical tools - insufficient language skills

4.3.3 Comparison of the results based on the experience on virtual teams

Respondents who had less experience (n= 21, under 5 points of scale 1-10) considered regular and open communication, camera use in meetings, and getting to know each other as trust-building factors.

"Regular and open communication."

"Small talks at the beginning / time to exchange affiliations. You can see facial expressions and gestures through the camera. Background information about people."

Respondents who had more experience listed (n= 64, 5 or over 5 points of scale 1-10) clear goals, informal discussion, and transparency as these factors.

"Free-form discussions about how are people, what's going on."

"Informal communication, using webcam, frequent meetings, clear agenda and tasks."

Factors detrimental to trust, according to respondents with less virtual team experience, included "facelessness" in meetings, unclear division of labor, and reluctance to work in a virtual team.

"Reluctance to virtual work in general."

"Camera inactivity."

"Unclear division of labor, poorly planned meetings."

Respondents with more experience considered IT problems such as poor audibility, lack of language skills, and team member inactivity to be these factors as shown in the table below.

"Poor audibility, poor English."

"Lack of language skills, if not given everyone 'space' for conversations, IT problems."

"If virtual team members don't share info and if they are passive during the virtual meetings."

The summary of these findings is presented in table 5.

Table 5. Comparison of the answers of less virtual team experienced respondents and more experienced respondents.

Experience	Promote trust	Undermine trust
Less experience	- regular and open communication - camera use in meetings - getting to know each other	- "facelessness" in meetings - unclear division of labor – - reluctance to work in a virtual team
More experience	- clear goals - informal discussion - transparency	- IT problems - lack of language skills - team member inactivity

4.4 Reliability of the research

This study sought to ensure the reliability of the study, in addition to the overview, by looking at various background factors such as nationality, age, and experience when analyzing the results. Despite this, the results of the respondents in the study cannot be compared reliably by nationality, because almost all the respondents speak Finnish as their mother tongue. The results are therefore unreliable in this respect and should be treated with caution. There were 85 respondents to the open-ended questions, which means that a larger sample provides a more reliable picture of the factors that promote and lower trust (Eskola & Suoranta 2014, 66).

Qualitative research does not seek to draw empirically generalizing conclusions as in statistical research, but to describe a phenomenon and understand a particular activity or to give a theoretically meaningful interpretation of a phenomenon. In this study, reliability was also affected by a target group consisting of individuals from different countries who were in different jobs, had different experiences of virtual teamwork, and who were of different ages.

According to Eskola & Suoranta (2014), in order to ensure the reliability of qualitative research, attention must be paid to collecting data from individuals who have as much information and experience as possible about the phenomenon under study and are interested in the research (Eskola & Suoranta 2014, 66).

5 DISCUSSION

Virtual group management can be perceived as a challenge, as the literature on virtual group management does not turn directly into the leadership context. The challenge is to coordinate team members from different geographical areas, skills and cultures. Leading virtual teams requires good leadership skills and the first responsibility is to build the right tools using the right tools, where team members are allowed to work freely and share their own expertise and knowledge with others. A sense of togetherness brings the best results in a team. (Mehtab et. al 2017.)

In order to provide the virtual project manager with tools for building trust in the virtual environment, the study sought to determine what are the prerequisites for successful trust building in the virtual team from the perspective of the virtual team members. The study found that the creation of trust is influenced by many different things and that different background variables of people influence which factors they perceive to be factors that promote and decrease trust.

5.1 Factors that positively contribute to building trust in virtual team and the challenges
    of building trust

According to the thesis, trust is built in virtual teams more cognitively than teams which operate face-to-face, especially due to the limited social nature of the virtual team. Responses indicated that trust is enhanced by cognitive factors such as experience and language skills and IT skills, but this was not the main factor influencing the creation of trust. The challenge in building trust in a virtual team is very much the virtuality, as in communication, gestures and tone of voice affect how another member's sayings are interpreted. In addition, team technical expertise appears to have a positive impact on team internal confidence, performance, and satisfaction with team membership. Henderson et. al (2018) state that when using communication tools, it can be difficult to build trust, as locals may begin to behave according to their own norms and not follow common rules, and thus the cultural diversity of virtual team members may even be highlighted and their use may increase their vulnerability to conflict.

Therefore, the team should also receive ongoing training in the use of technology to improve team performance and the team should also choose the appropriate communication tools so that trust can be built properly.

The results showed that the team members feel that trust is built through regular open discussion, common rules, clear goals and planning of meetings, as well as the functionality of the technical equipment. Thus, the project manager is equally expected to be fair, reachable and approachable. The study hypothesized to reveal that achieving a sense of presence virtually can be very challenging. Many respondents, especially those over the age of 40 or inexperienced respondents, saw the use of the camera as a trust-building factor. This may reflect the fact that these groups may be accustomed to working more face-to-face with people, allowing them to interpret the gestures and expressions of their colleagues, whereas in a virtual work environment this may not always be possible. That is interesting because this opinion differs from the opinions of other groups (Varhelahti & Turnquist 2021).

The responses to the survey emphasized that the feeling of presence can only be achieved through regular and active interaction. The results also showed that getting to know each other and informal discussions build trust.

Multilingualism in this study refers to the encounter of different national mother tongues. Because virtual teams need experts from other geographic areas, team members need to be trained so that they should be able to operate locally but think globally. The members of the group must therefore be aware of the norms and values of different cultures. This in turn requires management to develop new skills in leadership training (Mehtab et. al 2018).The survey responses also show that respondents considered taking another culture into account and etiquette practice in communication as a confidence-building factor.

According to Jaakson, Reino, and McClenaghan (2019) in virtual teams trust is explained as swift trust, which means that in a virtual team it is difficult to get information about each other's motives and direct experience of their actions, so trust is built on role expectations such as expertise and professionalism. This may refer to more limited and weaker communication. As open discussion, camera use and face-to-face meetings were important in the virtual teams, the project manager should also take these factors into account in order to improve trust, as trust in virtual teams is built through swift trust. (Jaakson, Reino, & McClenaghan 2019.)

The challenges of building trust in international virtual teams are different than in a traditional team. In this study, facelessness and lack of close interaction were seen as specific challenges for virtual teams in terms of building trust, as well as creating an open discussion in a virtual work environment, and choosing the right tools to communicate and mastering these tools and understanding multilingual differences, which can also help into understanding different cultural backgrounds.

5.2 Ways that virtual project manager can use to improve and maintain trust in an international virtual team

The results of this thesis suggest that the virtual team manager should promote open communication between team members and also meet face-to-face, which facilitates the emergence of affective trust. Kauffmann and Golan (2019) state, that in order to build trust teammates need to build social relationships with each other. The team leader should therefore be in regular contact with team members and inquire about affiliations, and promote such discussion among team members. It would also be good for the virtual project team manager to consider different age groups and their needs to build trust in a virtual work environment. For example, the study found that for the older age group, the use of a camera is important, while for the younger ones, the functionality of the communication technology (Kauffmann & Golan, 2019).

Although in this study, the responses of those who speaks Finnish as their mother tongue and those who do not, the factors to promote trust are quite similar, the project manger must consider and inform other team members if necessary about the etiquette rules of cultures. The virtual communication of Finns differs from the communication labels of many other countries. This was also evident from the responses of the survey, when other citizens were asked which factors lower trust in the virtual team. In my opinion, the virtual team manager should listen to everyone on an equal and reachable basis, as well as support the team. The project manager should also consider how the virtual team should communicate when they are not physically present at the same place. How can a sense of presence be built virtually using technology to aid? How should the project manager himself or herself build and maintain relationships with decentralized team members? Prejudices about the culture of others were also seen as a factor that undermined trust. Thus, the leader of a multilingual virtual project team should understand the different cultures of his or her subordinates. Although the mother tongue

does not indicate a cultural background, understanding its impact can also help lead multicultural teams.

The virtual project team manager must therefore take into account people's previous experience in the virtual team. The results of the survey showed that respondents who had little experience with virtual teams considered getting to know others and using the camera as factors in building trust. This, therefore, corresponds to what could be expected in a normal environment to promote trust between people. More experienced respondents, on the other hand, answered that building trust requires good language skills of team members, and the functionality of technological equipment, as well as activity in meetings. Thus, according to the thesis the team leader should be able to provide team members with good and functional technological tools as well as invest in people's visibility and use of the camera and getting to know others. Referring to the management of diversity above, an understanding of team diversity is clearly important when looking at the results of the study.

When thinking about project team phases, it is important to use video conferencing tools in the preparation phase, when team members meet for the first time, to build trust. The importance of this is also reflected in the results, which show that visibility is perceived as important for building trust (Hacker et. al 2019, 1-36).

In the second phase, an inaugural meeting is agreed, where other team members are introduced, goals are clarified and internal team rules are developed. In the study, the building of trust was helped by the fact that each team member follows the rules and that all members are consulted. Therefore, the team leader must also make common rules for all team members at this stage in order to build trust within the team. The third phase in team building is performance management, which focuses on leading the team through goals and feedback and improving team internal communication, team motivation and information management. The virtual team project manager must therefore take into account the linguistic differences in internal communication so that everyone understands the instructions given by the project manager. Because the thesis is about a multilingual virtual team, the project manager should also take into account location of the team members and the technical possibilities of the area and the IT skills of the team members in these phases. In addition, the leader should ensure that each person selected for the team has the ability to learn and make flexible use of a variety of technical communication tools. In the fourth phase, team development, team processes and activities are evaluated together with the group and through training and potential

new members are connected to the team. Team development includes assessing team needs and gaps, training individuals or the entire team and monitoring the results of these interventions. At this stage, the virtual team leader should therefore take into account for example different age groups, as for some it may be more challenging to use virtual tools than for others, which in turn may undermine the building of trust between team members as the study also shows. In the fifth and final phase, the team's accomplishments are reviewed and new goals and teams are formed. At this point, the project manager should also assess which factors can be improved to help build trust in the next team. (Hertel et al. 2005, 73.)

6 CONCLUSION

Multilingual virtual teams should be led by different methods than a traditional team where the team manager is physically present at all times, as was shown in many sources in the theory section. Therefore, the virtual team manager should strive to create an open discussion by choosing the right kind of technological tools and taking cultural differences into account in building trust and also taking into account the different stages of team when building trust. Because a virtual team has team members of different languages, ages and experiences, the team leader must consider these factors so that open conversation can take place between team members even though they work virtually and communication cannot therefore be the same as face-to-face. Good relationships, understanding and taking into account other team members facilitate the building of trust in the virtual team, so the team leader should be a professional and develop his or her skills in understanding the differences between cultural and other factors. Although this study did not examine the cultural background of the respondents, but their native language, understanding multilingual influences can also help lead multicultural teams.

In summary, the virtual team manager should be able to:

a) create an environment where people are encouraged to be open and honest in their communications.

b) choose the right means of communication taking into account the backgrounds of the team members.

c) work with team members to create goals and rules common to all.

d) demonstrate appreciation and respect for the team members.

A further research proposal for this study could be which technological tools are most effective in creating an open debate, which, according to this study, was one of the main factors influencing trust. In addition, further research could examine how trust is maintained between team members in a multilingual virtual team so that good trust is maintained from start to finish.

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