



KAUNAS UNIVERSITY OF TECHNOLOGY
SCHOOL OF ECONOMICS AND BUSINESS

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EVALUATION OF TRUST IN VIRTUAL PROJECT TEAM

MASTER THESIS

Supervisor: Doc. Kęstutis Duoba

KAUNAS, 2016

**KAUNAS UNIVERSITY OF TECHNOLOGY
SCHOOL OF EKONOMICS AND BUSINESS**

EVALUATION OF TRUST IN VIRTUAL PROJECT TEAM

Project management (621N24002)

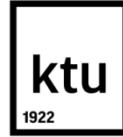
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Trust Evaluation in Virtual Project Teams
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SUMMARY

The study aims to evaluate trust in a virtual project team. In order to reach the goal, literature review was performed where main variables of the subject, namely, trust, virtual project team, challenges of such and success association with trust, were explained in more details. What is more, theoretical knowledge led to the conceptual model, which was adapted and used as a framework for the further qualitative research. The main aim of the research was to evaluate trust in a virtual project team, for that reason a case study was conducted together with qualitative research where 5 experts' responded to questionnaire prepared in advance. Results, in order to reach the main research goal, were analyzed using both case study and experts' responses analysis. Case study, interviews and questionnaire results analysis summarized key attributes for trust evaluation in virtual project team of a virtual team member attributes 360-degree assessment tool. The six extracted attributes were as follows: Collaboration, Credibility, Communication, Community, Contribution and Consideration. Furthermore, these attributes were used for hypotheses testing case study analysis, which revealed congratulatory results: adapted version of the assessment tool can be used for trust evaluations in virtual project teams. Finally, research revealed – that no connection could be found in between of times that virtual project team members have physically met and their level of trust with one another in this particular case study. To sum up, all theoretical and qualitative research findings were summarized in order to provide practical implications for business and virtual project team management and growth.

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SANTRAUKA

Tyrimu siekiama įvertinti pasitikėjimą virtualioje projektų komandoje. Norint pasiekti numatytą tikslą buvo atlikta mokslinės literatūros apžvalga, kurios pagalba detalizuojami pagrindiniai temos aspektai ir kintamieji – pasitikėjimas, virtuali projektų komanda, tokio pobūdžio komandų patiriami iššūkiai ir projekto sėkmės sąsaja su pasitikėjimu. Išsamiai atlikus literatūros apžvalgą atrinktas darbo temą atitinkantis konceptinis modelis, kuris buvo adaptuotas aprašomajai temai ir panaudotas toliau vykdytam kokybiniam tyrimui. Siekiant įgyvendinti pagrindinį tyrimo tikslą ir įvertinti virtualios projektų komandos pasitikėjimą buvo atlikta atvejo analizė, taip pat atliekama kokybinė penkių ekspertų apklausa naudojantis iš anksto paruoštu klausimynu. Tyrimo rezultatams pateikti, išanalizuoti, apdoroti ir apibendrinti buvo panaudoti abeji tyrimo šaltiniai – atvejo analizė ir ekspertų atsakymai. Atvejo analizės, interviu ir klausimyno rezultatų analizė apibendrina esminius virtualios komandos narių savybių 360 laipsnių vertinimo įrankio aspektus pasitikėjimo virtualioje komandoje vertinimui. Toliau išvardinti šeši išskirti aspektai: bendradarbiavimas, patikimumas, komunikacija, bendruomenė ir dėmesingumas. Šios dedamosios taip pat buvo panaudotos situacijos analizėje siekiant patikrinti iškeltą hipotezę, ko pasekoje buvo atrasti sveikintini rezultatai: pritaikyta virtualios komandos narių savybių 360 laipsnių vertinimo įrankio versija gali būti naudojama pasitikėjimo vertinimui virtualiose projektų komandose. Taip pat šio atvejo analizėje pastebėta, kad virtualios projektų komandos narių susitikimų skaičius realybėje neįtakoja jų pasitikėjimo vienas kitais įvertinimo. Apibendrinat, visa teorinė medžiaga bei kokybinio tyrimo rezultatai buvo susisteminti ir apibendrinti siekiant suteikti praktinės reikšmės verslo ir virtualių projektų komandų valdymui bei vystymui.

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INTRODUCTION

In the recent years the number of companies which are said to be „project oriented” has significantly increased. Consequently, it has been recognized that successful project impacts the status of company’s profit and loss. Therefore, it is not a secret that project managers are now under significantly higher pressure to make sure that projects are successfully delivered in the terms of results, cost and delivery date. Not to mention, the globalization of business has resulted in greater interest in a more comprehensive suite of the best practices of project management.

Research relevance. Virtual teams are the response of multiple organizations to the rapid - moving environment in today’s business due to several trends, one of which is decentralization and globalization of processes in a work place and the second – fast development of ICT - information and communication technologies (Arnison and Miller, 2002; Chen et al., 2003; Child, 2005; Hertel et al., 2005). The success behind virtual teams are several particular strategic advantages that help out organizations in multiple areas. For instance, companies can no longer bother about the local workforce availability and rather focus on staffing organizations based on expertise in the required field. Another high impact having advantage is the availability to work around the clock by simply having a team which consists of members from different countries around the globe – meaning different time zones, which consequently would help to increase flexibility of the organization itself and simultaneously increase the speed with which it could respond to demands on the market. None the less, another opportunity appears - better and individualized relations with customers when managing spread virtual teams around the globe, not to mention while also reducing work related travel expenses (Hertel et al., 2005). Nowadays it is important to keep in mind as Arison and Miller (2002) wrote: “The arena in which firms compete for resources now takes the whole world”. It is therefore the reason organizations not only consider, but actually are increasingly relying on such worldwide virtual teams to carry out their day to day assignments, projects and activities. (Arnison and Miller, 2002; Balthazard et al., 2004; Bell and Kozlowski, 2002; Croasdell et al., 2003).

Research problem. In this particular research it is established that virtual project teams are teams that have temporary structure and a group of people are working on the same goal, activity or assignment without any limitations in terms of distance between one another, organizational location or boundaries, countries, time zones or even continents for that matter.

Having in mind virtual project team definition briefly described above it is easy to notice one of the main issues, which has a high chance of probability. Most certainly at least few members of such team will not be familiar with the rest of them to begin with, in addition keeping in mind they might have never heard of one another before either. Furthermore, such virtual project team members have a real possibility to never meet face to face during the whole project, leaving a lot of space for interpretations of the competence, personalities and general qualities of team members. All in all,

combined with possible lack of virtual projects or teams management experience, lack of familiarity, trust and possible dissimilarities the members of the team might encounter various issues.

Accordingly, it is essential to mention, as Misztal (1996) argues that “trust is seen as being particularly important in both organizations and projects, since it is viewed as essential for stable relationships, vital for the maintenance of cooperation, fundamental for any exchange and necessary for even the most routine of everyday interactions.” Therefore here the main research problem is easily noticeable – such temporality of virtual project teams and its essence of being virtual will or at least may conflict with core virtue of trust due to the fact that in most cases trust grows over a longer period of time which contains at least several interactions as it is established by Dervitsitotis (2003). Herewith it is possible to conclude that to achieve well-working relationships all the virtual project team parties need to grow from a low-trust culture to a high-trust team in their relating.

Therefore, to help organizations and virtual project teams to grow to high-trust base it is essential to recognize its’ current trust base, for which the teams’ trust evaluation has to be performed. Accordingly, the problem of the thesis follows – how to evaluate trust in virtual project teams?

Research object – evaluation of trust in virtual project team.

Research purpose – to evaluate trust in a virtual project team.

Research objectives:

1. To analyze the necessity of the evaluation of trust in virtual project team;
2. To analyze current tools and models of the evaluation of trust in virtual project teams;
3. To adapt trust evaluation of virtual project team model for a case study;
4. To perform case studies’ result analysis after trust evaluation in a virtual project team.

Research methods. Qualitative research will be performed for this paper, which will be done by adapting currently existing virtual team assessment model with a case study analysis and 5 experts’ responses to questionnaire prepared in advance.

1. IMPORTANCE OF TRUST EVALUATION IN VIRTUAL PROJECT TEAM

To begin the first chapter of this master thesis it would be useful to have a general understanding that social groups of people or so called collectives have been part of interest in the social sciences for a long period of time (Hamilton & Sherman, 1996). Thereby, there are so called “special type of social collectives” - the teams, where different individuals join together for a common goal - working as a team on a project, assignment or task (Ilgen, 1999).

This interest in social sciences is formed mainly due to the fact that the third party or the observer and its understanding of what is happening in between of other two or group of individuals informs persons' senses and creates their behavioral responses (Abelson, Dasgupta, Park, & Banaji, 1998; Magee & Tiedens, 2006). Consequently, if there is an opportunity to join a collective as a new team member or if there is an opportunity to join it by becoming a sponsor of some ongoing or upcoming project or if a third party or an observer is in a role of a supervisor it would be more than beneficial with a help of social sciences to have an understanding of how this special type of social collective is actually interacting, functioning and what might be its future performance trajectory. Not to mention, the benefits of social sciences acknowledgments while having in mind that these kind of collectives have a potential to embrace countless negative outcomes such as internal conflicts, slow pace in decision making and problem solving, communication biases and most importantly - distrust (Jehn, 1995; Kerr & Tindale, 2004).

For continuation in further chapters literature review will be performed to define what virtual team is, what kind of negative outcomes or challenges such team face and most importantly how distrust effects its performance and why it is important to evaluate trust in virtual project teams.

1.1. Virtual Project Team

There are signs in modern day business that virtual projects, teams and organizations are the new ways of operating and are the next form of developed organizational structure (Guss, 1977). Even back in 1998, Mayer noted that “virtual organization, or the virtual corporation, is the model for corporations in the future”. On the other hand, it is truly surprising that, for the growing, up to date organizations the concept itself of the virtual team has already become part of a strategic tool, while there is still insufficient amount of information existing in terms of how to embrace such teams and how to effectively nurture them. (Rad & Levin, 2003). Although, to nurture a virtual project team, it is essential to agree on the overall understanding of what is a virtual project team itself, therefore such discussion will follow further in this chapter.

According to Parker (1994) the team itself is a group of people who all are highly dependent on one another and gathered to reach goals, complete assignments or any other given tasks with combined workforce. Meanwhile the definition of the team provided by Katzenbach and Smith (1994) is quite similar, though exposing other variables of the team and its members. Authors explained that it is a group, consisted of small number of individuals, who most usually complement one another's qualities and skills while assigned to the same, common task or goal and most importantly with a perspective of mutual, equally split accountability.

On the other hand, the main difference between team and virtual team as Mayer (1998) defines is that a virtual team is composed of individuals who are not necessarily in the same buildings, cities and/or even countries. In addition to that it is logical to continue with a definition that is given by Delisle et al. (2001), who describe the virtual team as a group of members, who are "behaving as a temporary group" while motivated by the same given task and whose "members are separated by geographic or temporal space". Hence, following this Delisle et al. virtual team's definition and adding some aspects of the term project itself it is possible to conclude an acceptable definition for virtual project team, which will be a basic ground of this paper. In continuation, it is required to mention that definition of project itself is a temporary activity or assignment, which is assembled for a product or service creation, implementation, release or other organizational activity and is bounded by time and limited financial resources. Herewith not forgetting to add up that project is not only a temporary activity, but it also has temporary organizational structure. („PMBOK GUIDE“, 2000, p. 4)

Therefore, for further use in this thesis, when combining the definition of virtual team as expressed above by Delisle et al. (2001) and project itself, it is possible to conclude, that virtual project teams are temporary groups with temporary organizational structure that work on a same assignment, task or other organizational activity and transcend distance, time zones, organizational boundaries, national borders or continental entities.

1.2. Challenges of Virtual Project Team Management

With assumption that nowadays most more developed or larger organizations have primarily used traditional teams for projects and that eventually occasionally some might have exclusively utilized such teams for earlier projects, this would mean that if such organizations had any tools or systems for the progress monitoring, it might have mainly been dependable on the face-to-face communications such as reporting and diagnosis. Therefore, in such cases, virtual project team management would become more difficult and face one of the first challenges that will be discussed. For continuation, in such cases the progress of a virtual project team would not be measurable in ways

of working and tools as was used to and eventually may not even be visible at the end of the day. Though according to the insights of Rad & Levin (2003) it is highly expected and logical that with correct planning, attention to detail and appropriate attention to unique features of virtual environment and ways of working in such it would be more than possible to create tools for progress monitoring, allowing new virtual organizations to handle and manage virtual teams that cultivate projects on a regular basis. While looking into such situation from the other way around due to poor planning and support it is said to be far more drastic and with way higher losses if such team would fail in comparison to the usual model of a traditional team (Rad & Levin, 2003).

More than likely, according to Rad & Levin (2003) “virtual alliances will be based exclusively on virtual relationships because the required skills might not be contained solely in the lead organization”. Having this in mind, the skills of the organizational project team will be contained in so called hybrid groups of individuals who, as mentioned previously, might be located in different geographic areas, and who might never meet face to face during the life of the project. So here another challenge arises that virtual project teams face are in regards of those organizational functions that deal with people, having in mind human resources in most cases, which takes care of such responsibilities as training and mentoring. Furthermore the team spirit building and most importantly – trust would need important, but more subtle changes. (Rad & Levin, 2003). These departments have to figure out new, innovative and most probably unusual approaches to deal with the issues risen within the team and/or project in order to perform at its best in virtual project teams.

In continuation, going in-depth of the team itself, another challenging situation for virtual project team's is when the team is created of quite different people rather than similar ones (van Knippenberg, De Dreu, & Homan, 2004), which has high probability due to the fact that the team is scattered around the globe. It is not uncommon that differences between people increase the variety of opinions and ideas or perspectives available during teamwork (Cox, Lobel, & McLeod, 1991). The bright side of such variety is that this can improve work based ideas and conversations outcomes and might even result in communication sufficiency (van Knippenberg et al., 2004). However, differences between people also increase the probability of negative team processes such as increased level of stress and arisen conflicts, consequently lowered satisfaction with team, work in general and most importantly distrust (Williams & O'Reilly, 1998). According to Tajfel & Turner (1986) “people generally prefer to work with similar rather than dissimilar others and dissimilarity therefore constitutes a potential inconvenience for team functioning. “

Misztal (1996) argues that trust is seen as being particularly important in both organizations and projects, since it is viewed as “essential for stable relationships, vital for the maintenance of cooperation, fundamental for any exchange and necessary for even the most routine of everyday

interactions.” Accordingly, to achieve well-working relationships between the parties of the virtual project team and to have all the issues above minimized to the lowest available chances it needs to develop from a low-trust base virtual project team to a high-trust base virtual project team in their relating, meaning that virtual project team members have to indulge and embrace trust within the team and in between every other team member.

Meyerson et al. (1996) pointed out the difficulties of establishing trust in such temporary organizations as projects having in mind temporality as a key attribute of his views. Additionally, Atkinson et al. (2006) claims that such new and temporary relationships as virtual project teams increase the importance of trust, since virtual project team parties may have little or even may have no prior knowledge of the other parties' technical or trust standards. Consequently as the team has been gathered for a project – there is a lack of time for in-depth familiarities, which could usually easily be developed from shared experiences or demonstrations of natural vulnerability, virtues or viewpoints. Though here it is important to mention that this temporarily characteristic of virtual project team may conflict with the building of trust, since trust is most often established over a longer period of time that under usual circumstances would include several interactions (Dervitsitotis, 2003).

Following previous paragraph it may be continued by stating that trust in a virtual project team is an interesting and important research focus since successful business relationships are the relationships that are trust-based (Ferraro, 2004). Trust is recognized by several authors to be an essential, key component of higher coherence in the organization (Mayer et al., 1995; Rousseau et al., 1998; Wood et al., 2002). Furthermore, it is stated by Kedefors (2004) that a high level of trust can significantly improve an overall project's performance. Though it is noticeable that only very little academic research have been attempted in order to document the factors that affect trust in a relationships (Moorman et al., 1993; Jin and Ling, 2005).

1.3. Complexity of trust

As it was already acknowledged in the chapter above - trust is an important factor in virtual project team or rather in the whole business-to-business relationship, but it is considered to be highly complex value or differently put – entity which is actually difficult to be measured (Gulati, 1995). Just as virtual team the concept of trust is not new, however, it has become a part of research in project management field only in the recent years. One of the most accurate thoughts in terms of research and trust is well said by Misztal (1996): “even though it has received a great attention, there are so many different views of trust that it tends to confuse more than it clarifies.”

Usually it is said that trust is quite dynamic and yet again complex construct which makes it all mostly confusing due to multiple bases, levels and determinants (Rousseau et al., 1998). Trust as a

concept in general has been applied in a variety of different fields according to its extended versions of theories and concepts mainly based on their natures and characteristics (Ford, 2001; Frost et al., 1978; Good, 1988; Jones and George, 1998). Furthermore, keeping in mind the many complexities of projects or constantly changing project conditions, trust and its theories and concepts are also dependably changing from time to time (Kramer and Tyler, 1996; Rosenfeld et al., 1991).

At the end it is possible to determine, that here is no universal definition of trust which would solely be accepted by multiple authors (Misztal, 1996; Rousseau et al., 1998; Child, 2001), though interestingly, there is an agreement on the importance of trust itself in a business context. Trust is said to enable cooperative behavior, which consequently helps to reduce and minimize conflicts from which nothing worthy could be as an outcome, where organization could also benefit from cost saving due to small need of transaction costs. Trust is also said to promote adaptive organizational forms and promote more effective responses to crisis and a wish to take part in control of a crisis in general (Rousseau et al., 1998). In continuation, trust is also important for problem solving because “it encourages the exchange of relevant information and determines whether team members are willing to permit others to influence their decisions and actions” (Carnevale and Wechsler, 1992, p. 471). Moreover, nothing could express the benefit of trust better than Beslin and Reddin (2004) by explaining that trust is a powerful tool in creation of such valuable as loyalty, that “gives an organization the benefit of the doubt in situations where they want to be understood and believed.”

There are several other definitions of trust: Berkun (2005), Hirsch (1977), Luhmann (1979), Dervitsitotis (2003), Hoffman (2002), Shapin (1994), Habermas (1984), Beslin and Reddin (2004), Moorman et al. (1992), Humphries and Wilding (2004), and Das and Teng (1998). However, in this paper it will be held that it is essentially agreed with Rosseau et al. (1998, p. 395) definition, who define trust as “a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another.” On the other hand, it will be taken into a consideration that Lewicki et al. (1998) believe that trust can be understood also in behavioral terms. Furthermore, it is worth to mention, that a person who believes that a partner is trustworthy, and yet is unwilling to rely on that partner, really has only limited trust (Moorman et al., 1992).

Overall, trust is a multi-dimensional and complex phenomenon (Wood et al., 2002). It might be useful to mention that scholars disagree on whether some factors affect trust or if it is actually the other way around. For example, Sullivan and Peterson (1982) assess trust by measuring sincerity, caution, effort in establishing a relationship, equality, goal congruence, consistency, and expectations of cooperation. Crosby et al. (1990) assess trust by measuring sincerity, competitive behaviors, honesty, and beliefs about information sharing. Moorman et al. (1993, p. 83) argue that some of these

dimensions are viewed more appropriately as factors that influence trust than components of trust itself, which corresponds well with the view on trust in this paper.

1.5. Trust and Project Success

In considerations of the “human dimension of project management” - trust is identified as the most significant determinant for project success accordingly to Pinto et al. (2008) and is considered vital to ease the processes of cooperation within the project team and the environment itself (Kramer, 1999; Wicks et al., 1999). The relationship between trust and project success is additionally highlighted by Kadefors (2004, p. 176) by saying that with a help of trust people can interact spontaneously while not wondering if there are any hidden motives or while not looking for people who are responsible for problems or risks in regards of revealing information.

In conclusion, in order to manage a successful project, to ensure its ease and friendly environment it is important to make sure that trust is one of the core, most significant virtues, that have been established within virtual project team. As continuing Pinto et al. (2008) thoughts it is determined that trust has strong influence on success of the project together with cooperation in partnerships and improvements in relationships.

2. METHODOLOGY OF TRUST EVALUATION IN VIRTUAL PROJECT TEAM

Trust is a sensation that is said to be a must to have, as it is one of the senses that help an interaction to immediately become easy (Romahn and Hartman, 1999, p. 233), and there is settled opinion worldwide on the value trust brings in, when studying fields of social sciences or more specifically human behavior (Bigley and Pearce, 1998). As Romahn and Hrtman (1999) continues – “the human interactions required in any organization or project setting essentially require trust”.

Consequently, as it has already been settled on the complexity of trust and its importance for virtual project teams and overall project success, in this chapter the main subject will be the analysis of the methodologies found during literature review for the evaluation of trust and its dimensions, evaluation of trust in teams and virtual project teams and eventually out of which the essential method of trust evaluation in virtual project team for this thesis will follow.

2.1. Inputs-Processes-Outcomes model

The inputs-processes-outcomes (I-P-O) model (Hackman & Morris, 1975) is the leading structure that is used in the study of teams and has given a solid ground for organizing and integrating the literature review on virtual teams in the research of L.L. Martins et al (2004).

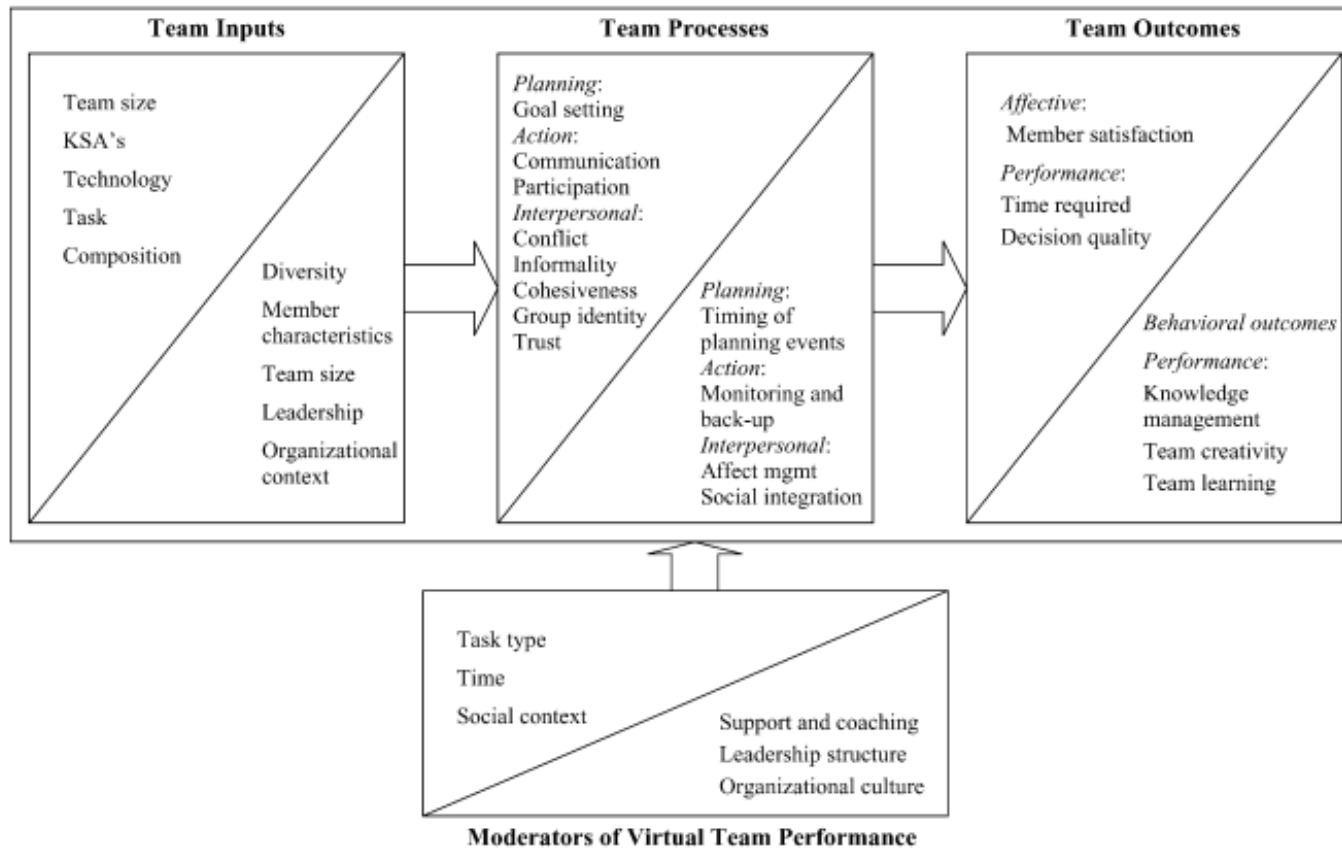
To begin with, the inputs in this model represent the beginning conditions of a team, such as its characteristics, human resources details, materials and further. Moving on, the processes in this model represent interactions among the members of a project team or group as they perform on a given assignments, project or task such as planning, actions and interpersonal interactions. As further follows, the outcomes in this model represent consequences of a project team’s or group’s functioning on the assignment and off the task. The model could be seen in more detail in the Figure 1 on a page 19, while the relevant findings of this model will be discussed in between.

2.2. I-P-O interpersonal team processes

As it could be seen from the Figure 1 – trust is one of the components of the I-P-O model in the processes section, which is the main reason why the model has been selected for further investigation. Although, for an overall overview and better understanding a brief look-through will be performed over the section of team processes.

In the team processes section accordingly to the model it could be seen how teams are achieving consequently following outcomes (Weingart, 1997). They are divided as follows: into planning, action and interpersonal processes (Marks, Mathieu & Zaccaro, 2001).

I-P-O Model of Virtual Team Functioning*



*Within each category of variables, those that have been examined in research on VTs are listed above, and those in need of future research are listed below, the diagonal.

Figure 1. The I-P-O model

Planning processes cover such components as goal setting, formulation of a vision, mission and strategy, also timing of planning events. Action processes are such activities that occur during the general work of a team or group while reaching for the goal and assignment accomplishment, not limited to communication and participation, but also combining coordination and monitoring of the progress and back-up (L.L. Martins et al 2004).

Moving on to the most essential part of the I-P-O model for this thesis, interpersonal processes refer to the core components of the relationships among team, project or group members and cover such variables as conflict, informality, cohesiveness, group identity, affect management, social integration and most importantly – trust. According to the opening statement of L.L. Martins et al (2004): “To date, the majority of VT (*aut. note* -virtual teams) research pertaining to interpersonal processes has focused on conflict, uninhibited behavior such as swearing and name-calling, informality of communication among group members, interpersonal trust, and group cohesiveness.”

Although there are multiple researches done on variety of interpersonal processes, accordingly to the aim of the thesis only the author’s findings on trust will be covered throughout this chapter. To provide simplicity and more systematic view of the research done with a help of I-P-O model, the essential findings made could be listed with brief bullet points below:

- Trust has been recognized as one of the most important factors on the impact on the effectiveness of activities that are in need of coordination (McAllister, 1995);
- According to the multiple researches, trust is valuable for virtual teams as it also has an impact on psychological intimacy, by minimizing its negative effects, which generally are caused by geographical split of the team members (Handy, 1995; Jarvenpaa, Knoll & Leidner, 1998; Sarker, Valacich & Sarker, 2003);
- The most crucial factors of trust in a virtual environment are time (Walther, 1995; Walther & Burgoon, 1992), intensity of communication between the team members and last but not least an ability to manage and deal with an uncertainty in given task or technical area (Ratcheva & Vyakarnam, 2001);
- Trust in virtual teams has to develop far faster than in the regular team, due to the temporality of the assignment, possible urge and importance of the task and due to the possibility of short period of time given for a proper interaction (Alge et al., 2003; Jarvenpaa & Leidner, 1999; Kanawattanachai & Yoo, 2002);
- Additionally it has been noticed that trust also has a dependability on the understanding of ones abilities as a part of a virtual team and self-conscious integrity, while also keeping in mind the virtue of wanting to trust others beforehand. Though ones abilities will have less of an impact during the time and progress of the project (Aubert & Kelsey, 2003; Jarvenpaa et al., 1998);

- Trust might rapidly increase if face-to-face meetings would be initiated during the “go live” period of the project or virtual team’s life cycle. (Coutu, 1998; Suchan & Hayzak, 2001);
- Overall performance might highly effect the levels of trust, where low performing virtual team, would have a slow paced decrease of trust within the team and vice versa accordingly with a successfully performing virtual team. (Kanawattanachai & Yoo, 2002);
- Consequently, just as in a traditional team, trust in virtual teams has been positively affected by job satisfaction (Morris, Marshall & Rainer, 2002) and by enhanced relationships at work (Sharifi & Pawar, 2002).

In conclusion, relations of trust with other variables mentioned in this chapters ‘findings are captured in the Figure 2 below, where accordingly to the literature review findings have been grouped into three sections – environmental factors effecting trust, factors effected by trust and factors effecting trust and possible model of trust connections with other variables have been adapted.

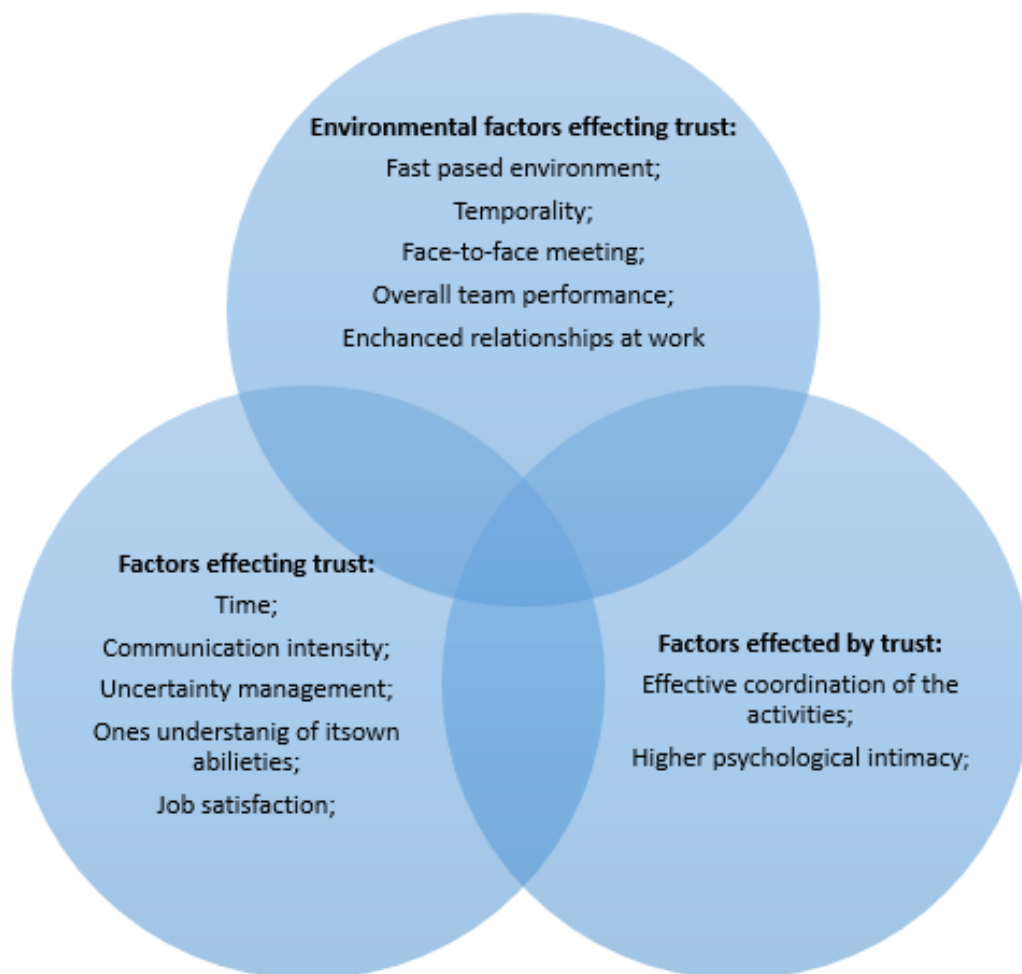


Figure 2. Relations of trust (designed according to the review of L.L. Martins et al, (2004))

Even though a lot of research results have been found, none of them were provided with a possible tools for the evaluation. Herewith, it may be concluded, that unfortunately, during I-P-O model review, an answer to the main research problem have not been found and the presented model could not be adapted for the evaluation of trust in virtual project teams.

2.3. Dimensions of Trust

In continuation, in this chapter another model of trust, which could be seen in a Figure 3 on page 22 will be reviewed. Although it has similar structure and variables as the one designed according to the literature review in the previous chapter, it will help to broaden the theoretical background with higher complexity of trust dimensions.

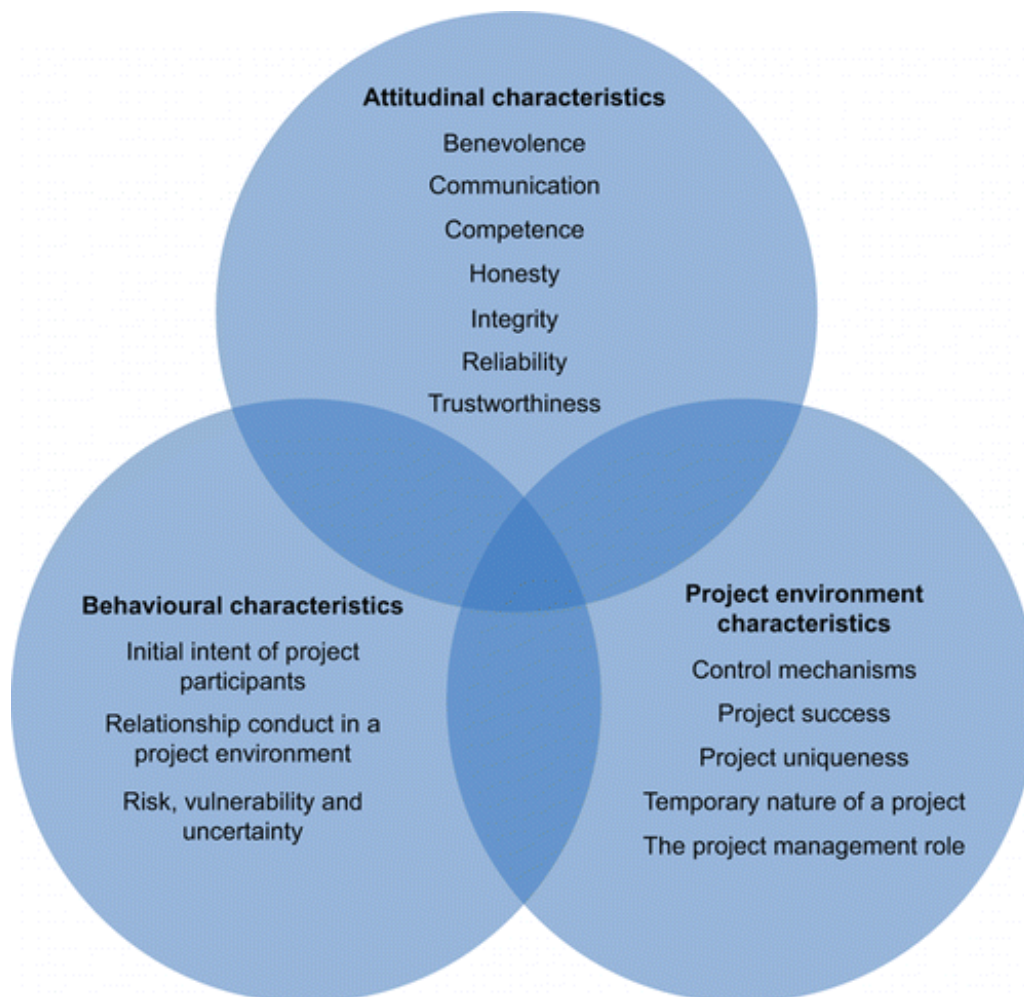


Figure 3. The dimensions of trust (as extracted by G. Brewer and S. Strahom (2012))

The dimensions of trust in this particular model, which was created by G. Brewer and S. Strahom (2012), are the three characteristics – attitudinal characteristics, behavioral characteristics and project environment characteristics.

According to the authors of the dimensions of trust model, attitudinal characteristics are combined of seven dimensions as follows:

- Benevolence, which could be best explained by citation of Lamsa and Pucetaite (2006): “Benevolence is one party’s belief that another party will act compassionately, and is considered a common characteristic of trust”.
- Communication, which is said to be essential in effectivity between virtual project team members in all possible ways of project and its management. According to PMBOK there is “true importance of communication in facilitating trust with significance of communication in achieving project success, acknowledging also the connection between trust and communication in the project environment.”
- Competence, as Hartman (1999) wrote: “is described as one party's belief that another party is competent to undertake the allocated work”. Having that in mind, such ability of the individual virtual project team members is a fundamental trustworthiness element. (Butler, 1991; Deutsch, 1958; Gabarro, 1978; Sitkin and Roth, 1993).
- Honesty, which according to Munns (1995): “implies that there will be no attempt to deceive, and is considered a personal characteristic associated with objective credibility.” It is also said, that information, which is shared in an open way, when mistakes are admitted rather than avoided, also when virtual project team members act in a way as it was agreed, then such honesty portrays trustworthiness.
- Integrity, as Mayer et al. (1995) wrote: “Integrity deals with the trustor’s perception that the trustee will adhere to a set of principals which are acceptable to the trustor, with this perception implying a degree of reliability and dependability towards the trustee”.
- Reliability, which allows virtual project team members to proceed in everyday activities with confidence, which at the end of the day contributes to the overall environment, which consequently helps to grow trust in the relationships of the team. On the other hand as expressed by Lander et al. (2004): “unreliable behavior inhibits the development of trust and fosters an environment which is distrusting.”
- Trustworthiness, as Luo (2007) acknowledge: “A key component in this regard are the procedures designed to distribute justice within the project team, and the perception of justice thus obtained during interactions between trustors and trustees”.

Additionally, some of the attitudinal characteristics dimensions could be confirmed and the characteristic itself could be even expanded by Wong et al. (2005) identifications of trust dimensions that would similarly affect the trust in between of virtual project team members. According to its findings, characteristic could be broadened with such dimensions as problem-solving, openness,

alignment, information flow, unity, respect, compatibility, long-term relations, financial, adoption of alternative dispute resolution, reputation, and satisfactory terms. In another study, Zaghoul and Hartman (2003) identified three core bases of trust: competence trust, integrity trust and the third - intuitive trust which is based on the sensation and general feeling of trust for another party. Consequently, it should be mentioned, that such dimension of trust – intuitive trust – was never before found in literature review and/or mentioned in any of the articles adding a new variable into the trust complexity on this research.

Moreover Dasgupta (1988) suggests that the definition and the meaning of trust supposed to cover hopes and expectations about the actions that other parties might have taken in the past or the future even though such actions have not been initially required and agreed upon. What is more, trust could become even more complex due to the fact that there exists also “a cultural effect” by which it is meant that an act that might seem as trustful for one party might not be seen as trustworthy for another due to different cultural background (Rowlinson et al., 2008).

In continuation, according to the authors of the dimensions of trust model, project environment characteristics are combined of five dimensions as follows:

- Control mechanisms as explained by Cong et. Al (2007): “are utilized in a project setting to control risk, mitigate uncertainty, and protect the vulnerability of stakeholders, providing penalties for non-performance. Their presence is claimed to install a degree of confidence in the respective parties, and it is further claimed that this can activate trust”. Consequently it is said that in presence of trust with control mechanisms, the control itself could be reduced and save the some additional costs for the organization additionally while virtual project team can work without fear (Aubert and Kelsey, 2000).
- Project success, as written and explained by Kadefors (2004): “If trust is present, people can spontaneously engage in constructive interaction without pondering what hidden motives exchange partners might have, who is formally responsible for problems, or the risks of disclosing information.” Additionally, maintaining healthy environment, growing partnership and cooperation in between one another - trust has high impact on the overall project success. (Pinto et al., 2008).
- Project uniqueness, which has to be revised by the management of the project as explained by Hartman (2002) it create challenges for trust building, as it “presents a high degree of randomness and uncertainty, which hinders the development of trust. The people forming the project team may also only be involved because they are available and possess the required skills and expertise, and this can result in a lack of motivation in terms of achieving universal project goals.”
- Temporary nature of a project, which complicates the long-term trust development in virtual project team members relationship with one another (Munns, 1995), though the time is one of

the most essential part of building trust as it was discussed in previous chapters, due to as Hartman (2002) explains “normally being limited to the time frame in which the project must be completed”.

- The project management role, as briefly considered by PMBOK supposed to build the team and stimulate trust within it and project environment.

It could be said, that project environment dimensions have also been reviewed during literature analysis in earlier chapters, having in mind that most of these have been the definitions and reasons of the need of trust in virtual project teams. Though it would be beneficial to mention that some dimensions are working in quite different perspective, for instance, control mechanisms in a way are making a team member feel controlled and not entirely trusted, though the main goal of such mechanisms are a consequence of the risk reduction (Wong et al., 2007).

On the over hand, to contribute to environmental characteristics it would be beneficial to look into another complexity variable, which gives even more diversity for trust. Trust could develop over the life cycle of the project as Walker et al. (2008) points out: “trust is developmental and can take place at different phases of a project life cycle and the types of trust begin as an institutional type of trust at the initial planning stage and a calculative type of trust at the transaction stage, and will subsequently develop into relational trust near the late and realization stage of the design and production process.”

Last but not least, according to the authors of the dimensions of trust model, behavioral characteristics are combined of fewer – only three dimensions, though at the higher level of complexity, as follows:

- Initial intent of project participants, which is the opposite of what is stated by Munns (1995): “Non trusting intent may be characterized by poor communication, and a restriction of information, leading to scenarios in which the actions of team members are motivated by self-interest, and not the interest of the overall project”.

- Relationship conduct in a project environment, as written by Pinto et al. (2008): “Fostering trust is part of the team building process, which must necessarily require the formation of interpersonal relationships”. Continually, it is expected in advance that all the members will be building the relations and community, that all actions taken are honest and with high levels of tolerance.

- Combination of risk, vulnerability and uncertainty. Where the trust dimensions come in, is that members would be mostly driven by the uncertainties and risks their facing in their daily performances, while seeking for the ability to growth, each member should be motivated to develop new skills, to broaden the knowledge and consequently to minimize the risks.

In addition, it could be said that risk, vulnerability and uncertainty are the most frequently cited dimensions of trust, and most probably could be called an integral part of trust in virtual project teams. It is also important to note that according to Romahn and Hartman (1999): “potential gains resulting from accepting any risk will be forfeited if a party chooses not to trust.”

In continuation, trust is actually seen as irreplaceable sense in risky situations. Due to the circumstances, which require each individual to take part in a risk-taking processes both in business or everyday life, where individuals have no choice and/or no knowledge of the situation itself and therefore trust becomes the only available option. It is possible to state that risk is part of trust and the level of trust will most likely depend on the amount and coverage of the information available and on the uncertainties out of which the picture of the overall situation will be formed into possible predictions (Bhattacharya et al., 1998).

Reviewing risk further, trust exists in an uncertain and risky environment and since the individual who decides to take risk, has to acknowledge the uncertainties that are unavoidable in risk-taking situations then in such cases trust become a whole new subject – an acceptance of risk (Sheppard and Sherman, 1998). Yet, according to Chan et al. (2010, p. 69) uneven levels of commitment amongst virtual project team members and risks taken or rewards not shared fairly between virtual project team parties “are still regarded as the potential obstacles in implementing partnering or relational contracting”.

In conclusion, as it has already been established multiple times that developing trust among virtual project teams has always been considered important for successful projects, alliances and relational contracting (Chan et al., 2010; Cheung and Rowlinson, 2005; Wong and Cheung, 2004), it becomes unclear if trust in a relationship could in general have been fulfilled in respect of the multi-faceted nature of the trust itself. Nonetheless, it could be easily said, that this model of trust characteristics and its dimensions have acknowledged same core features of trust, though unfortunately, the presented model could not be adapted for the evaluation of trust in virtual project teams.

2.4. Critical dimensions of a team

According to Rad & Levin (2003), who will be the main source of theoretical background further in this chapter, success of every individual virtual project team member in performing day to day work duties can be predicted depending on the behavioral dimensions of that person. In consequence it is easily understandable that in such sequence the success of the overall virtual project team would be the total sum of the individual success of every virtual project team member.

This new approach in this thesis leads to review of a concept of ten critical dimensions of a virtual project team, which could be seen in Figure 4 on the page 27. As the authors claimed “effective performance in these ten critical areas will lead to maximum performance for the individual and, by extension, to optimal performance of the team.”

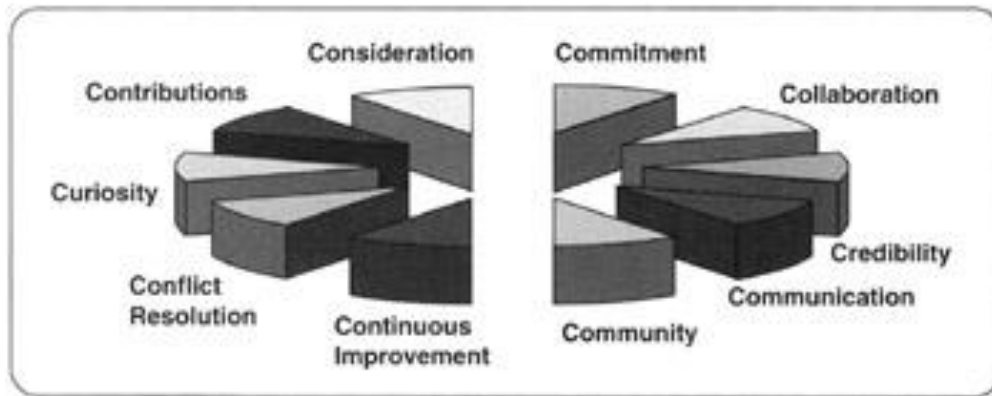


Figure 4. Critical dimensions of a team (Rad & Levin (2003))

2.5. Virtual Team member attributes 360-degree assessment tool

Virtual Team member attributes 360-degree assessment tool is an adaptable team performance appraisal model. Such appraisal model is beneficial in performance evaluations where multiple feedback approach is requested, for instance when there is a need to align both – individual and project teams work (Rad & Levin, 2003). With a help of this tool it is possible to gather the feedback on the same subject from the variety of perspectives and from different individuals such as colleagues, clients, team members and managers.

Primarily this tool has been designed for an assessment of performance of one another in a team, though with slight adaptations, 360-degree instrument could be also used for evaluation of hectic areas which need to be enhanced, developed, changed or even newly established. Furthermore, this model is acceptable not only for the virtual teams, but also for the self-assessment. With a help of combination of self-assessment and how others perceive one, team member could identify its strengths and weaknesses in an easier way.

Alternately, there is always an option to perform the evaluations in an anonymous name, when the assessment would be analyzed by the neutral third party and prepare the results. Though in an ideal situation this assessment tool would be reviewed prior the actual projects’ kick-off meeting, where together with the whole team, the key performances would be selected for the evaluation.

The tool itself is based on critical dimensions of a team which were shown in a Figure 5 in the previous chapter, with fifteen specific statements that would be further evaluated by the member of

virtual project team and generalized by the overall rating. Every statement could be evaluated on five-level Likert scale for the more comfortable assessments, with below meanings:

1 = Never

2 = Seldom

3 = Sometimes

4 = Often

5 = Always

In conclusion, the appearance of the 360-degree assessment tool could be reviewed in the Annex 1.

2.6. Critical dimensions of a team in 360-degree tool

To better understand the tool, all ten dimensions will be reviewed and described according to the tool questionnaire in the following chapters of 2.6.

2.6.1. Commitment

First dimension used in the assessment tool is Commitment which is expressed through a strong commitment to the project goals and objectives. Initially it is said that commitment is an agreement in terms of work that has to be done and performed according to the time given, within a budget and in terms of quality and specifications. This variable is focused on the concentration on the contribution one makes to the project, while keeping in mind its initial core virtues as a common purpose. Consequently, it is said that if the members of the team stay committed throughout then cooperative relationship, trust in one another and increased motivation would follow.

When filling in the virtual team member attributes 360-degree assessment, the respondent has to evaluate commitment of its every team member in as scale from 1 to 5 of below following statements:

- Completes assigned tasks according to the project schedule when faced with competing priorities between the work of this projects and other assigned work;
- Recognizes how his or her assigned tasks support the project's goals and objectives and the organization's strategic goals and objectives;
- Establishes objectives for the project that are aligned with the overall organizational goals and objectives;
- Keeps track of details, and follows up on action items and tasks;

- Affirms priorities frequently so less important tasks do not dominate more important ones;
- Considers risks to be opportunities to enhance overall project value;
- Plans ahead and follows through to complete work on schedule;
- Considers organizational and project constraints and project assumptions in planning and executing assigned tasks;
- Completes requests from others on the project team in a timely manner;
- Puts forth more effort and takes more initiative than expected in order to complete assigned project work;
- Takes corrective action as required to ensure that all work is done on schedule and meets performance specifications;
- Works to ensure that he or she is considered to be among the most reliable and dependable in all aspects of the work of the project;
- Actively works to prepare the project team's charter and other accompanying policies and procedures;
- Takes initiative to identify and resolve any project-related problems that need to be solved;
- Works to improve one's own results on assigned tasks in order to fully contribute to the work to be done by the project team.

2.6.2. Collaboration

The second dimension that is about to be explained according to 360-degree assessment tool is a collaboration. This dimension appears as a collaborative environment for project work. Partly this dimension is in a collaboration with commitment that a virtual project team member would not only be aware but rather understand project goals and objectives, how ones relate to the organizational deliverables and how their performance would affect them. Therefore, if the value after the evaluation of collaboration is high, then ideally the members of the team should be taking part in an everyday decision-making procedures that have an impacts on their work performance by lifting it up even higher. Consequently, virtual project team members become more reliable as this virtue is based on the encouraging the members to share their thoughts, knowledge and concerns or ideas and as stated by Lander et al. (2004): "Unreliable behavior inhibits the development of trust and fosters an environment which is distrusting".

When filling in the virtual team member attributes 360-degree assessment, the respondent has to evaluate collaboration of its every team member in as scale from 1 to 5 of below following statements:

- Encourages cooperation and teamwork on the project;
- Seeks the opinions of others on work in progress or completed;
- Seeks the advice of others who are perceived as subject matter experts in areas of the project in which he or she may lack expertise to advance knowledge;
- Makes it easy for others to disclose information, share idea, and openly talk about problems and concerns;
- Takes initiative and offers both informal and formal assistance to others on the team;
- Develops cooperative, rather than competitive, working relationships with others on the team;
- Involves others in his or her decision-making and problem-solving tasks when appropriate;
- Maintains friendly relationships with other team members;
- Determines innovative ways to optimize cooperation among project team members;
- Strives to unite the team in common actions and rewards;
- Ensures all team members participate in discussions concerning the team's mission, scope, and deliverables and how best to work toward success;
- Encourages team members to work toward consensus before decisions are made;
- Expresses confidence in the team's ability to meet or exceed the project's goals and objectives;
- Examines different perspectives and alternatives concerning issues that are being discussed;
- Develops an appreciation for the views and ideas of other team members.

2.6.3. Credibility

Moving on to the third dimension it will be reviewed what aspects of credibility are required for the successful project performance. Generally said, the credibility has to be shown in the all aspects of the project work, starting with productive time management, timely information management and finishing with helping to enhance other team members' work on the project. Also, here it is important to know not only your own responsibilities and roles, but rather the whole teams'.

When filling in the virtual team member attributes 360-degree assessment, the respondent has to evaluate credibility of its every team member in as scale from 1 to 5 of below following statements:

- Appears to be thoughtful in personal interactions in team situations;
- Shows respect for other team members;
- Helps team members establish a foundation of trust among one another;
- Handles issues that arise on the project according to procedures defined by the team;
- Provides information to others promptly on developments that may affect project work;
- Expresses confidence in the skills and abilities of others;
- Displays a nonjudgmental attitude toward the ideas and work of other team members;
- Prepares for project team meetings;
- Is able to cope in situations that are ambiguous or uncertain;
- Takes time to gather and analyze information before making decisions that affect the project;
- Demonstrates high performance standards, acting as a role model for others on the team;
- Organizes and manages time productively;
- Takes responsibility for statements and points of view;
- Has a well-developed sense of personal standards and principles to guide behavior;
- Works to ensure that the project's technical and performance goals are met, even if this requires compromises in terms of cost and schedule.

2.6.4. Communication

In continuation, the fourth dimension of 360-degree assessment tool is communication. Here the evaluation is performed on the effective communication between project team members and stakeholders. As face-to-face meetings are mostly out of the question for some projects, communication which is important in traditional teams become even several times more essential to the virtual project team having in mind rare open and especially frequent virtual communications. It is said that high evaluated levels of communication helps to maintain trust and momentum in between the virtual project team members. Furthermore, as Aubert and Kelsey (2000) declare: “Trust can free up the exchange of information, which is vital to effective and efficient project outcomes that might not happen in the absence of trust”.

When filling in the virtual team member attributes 360-degree assessment, the respondent has to evaluate communication of its every team member in as scale from 1 to 5 of below following statements:

- Recognizes the most important information and communicates it to others effectively, concisely, and clearly;
- Summarizes what others have said to clarify understanding;
- Prepares written communication in a way that all members of the project team easily understand;
- Seeks additional information by asking for information to clarify items;
- Provides clear, concise, and logical answers to questions from other team members;
- Encourages the expression of diverse points of view in communication with other team members;
- Avoids the tendency to dominate project team meetings;
- Listens to what others say in a way that expresses understanding;
- States opinions in a persuasive, clear, and logical manner;
- Establishes processes for interpersonal communication among project team members;
- Appreciates and recognizes individual differences in communications with project team members;
- Asks open-ended questions to encourage information exchange;
- Establishes and manages formal and informal communications networks with project stakeholders;
- Considers the nature of the alliance with the people involved in the communication;
- Relates to other team members as a person of equal worth and value so that communication is based on reciprocal and mutual respect.

2.6.5. Community

Community as a fifth dimension of 360-degree tool is considered as a sense of one within the team but with high focus on professional responsibility in all the project activities. Trust and openness are essential tools for successful work of a virtual project team. It is expected that the virtual project team members will join the team with intuitive trust (Zaghloul and Hartman (2003) and with granted benefit of the doubt. To increase the sense of community, virtual project team members should act in tolerance, honesty and understanding of possible differences between one another and values of others. Furthermore, not only the community but also the sense of trust would be greatly enhanced if sharing of experiences, best ways of working, lessons learned and ideas would become a basic ground of virtual project team.

When filling in the virtual team member attributes 360-degree assessment, the respondent has to evaluate community of its every team member in as scale from 1 to 5 of below following statements:

- Shows an awareness of the social and cultural contexts of problems;
- Shares information appropriately within the professional community;
- Shows sensitivity to project confidentiality requirements;
- Elicits and respects the values of others;
- Exhibits sensitivity to others who are from a different culture;
- Shows awareness of the impact of different values, obligations, moral rights, and personal principles in choices and decisions that are made;
- If there is evidence of unethical behavior, identifies it and suggests the most appropriate corrective action;
- Exercises tolerance and compromise in interaction with team members and project stakeholders;
- Adheres to legal requirements and ethical standards in project work;
- Demonstrates the desired skills, behavior, and attitude to follow on project work;
- Exercises appropriate judgment in order to protect the community and project stakeholders;
- Gathers, analyzes, and integrates information in order to determine methods of fair resolution if there are competing requirements and objectives;
- Exhibits empathy toward other team members, especially in the face of competing pressures among project objectives;
- Recognizes that a team decision will generally be more complete than a decision made solely by one person on his or her own and works to involve others as appropriate;
- Shares lessons learned and best practices with other team members in a manner that is unobtrusive in order to contribute toward overall team success.

2.6.6. Continuous improvement

Moving over to another half of the dimensions according to the 360-degree assessment tool continuous improvement will be discussed further. According to the tool authors the ideal situation would be if every virtual project team member would have a development – personal growth and learning plan. It is said that such continuous improvement programs should help to encourage the

whole team by growing its individual members, especially when it should end up with procedures and processes improvements.

When filling in the virtual team member attributes 360-degree assessment, the respondent has to evaluate continuous improvement of its every team member in as scale from 1 to 5 of below following statements:

- Leverages the contributions of others and available resources to the greatest extent possible in order to increase personal knowledge and skills;
- Redefines problems so they are viewed as possible opportunities;
- Looks for opportunities to continually upgrade knowledge and skills;
- Performs a self-assessment of his or her strengths and weaknesses;
- Actively seeks feedback from others on the project team on project performance;
- Values feedback that is received on working relationships;
- Provides feedback to other team members regarding working relationships and project performance in a nonthreatening manner;
- Uses those constructive comments that are provided by others to their maximum extent;
- Applies new information and practices to improve project performance;
- Determines changes to the team's procedures as defined in its charter to increase their effectiveness;
- Determines changes to the organization's project management methodology to increase its effectiveness;
- Identifies lessons learned throughout the project and communicates them to other team members as appropriate;
- Complies internal and external best practices in project management and makes them available to project team members;
- Provides mentoring and coaching to other team members, as appropriate, in order to transfer knowledge and best practices;
- Strives to keep options open, and looks for new alternatives or breakthroughs to obtain desired performance results on technical project issues.

2.6.7. Conflict resolution

In continuation, effective conflict resolution among the team members will be covered. As conflicts are more than certainly arising in traditional teams it for sure might be expected in such complex team as the virtual project team. In general, the team members have to be able to handle

conflict situations and in some cases, conflicts might be arisen in small group of members in a team, where confidentiality and experience handling problems would be highly appreciated. Knowledge, that virtual project team can operate during such difficult times as conflicts due to the fact, that they are resolved in trusted, open and cooperative manner increases the motivation, trust and overall job satisfaction.

When filling in the virtual team member attributes 360-degree assessment, the respondent has to evaluate conflict resolution of its every team member in as scale from 1 to 5 of below following statements:

- Seeks agreement on specific actions when conflicts arise among team members;
- Discusses possible win-win solutions to help resolve conflicts on the project team;
- Helps the team members involved generate possible alternatives if asked to help resolve a conflict;
- Remains neutral when asked to resolve a conflict between other team members;
- Focuses on issues and not on personalities;
- Tries to avoid the need to escalate the resolution of conflicts to those outside the project team;
- Displays openness and flexibility to conflict opinions when presenting point of view;
- Resists reacting defensively, and keeps an open mind when others disagree with his or her point of view;
- Uses creativity to resolve differences among team members;
- Identifies conflicts to maximize achievement of project objectives;
- Exercises judgment in determining the fair resolution of project conflicts among team members;
- Productively challenges existing paradigms when conflicts arise, so that they are viewed as opportunities rather than solely as problems to be solved;
- Fosters an attitude among team members that conflict can be useful in reducing the risk of intellectual complacency or a tendency toward groupthink;
- Ensures that conflicts are addressed in a way that people do not withdraw from one another and in a way that overall team motivation is strengthened;
- Considers a resolution approach that is most appropriate given the specific phase of the project life cycle.

2.6.8. Creative curiosity

Another 360-degree tool dimension is creative curiosity. In this assessment tool, creative curiosity stands as a mindset to look for an improvements in processes, techniques, tools and even deliverables, but looking out for sometimes even radical solutions. Such mindset of a team would help to develop a sense of community, accomplishments and most importantly it would be based on the sensation of competence and knowledge, growth, which would help building an overall trust during time.

When filling in the virtual team member attributes 360-degree assessment, the respondent has to evaluate creative curiosity of its every team member in as scale from 1 to 5 of below following statements:

- Strives to generate new ideas and creative solutions to problems;
- Suggests changes to existing processes and procedures in order to minimize bureaucracy and maximize effectiveness;
- Identifies any team-related barriers in order to remove them to improve effectiveness;
- Determines innovative ways to optimize cooperation among project team members;
- Seeks opportunities for adding value to the project's product or service;
- Considers alternatives and generates contingency plans when solving problems;
- Pilots the use of new tools and technologies to facilitate project work;
- Challenges existing approaches in order to determine optimum ways to meet people objectives;
- Acquires new knowledge to refine/expand potential alternatives to problems;
- Seeks innovative solutions to meet the project's goals and objectives;
- Shows genuine interest in the work under way by other team members in order to contribute new ideas whenever appropriate;
- Experiments with new approaches in order to later inform team members of possible changes in team processes to promote effectiveness;
- Helps the team to establish guidelines, rather strict rules and procedures, to promote flexibility and innovation in project work;
- Asks probing questions during team meetings or one-on-one communication with genuine interest in taking the discussion beyond the general level;
- Listens to as many stakeholders as possible, even to those people who may not have a direct interest in the projects outcomes, in order to broaden perspectives.

2.6.9. Contributions

Looking forward, such bravery and curiosity leads to another 360-degree tool dimension where recognition of the other virtual project team members could be found. The evaluation of contributions of every individual of a team in terms of reaching goals and objectives surely goes well with trust. According to the authors of assessment tool Rad & Levin (2003) “early success can help build winning attitude and set the direction of the entire project toward success”. Having that in mind with a help of early evaluations of contributions it is possible to set a winning mindset of the team and create great motivational pattern.

When filling in the virtual team member attributes 360-degree assessment, the respondent has to evaluate contributions of its every team member in as scale from 1 to 5 of below following statements:

- Sends personal e-mails to or telephones others on the team when they accomplish something significant on the project;
- Acknowledges and recognizes the contributions of other team members to his or her work;
- Recognizes these team members who champion ideas as well as those team members who support the ideas of others;
- Relates to team members by recognizing and appreciating individual differences;
- Analyzes internal and external influences on team performance to remove ant barriers that may hinder performance;
- Takes action to reduce any negative impact on project performance;
- Compares project outcomes against the defined scope and uses this information to recognize the work done by other team members;
- Works with the team to establish agreed-upon performance measurement criteria for the team and each individual member;
- Provides feedback to team members in a way that is both constructive but also recognizes success;
- Works to help unite the team in common actions and rewards;
- Develops win-win strategies for both individual and team goals;
- Works to make sure that everyone has an opportunity to contribute ideas and concerns;
- Requests information from others in order to fulfill assigned responsibilities in a timely manner;

- Works to ensure that all types of project tasks, even administrative ones, are considered essential to overall project success;
- Recognizes that one's personal success is dependent on the overall team's success in terms of project goals and objectives.

2.6.10. Consideration

Last but not least dimension of 360-degree tool is consideration. Long lasting relationships in between of virtual project teams could be built and strengthened while helping others to succeed. Goodwill, good deeds and consideration are always welcome in strong teams, where people are genuinely heard, especially during problem solving periods, when it is possible to trust, to be listened to and understood. Consequently, such virtue is always coming back, meaning that goodwill always returns as a goodwill and such way of working is a concrete base for trust.

When filling in the virtual team member attributes 360-degree assessment, the respondent has to evaluate consideration of its every team member in as scale from 1 to 5 of below following statements:

- Treats other team members in a fair and consistent manner;
- Shows a willingness to take time to listen to and understand the points of view expressed by other team members;
- Shows genuine concern and interest even if he or she disagrees with another team member;
- Avoids making personal accusations toward other team members;
- Realizes the importance of taking the appropriate time to provide advice and direction to others;
- Provides feedback focused on problems or solutions, not on personalities;
- Remains attentive and interested in team meetings and conference calls even if one's own work progress is not being discussed;
- Demonstrates empathy toward others;
- Communicates in a manner that is not condescending to others on the team;
- Shares beliefs and feelings with others on the team so as to be self-disclosing;
- Appears to be in control of any personal differences in interpersonal relationships;
- Provides opportunities to promote long-lasting relationships among team members;
- Volunteers services and support to others from the very early stages of the project;

- Works to ensure that other team members recognize his or her assistance as instrumental toward their success;
- Refrains from attributing self-serving motives to other team members.

2.7. Conceptual model for further research

Most of critical dimensions of the team could be recognized in previously seen trust models, which leads to the probability, that by evaluating such critical dimensions it would be possible to evaluate the level of trust in virtual project team. Therefore, based on the last two chapters of trust and critical dimensions, there is a possibility to create a new conceptual model, which will be used for further research and questionnaire. The interpretation of dimensions is provided further in this chapter.

- **Commitment and Reliability**

Reliability was explained as confidence in performing everyday activities while commitment was said to be an agreement to perform the assignments in accordance to specifications and when reviewing the questionnaire statements of commitment its was seen that the core axis of the statements where knowledge, attention to details, planning, initiative and improvements which consequently leads one to the confidence and therefore reliability in terms of other virtual project team members.

- **Collaboration and Initial intent of project participants**

Initial intent of project participants in trust dimension was defined as selfless actions with interest in overall project, sharing of information and good communication in between while collaboration was said to be a commitment to relate to organizational deliverables, understand its goals and objectives and to share thoughts, knowledge, ideas and concerns.

- **Credibility and Integrity**

Integrity was indicated as reliability on the perception that trustee will act according to the set acceptable principals while credibility was said to be knowledge of not only your owns' responsibility , but the whole teams', also productive time, information management, which could mainly be productive only by following already established rules of ways of working.

- **Communication and Communication**

Communication in trust dimension was clarified as essential in between virtual project team in regards in its effectiveness while in critical dimensions communication was explained in more details by stating that it is even more essential in virtual project teams than in regular team as open communications help to build trust and trust helps to open up communications, which conclude in overall efficiency.

- **Community and Relationship conduct in project environment**

Relationship conduct in project environment was explained as team and community building with honest action and tolerance while community was said to be a sense where virtual project team members promote honesty, tolerance, understanding and where openness and trust is essential.

- Continuous improvement and Risk, vulnerability and uncertainty

Risk, vulnerability and uncertainty in trust dimension was defined as drive to grow, motivation to develop new skills and knowledge broadening while continuous improvement was said to be willingness to grow, develop and learn and when reviewing the questionnaire statements of continuous improvement it was seen that the core axis of the statements were looking for the opportunities, redefining, feedback, assessment, changes and striving for open options.

- Conflict resolution and Honesty

Honesty was indicated as credibility and trust that other party will not act in deceiving ways and the information will be shared openly while accepting own mistakes while conflict resolution was said to be a quality, with the help of which trusted, open and cooperative team could be created where problem handling would be sorted in experienced ways and when reviewing the questionnaire statements of conflict resolution it was seen that the core axis of the statements were agreement seeking, openness, flexibility and honesty.

- Creative curiosity and Competence

Competence in trust dimensions was clarified as belief that other virtual project team members could perform in competent ways when executing allocated tasks while creative curiosity was said to be a mindset to look for improvements which would help to develop community, accomplishments and competence based on growth and knowledge.

- Contributions and Trustworthiness

Trustworthiness was explained as distribution of justice in between of virtual project team and perception of it during the interactions while contributions was said to be a recognition of other virtual project team member and their individual contribution and when reviewing the questionnaire statements of contributions it was seen that the core axis of the statements were acknowledgment of others' work, being able to relate, feedback and recognition.

- Consideration and Benevolence

Benevolence in trust dimension was explained as belief on the acts full of compassion for one another while consideration was said to be good willingness, good deeds consequently building long lasting relationship between virtual project team members and when reviewing the questionnaire statements of consideration it was seen that the core axis of the statements were treatment of others, willingness, genuine concerns, attention, feedback, sharing and empathy.

According to the coherence interpretation due to the similarities in definitions or dimensions' goals between trust dimensions and critical dimensions of a team in the virtual team member attributes 360-degree assessment tool, these two models supposedly have a positive correlative connection. Which means that if one variable of critical dimensions of a team changes it affects the one corresponding with it in the trust dimension and vice versa.

Given this coherence it can be presumed, that by evaluating the level of critical dimensions of the team with virtual team members attributes 360-degree tool trust level in virtual project team could be evaluated. Possible conceptual model is provided in Figure 5 on page 41 below.

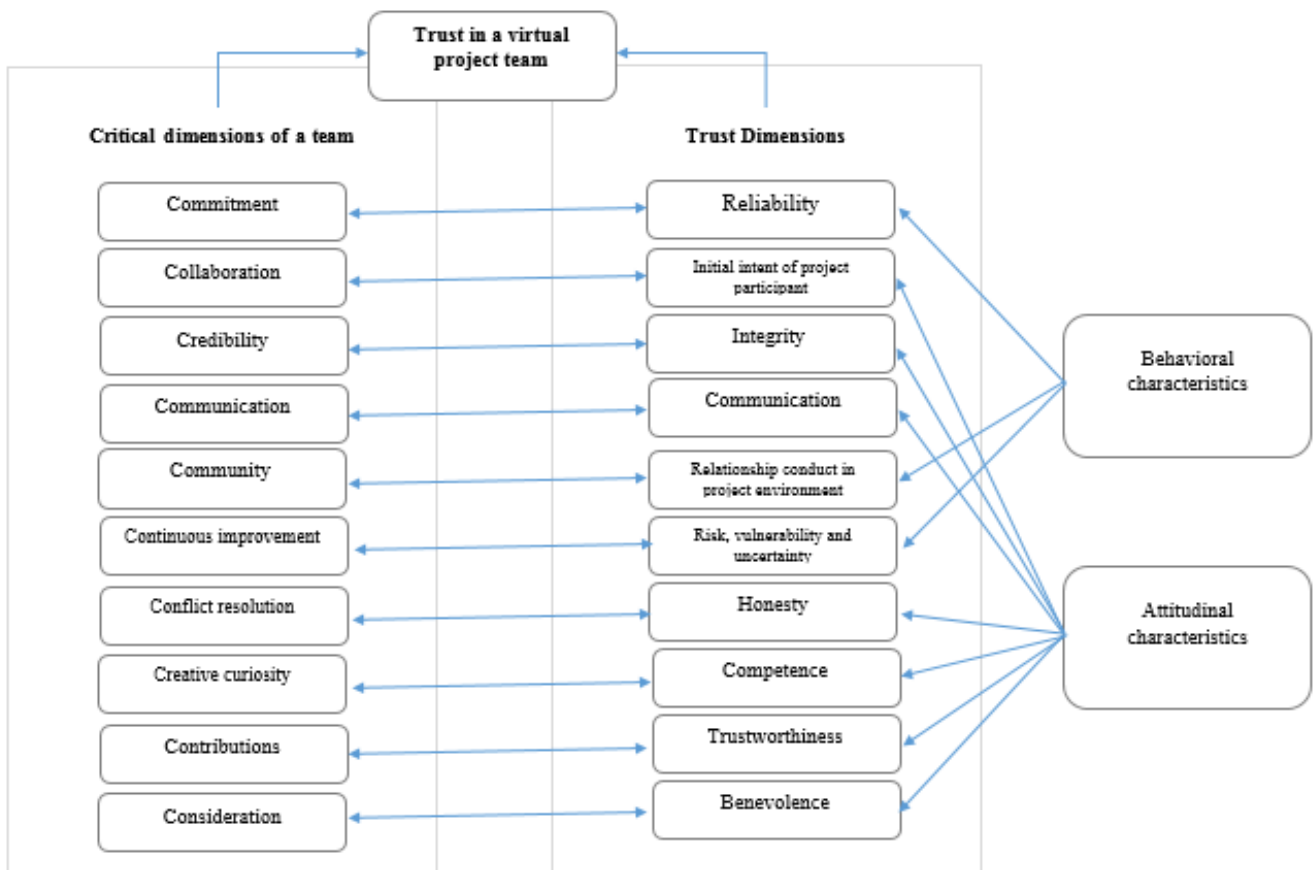


Figure 5. Conceptual model

According to the provided conceptual model it could be concluded that virtual team member attributes 360-degree assessment tool, which consists of critical dimensions of a team, is suitable for further research of how to evaluate trust in virtual project teams.

Herewith the research hypothesis follows - virtual team member attributes 360-degree assessment tool can be used for evaluation of trust in virtual project teams.

3. METHOD OF TRUST EVALUATION IN VIRTUAL PROJECT TEAM

In this research, a case study and qualitative research has been selected as a method of trust evaluation in virtual project team. Method, tool used for the qualitative research, experts and case study will be introduced further.

There will be data collection and analysis from the available different sources of information about the interested phenomena. There are numbers of different trust dimensions and definitions, qualities and it is essential to the virtual project team. This analysis will focus only on one virtual project team in particular and will attempt to reveal how to evaluate trust with a help of theoretical background.

According to Klien and Myers (1997), the philosophical assumption about the qualitative research could be interpretive, positive or critical. It depends on the researcher's inclination. The authors argue that interpretive research is seeking to understand reality "through social construction via shared meanings, documents, tools, language and other artefacts", Klien and Myers (1997). Positivist philosophy is supported by the formal proposition, quantifiable measures or/and hypothesis testing. The critical philosophy is seeking to eliminate causes of the unnecessary disaffection caused by cultural, political, social factors, laws or resources limitation.

It has been justified that there will be a case study approach applied to the project. Case study enables to provide a detailed and unique information to the case analysis of the organization which will assist in providing the research answers.

When doing case studies, the aim is not statistical generalization but rather theoretical generalization. Therefore, trying to achieve a probability sampling becomes an irrelevant issue as there is no way of estimating the probability that any population element will be included in the sample for the in-depth interviews. The representatives of the virtual project team were handpicked for the research because they were expected to serve the research purpose.

3.2. Qualitative questionnaire

In this qualitative research questionnaire of virtual team member attributes 360-degree assessment have been used. As it was described in the chapter 2.5., the tool itself is based on critical dimensions of a team: Commitment, Collaboration, Credibility, Communication, Community, Continuous improvement and Conflict resolution, Curiosity, Contribution and Consideration. Each of these ten dimensions have fifteen specific statements that would be further evaluated by the member of virtual project team and generalized by the overall rating. Every statement could be evaluated in five-level Likert scale, a psychometric response scale primarily used in questionnaires

to obtain participant's preferences or degree of agreement with a statement or set of statements, for the more comfortable assessments, with below meanings:

- 1 = Never
- 2 = Seldom
- 3 = Sometimes
- 4 = Often
- 5 = Always

Full version of the assessment tool – questionnaire that was sent to the experts could be seen in an Annex 1.

To begin with, the experts received the questionnaire on the 1st of April, 2016 by e-mail and were asked, to review the assessment tool and ask for any clarifications if needed. As no questions have risen, experts have been instructed to distinguish only those dimensions that from their perspective could be defined as the ones that effect trust in the virtual project team. No definitions, models or other information apart the questionnaire itself was given.

Further the experts have been asked to evaluate every other team member accordingly to the self-distinguished dimensions and five-level Likert scale as clarified above without any strict deadline for completing. In addition to that, experts have been asked to evaluate every other team member in regards of trust in five-level Likert scale with below meanings:

- 1 = Never
- 2 = Seldom
- 3 = Sometimes
- 4 = Often
- 5 = Always

After all questionnaires have been filled in and sent back, the results have been codified and presented in further chapters.

3.3. Interview with the experts

The qualitative research method used was in-depth interviews, which were used to explore and probe in depth of the case study. In-depth interviews represent one of the most important sources of case information (Yin, 2003). A pretest of the interview have not been performed. Most of the questions were open-ended in nature.

The interviews were conducted on the conference call with all respondents separately, while having 1-to-1 sessions. For better documentation and later analysis of the interviews, all interviews were transcribed. To get a good start, each interview was opened with questions about factual or

descriptive information which the respondents could easily answer. The respondents did not see the questions to prepare for the interview beforehand. During the interviews leading and multiple questions were avoided and at the end of the interview the respondent got a chance to make comments on subjects that may not have been covered in the interview. Thus, there was not only some level of control, but also there was an opportunity for the respondents to lead some of the conversation. After each call for the evaluation purposes the respondents were asked to read the transcribed interviews.

The interviews were held with overall of five members of virtual project team, who were considered to be the experts of the case study analysis and respondents of the questionnaire.

Expert number 1: G.L., the Consumer Relations team manager for Central Europe and EAM, with the experience of 7 years in project management and 5 years in virtual project team management, certified coacher in business and personal growth.

Expert number 2: J. L., the Consumer Response Specialist, EAM with the experience of 4 years in virtual project teams.

Expert number 3: J. P., the Consumer Response Coordinator for Check Republic, with the experience of 11 years in projects and 6 years in virtual project teams.

Expert number 4: K.M., the Consumer Relations Coordinator, Poland, with the experience of 9 years in projects and 6 years in virtual project teams.

Expert number 5: D.B., the Consumer Relations Specialist for Bulgaria, with the experience of 2 years in virtual project teams. Joined the team in the final year of the project.

4. TRUST EVALUATION IN VIRTUAL PROJECT TEAM RESEARCH FINDINGS AND DISCUSSION

This chapter is going to summarize and analyze the primary data obtained through the qualitative research, case study and expert interviews with five different level virtual project team members from Consumer Relations department though different geographical locations.

The analysis and evaluation will be based on the data gathered through the number of different academic sources mentioned in the chapters before and most importantly five expert's evaluation. The contrasting and comparing both types of data will allow to answer the research question - how to evaluate trust in virtual project team.

4.1. Selected company

Prior moving to the case study and its results it is beneficial to briefly introduce the company, which was selected for the study. Unfortunately due to internal policy of the company not to share information that is distributed internally, only given details were of the time when the case was happening.

Mondelez is Global snacking company – referring itself to “Global snacking powerhouse” and operating in 165 countries all over the world, managing and reporting operating results through five geographic units – North America; Latin America; Asia Pacific; Eastern Europe and Middle East & Africa (“EEMEA”); Europe. It has went through strategic changes in corporate level by going live with the spin-off on the 1st of October in 2012 concluding with new name and strategy while still executing same values of the legacy organization and the heritage of the companies' best brands, such as “Milka”, “Cadbury Dairy Milk”, “Cadbury” Chocolates; “Oreo”, “LU”, “Nabisco” biscuits; “Jacobs” coffee; “Trident” gum (better known as “Dirol” in Lithuanian market); and “Tang” powdered beverage.

As a result, Publicly Listed Company “Mondelez International” began to trade under new ticker symbol MDLZ on NASDAQ Global Select Market with 24,526,330 number of operating shares at the value of \$28.42 on the 1st of October in 2012. According to the Annual Report on the form 10-K 2012 Mondelez was one of the world's largest companies and has reached \$35.0 billion global net revenues and earnings from continuing operations of \$1.6 billion in 2012 and going up by 0.8 percent in 2013 – reaching \$35.3 billion in the net revenues as reported on the full year results of 2013 by Mondelez on the 12th of February in 2014

According to the fact sheet, main goals of the company were “to deliver top-tier financial performance and to be a great place to work”. This message was based on the competitive advantages – Fast-Growing Categories, Advantaged Geographic Footprint, Favorite Snacks Brands, Leading

Innovation Platforms, Strong Routes-to-Market, World-Class Talent and Capabilities, which could also be found in the fact sheet of the Mondelez. However, both goals and competitive advantages were very related and dependent of each other therefore company had main five strategies that it was following in every country where it was and probably still is operating to fulfil its goals and to strengthen its advantages: Unleash the Power of Our People, Transform-Snacking, Revolutionize Selling, and Drive Efficiency to Fuel Growth and Protect the Well-Being of Our Planet (Fact Sheet, 2013). Anyhow, for the last couple of years up to 2012 ad 2013 company had another strategic challenge – successfully going live with the spin-off, moving through waves of the changes called “Bridge”, leading company to the integration of one family, one company throughout the globe with the companies’ name itself stating the vision – Monde meaning world in French and delez as delicious.

4.2. Case study

To begin with, the case study selected was an implementation project in an international company Mondelez, where new employee roles had to be introduced into the organization throughout Europe while being virtually managed. Originally the project has started in 2013 as most of the projects in the company at that time. It was supposed to last for up to three years, though the original concept of the project has slightly changed in 2015 due to the high level of uncertainty and complex organizational level changes. In the same year of 2015 the original project has been terminated, as due to the company reorganization part of the team members were released and new role introductions into organization have been terminated.

All the members except the manager were at the same level of organizational structure, had same missions, though with different market sizes and challenges. Anyhow, members were able to interact with one another basically on every question for that matter and were different only by the general experience of working in such environment and team. Interestingly, not all team members felt equal with one another and more often used to select particular person of the team rather than randomly choosing any team member when asking for help.

Generally, the selected virtual project team was only one piece of even bigger project team. The temporary organizational structure of the selected virtual project team in the perspective of overall virtual project team could be seen in the Figure 6 below in page 47.



Figure 6. Organizational structure

The selected experts group have been in a team since the original date, and originally has been formed out of 8 people. Only one expert, who have replaced one team member in the least year of the project consequently has joined in latter on in the project. As the team was geographically split, only one expert – team manager have met all the members in person. All other have met not more than two colleagues of a team, therefore trust was a subject of consideration.

As face-to-face meetings were considered as important part of trust in virtual project teams, the summary of times the selected virtual project team members had met during the life of the project can be seen in a Table 1 below on page 48. Furthermore, it is visible which members had never got acquainted in real life.

Table 1. Summary of face-to-face meetings

	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5
Expert 1		3	2	2	1
Expert 2	3		0	0	0
Expert 3	2	0		3	0
Expert 4	2	0	3		0
Expert 5	1	0	0	0	

Though, as a matter of fact, team had a virtual face-to-face meetings once in a month, where they used to spend three hours in a call with video conference while summing up work related matters that happened within that period of time.

In continuation, the overall situation in the company has been intense at that time, due to the restructuration of organization. The project was just catching the momentum and there was still a sensation of a new wind and challenge for 4 out of 5 experts when company has decided to put the project on hold. Even though all team has continued with day to day activities, there was a constant uncertainty of the future for about from 4 to 5 months, when some of the members were released from their roles.

In continuation, one of the most disturbing experiences according to all the experts was that all the work that has been done up to date when some members were released became worthless, as if “the person was working from having nothing better to do”. Apparently nobody took over the positions and nobody was hiring, therefore all the work was completely lost and unused.

All in all, all members of this virtual project team have confessed feeling insecure when interacting with some of the team members, especially when the conversations used to turn to the reorganization issues due to the lack of trust.

4.3. Virtual Team member attributes 360-degree assessment results

4.3.1. Assessment results

To begin with, in this chapter the summary of virtual team member attributes 360-degree assessment results will be provided and discussed. It is important to remind that further provided critical dimensions of team are not the original model of the questionnaire.

In this review the dimensions that are given are thought to be the core dimensions that have the direct link with the evaluation of level of trust. These implications and adaptations have been done according to the opinion of the particular expert group.

Surprisingly, all the experts have selected the same dimensions - Collaboration, Credibility, Communication, Community, Contribution and Consideration. In addition, two experts have selected one more variable each. One of the selected attributes was Continuous improvement, which is emphasized in personal and team skill and knowledge, another – curiosity and creativity, which is demonstrated in project activities. Even though, eventually these two dimensions have not been included in further research due to the lack of importance for the other experts of the group.

Each below provided table has all the statements of the attributes as it was in the original questionnaire, there is also easy to see the overall evaluation result of each expert, which was

determined by the sum of other 4 experts critical evaluation. Herewith the conclusions could be done in terms of which member of the group is struggling with which attribute and narrow it down to particular statement for opportunity of growth. In continuation, there is a bottom line, where the overall result of the team could be seen, helping to evaluate the overall rating of the team in the specific dimension.

Consequently, it could be stated that according to 5/5 experts trust can be measured by further following dimensions and having these six attributes adapted into a structured questionnaire which is provided in the Annex 2.

Table 2. Collaboration

Establishes and supports a COLLABORATIVE environment for project work

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always							
		EXPERT	1	2	3	4	5
a.	Encourages cooperation and teamwork on the project		18	16	13	10	15
b.	Seeks the opinions of others on work in progress or completed		20	15	12	17	11
c.	Seeks the advice of others who are perceived as subject matter experts in areas of the project in which he or she may lack expertise to advance knowledge		19	20	17	17	18
d.	Makes it easy for others to disclose information, share idea, and openly talk about problems and concerns		20	20	11	14	17
e.	Takes initiative and offers both informal and formal assistance to others on the team		17	16	12	12	15
f.	Develops cooperative, rather than competitive, working relationships with others on the team		20	20	14	14	17
g.	Involves others in his or her decision-making and problem-solving tasks when appropriate		16	18	14	16	14
h.	Maintains friendly relationships with other team members		20	20	18	18	19
i.	Determines innovative ways to optimize cooperation among project team members		8	5	5	5	8
j.	Strives to unite the team in common actions and rewards		20	16	16	16	16
k.	Ensures all team members participate in discussions concerning the team's mission, scope, and deliverables and how best to work toward success		18	16	18	16	16
l.	Encourages team members to work toward consensus before decisions are made		16	14	12	12	14
m.	Expresses confidence in the team's ability to meet or exceed the project's goals and objectives		20	20	17	16	20
n.	Examines different perspectives and alternatives concerning issues that are being discussed		18	14	12	12	16
o.	Develops an appreciation for the views and ideas of other team members		20	20	18	18	20
Collaborative summary			270	250	209	215	236
TOTAL			1.180				

In the Table 2 an overview of Collaboration dimension could be seen. The overall evaluation of Collaboration gathered 1.180 points, which could be converted into the level of trust into 65,56% out of 100%, meaning that the trust-base of the team in this dimension is only in slightly higher level than medium.

Consequently, it is easily noticeable that the main trust driver in the team is an expert 1, who in this case study, as mentioned in a chapter “Interview with the experts”, page 33, is the virtual project team manager. Though the main statement which negatively affect the whole score is the determination of innovative ways to optimize cooperation among project team members. Here even the most trusted member of the team should work on better performance.

Table 3. Credibility

Demonstrates CREDIBILITY in all aspects of project work							
1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always							
		EXPERT	1	2	3	4	5
a.	Appears to be thoughtful in personal interactions in team situations		20	20	16	18	18
b.	Shows respect for other team members		20	20	20	20	20
c.	Helps team members establish a foundation of trust among one another		20	16	16	16	16
d.	Handles issues that arise on the project according to procedures defined by the team		20	20	18	18	18
e.	Provides information to others promptly on developments that may affect project work		17	16	16	14	17
f.	Expresses confidence in the skills and abilities of others		20	20	18	18	19
g.	Displays a nonjudgmental attitude toward the ideas and work of other team members		18	19	16	17	19
h.	Prepares for project team meetings		20	20	20	20	20
i.	Is able to cope in situations that are ambiguous or uncertain		19	16	17	16	15
j.	Takes time to gather and analyze information before making decisions that affect the project		20	20	20	20	20
k.	Demonstrates high performance standards, acting as a role model for others on the team		20	18	17	17	18
l.	Organizes and manages time productively		18	19	20	16	18
m.	Takes responsibility for statements and points of view		20	20	20	20	20
n.	Has a well-developed sense of personal standards and principles to guide behavior		20	18	16	16	17
o.	Works to ensure that the project's technical and performance goals are met, even if this requires compromises in terms of cost and schedule		19	19	18	19	18
Credibility summary			291	281	268	265	273
TOTAL			1.378				

In the Table 3 an overview of Credibility dimension could be seen. The overall evaluation of Credibility gathered 1.378 points, which is the highest result of all the dimensions evaluated in this case study. The result could be converted into the level of trust into 76,56% out of 100%, meaning that the trust-base of the team in this dimension is in the higher level.

Consequently, once again it is visible that main trust driver in the team is an expert 1, though, the expert 2 have also distinguished. In this dimension there is no statements that would be dragging the overall result down, meaning that credibility in this team is essentially balanced.

Table 4. Communication

Promotes effective COMMUNICATION among project team members and stakeholders

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always

		EXPERT	1	2	3	4	5
a.	Recognizes the most important information and communicates it to others effectively, concisely, and clearly		16	15	14	14	16
b.	Summarizes what others have said to clarify understanding		9	8	8	9	8
c.	Prepares written communication in a way that all members of the project team easily understand		16	16	16	16	18
d.	Seeks additional information by asking for information to clarify items		19	18	16	17	16
e.	Provides clear, concise, and logical answers to questions from other team members		18	16	16	12	17
f.	Encourages the expression of diverse points of view in communication with other team members		17	15	11	13	16
g.	Avoids the tendency to dominate project team meetings		20	20	16	12	20
h.	Listens to what others say in a way that expresses understanding		19	17	15	14	17
i.	States opinions in a persuasive, clear, and logical manner		16	14	14	14	16
j.	Establishes processes for interpersonal communication among project team members		18	14	14	12	16
k.	Appreciates and recognizes individual differences in communications with project team members		17	17	17	16	17
l.	Asks open-ended questions to encourage information exchange		20	14	14	12	15
m.	Establishes and manages formal and informal communications networks with project stakeholders		20	8	8	8	10
n.	Considers the nature of the alliance with the people involved in the communication		20	18	19	19	18
o.	Relates to other team members as a person of equal worth and value so that communication is based on reciprocal and mutual respect		20	20	16	16	20
Communication summary			265	215	214	204	240
		TOTAL	1.138				

In the Table 4 an overview of Communications dimension could be seen. The overall evaluation of Communications gathered 1.138 points, which is the lowest evaluation of all dimensions in this case study. The result could be converted into the level of trust into 63,22% out of 100%, meaning that the trust-base of the team in this dimension is hardly higher level than medium.

Although, the main trust driver in the team is again the expert 1, it is surprising that one of the main reasons the result is this low is seldom use of summaries, which are the key into good communication.

Table 5. Community

Establishes a sense of COMMUNITY within the project team with a focus on professional responsibility in all activities

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always		EXPERT	1	2	3	4	5
a.	Shows an awareness of the social and cultural contexts of problems		16	16	16	16	16
b.	Shares information appropriately within the professional community		18	16	16	15	16
c.	Shows sensitivity to project confidentiality requirements		19	17	18	16	20
d.	Elicits and respects the values of others		20	20	19	19	20
e.	Exhibits sensitivity to others who are from a different culture		20	20	20	20	20
f.	Shows awareness of the impact of different values, obligations, moral rights, and personal principles in choices and decisions that are made		20	20	20	20	20
g.	If there is evidence of unethical behavior, identifies it and suggests the most appropriate corrective action		18	18	16	17	18
h.	Exercises tolerance and compromise in interaction with team members and project stakeholders		20	17	17	18	17
i.	Adheres to legal requirements and ethical standards in project work		19	18	18	18	18
j.	Demonstrates the desired skills, behavior, and attitude to follow on project work		18	16	16	16	17
k.	Exercises appropriate judgment in order to protect the community and project stakeholders		20	19	19	17	19
l.	Gathers, analyzes, and integrates information in order to determine methods of fair resolution if there are competing requirements and objectives		19	16	19	19	16
m.	Exhibits empathy toward other team members, especially in the face of competing pressures among project objectives		20	20	16	16	20
n.	Recognizes that a team decision will generally be more complete than a decision made solely by one person on his or her own and works to involve others as appropriate		18	16	12	11	14
o.	Shares lessons learned and best practices with other team members in a manner that is unobtrusive in order to contribute toward overall team success		20	20	20	20	20
Community summary			285	269	262	258	271
		TOTAL	1.345				

In the Table 5 an overview of Community dimension could be seen. The overall evaluation of Community gathered 1.345 points, which is the second highest result of all the dimensions evaluated in this case study. The result could be converted into the level of trust into 75,72% out of 100%, meaning that the trust-base of the team in this dimension is in the higher level.

Consequently, once again it is visible that main trust driver in the team is an expert 1, though, the expert 5 have also distinguished. In this dimension there is no statements, which would be significantly dragging the overall result down, meaning that community in this team is essentially balanced. Though, in terms of the statement “N” it would be recommended to the manager to help other team members to rather trust more and share the responsibilities than make all the decisions individually.

Table 6. Contributions

Recognizes the CONTRIBUTIONS of other team members to the project's goals and objectives

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always

		EXPERT	1	2	3	4	5
a.	Sends personal e-mails to or telephones others on the team when they accomplish something significant on the project		20	18	16	16	18
b.	Acknowledges and recognizes the contributions of other team members to his or her work		20	20	19	19	20
c.	Recognizes these team members who champion ideas as well as those team members who support the ideas of others		20	20	17	16	18
d.	Relates to team members by recognizing and appreciating individual differences		18	18	16	16	17
e.	Analyzes internal and external influences on team performance to remove ant barriers that may hinder performance		16	12	13	12	15
f.	Takes action to reduce any negative impact on project performance		20	20	13	15	19
g.	Compares project outcomes against the defined scope and uses this information to recognize the work done by other team members		9	5	4	4	4
h.	Works with the team to establish agreed-upon performance measurement criteria for the team and each individual member		20	8	7	7	9
i.	Provides feedback to team members in a way that is both constructive but also recognizes success		18	12	9	11	14
j.	Works to help unite the team in common actions and rewards		19	17	15	16	17
k.	Develops win-win strategies for both individual and team goals		20	15	17	14	17
l.	Works to make sure that everyone has an opportunity to contribute ideas and concerns		16	13	14	12	14
m.	Requests information from others in order to fulfill assigned responsibilities in a timely manner		20	20	20	20	20
n.	Works to ensure that all types of project tasks, even administrative ones, are considered essential to overall project success		17	14	11	12	14
o.	Recognizes that one's personal success is dependent on the overall team's success in terms of project goals and objectives		20	20	19	19	20
		Contribution of others summary	273	232	210	209	236
		TOTAL	1.160				

In the Table 6 an overview of Contribution dimension could be seen. The overall evaluation of Contribution gathered 1.160 points, which is the second lowest result of all the dimensions evaluated in this case study. The result could be converted into the level of trust into 64,44% out of 100%, meaning that the trust-base of the team in this dimension is only in slightly higher level than medium.

As usual, it is visible that main and this time significant, compared to the other members of the team, trust driver in the team is an expert 1. Though, in terms of the statement “N” it would be recommended to the manager to help other team members to understand the importance of the administrative tasks.

Table 7. Consideration

Shows CONSIDERATION toward other team members during the project

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always							
		EXPERT	1	2	3	4	5
a.	Treats other team members in a fair and consistent manner		20	20	19	19	19
b.	Shows a willingness to take time to listen to and understand the points of view expressed by other team members		20	20	16	14	16
c.	Shows genuine concern and interest even if he or she disagrees with another team member		19	18	15	15	17
d.	Avoids making personal accusations toward other team members		20	20	16	16	20
e.	Realizes the importance of taking the appropriate time to provide advice and direction to others		20	20	14	17	18
f.	Provides feedback focused on problems or solutions, not on personalities		18	16	12	13	16
g.	Remains attentive and interested in team meetings and conference calls even if one's own work progress is not being discussed		19	14	12	12	16
h.	Demonstrates empathy toward others		20	20	16	16	19
i.	Communicates in a manner that is not condescending to others on the team		19	19	16	16	16
j.	Shares beliefs and feelings with others on the team so as to be self-disclosing		20	20	20	20	20
k.	Appears to be in control of any personal differences in interpersonal relationships		20	18	16	16	17
l.	Provides opportunities to promote long-lasting relationships among team members		12	14	9	7	11
m.	Volunteers services and support to others from the very early stages of the project		20	20	12	14	20
n.	Works to ensure that other team members recognize his or her assistance as instrumental toward their success		16	14	17	17	15
o.	Refrains from attributing self-serving motives to other team members		20	18	16	17	19
Consideration summary			283	271	226	229	259
TOTAL			1.268				

In the Table 7 an overview of Consideration dimension could be seen. The overall evaluation of Consideration gathered 1.268 points, which could be converted into the level of trust into 70,44% out of 100%, meaning that the trust-base of the team in this dimension is in the higher level.

Consequently, once again it is visible that main trust driver in the team is an expert 1, though, the expert 2 have also distinguished. In this dimension there is no essential statements that would be dragging the overall result down, meaning that consideration in this team is essentially balanced.

Last but not least, overall performance summary table for the comparison to highest and lowest possible rate could be seen below. As it is shown in the table, at its worst performance the virtual project team of five members can gather an overall minimum of 1.800 points and on the other hand, while being at its best in trust performance evaluation the team could assemble an overall maximum of 9.000 points.

Table 8. Virtual project teams’ total result of trust evaluation

Collaboration	1.180	
Credibility	1.378	
Communication	1.138	
Community	1.345	
Contribution	1.160	
Consideration	1.268	
	300x6=1.800	MIN
TOTAL	7.469	
	1.500x6=9.000	MAX

In this particular case study and this version of adapted 360-degree tool the level of trust is surprisingly high. The overall evaluation gathered 7.469 points which means that the team has reached the higher trust-base level by reaching 82,99% on the possible scale. Although this is a very pleasant finding, there is still space for improvement as discussed in a dimensional reviews.

4.3.2. Additional research insights

During the literature review it was found that face-to-face meetings can significantly impact ones’ trust with other virtual project team members. Accordingly, a decision was made to perform additional research on this subject.

It is important to note, that all required data was not gathered additionally as all variables have been provided during the original research:

- Experts have already evaluated their sense of trust for other team members;
- Face-to-face meetings summary has been provided in Table 1 on chapter 4.2. Case study.

Consequently, it is possible to evaluate if the number of times that virtual project team members have physically met the other team members actually impact their assessment and consequently – level of trust.

A summary of trust evaluation is provided in a Table 9 in page 56.

Table 9. Summary of trust evaluation

	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5
Expert 1		5	4	3	5
Expert 2	5		3	2	5
Expert 3	5	4		5	3
Expert 4	4	4	5		3
Expert 5	4	5	2	2	
Total:	18	18	14	12	16

In the Figures 7-12 below the result of evaluation if connection of times that virtual project team members have physically met and their level of trust could be seen. Darker shade indicates the times virtual team members have met and the lighter shade – score of trust given.



Figure 7. Trust and face-to-face meetings connection. Expert 1

Looking into Figure 7 details where evaluation of Expert 1 is given no concrete patten could be noticed and no particular connection could be seen due to the fact that two members of virtual project team has given the highest score in trust estimation, though times of face-to-face meetings are different. The same difference is seen in the lower trust evaluation, therefore no specific connection could be noticed.

Looking into Figure 8 details where Expert 2 has been evaluated no concrete patten could also be noticed. Differently than in the evaluation of Expert 1 this team member has received high scores of trust evaluation despite the fact that with three out of four members no face-to-face meetings have happened.

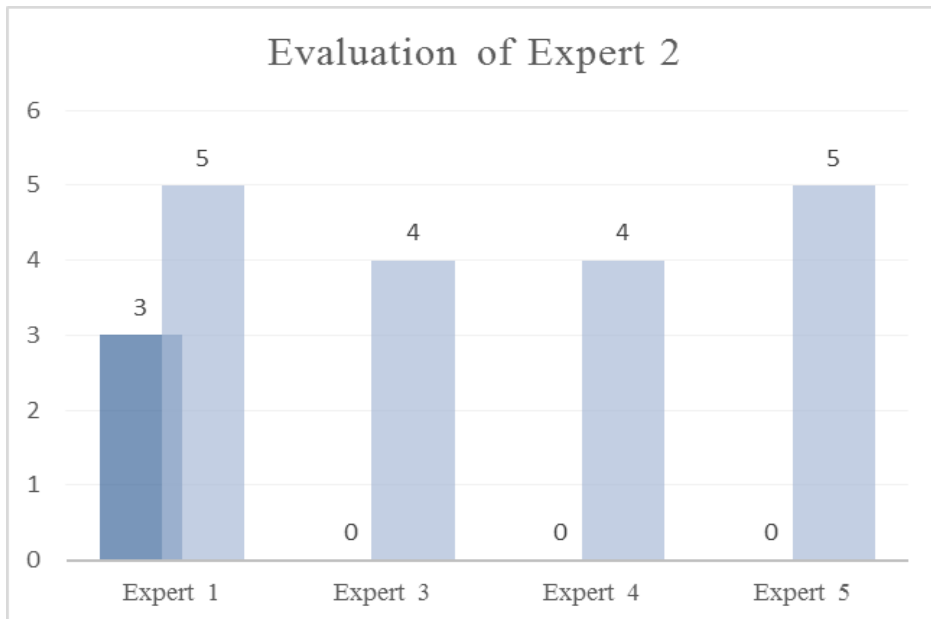


Figure 8. Trust and face-to-face meetings connection. Expert 2

In the evaluation of the Expert 3 in the Figure 9 small pattern could be noticed. The more times this member has met with other virtual project team members – the higher is the score of trust evaluation. Though having in mind that in previous cases no patter has been noticed it could not be stated for sure that connection between of times that virtual project team members have physically met and their level of trust exists.

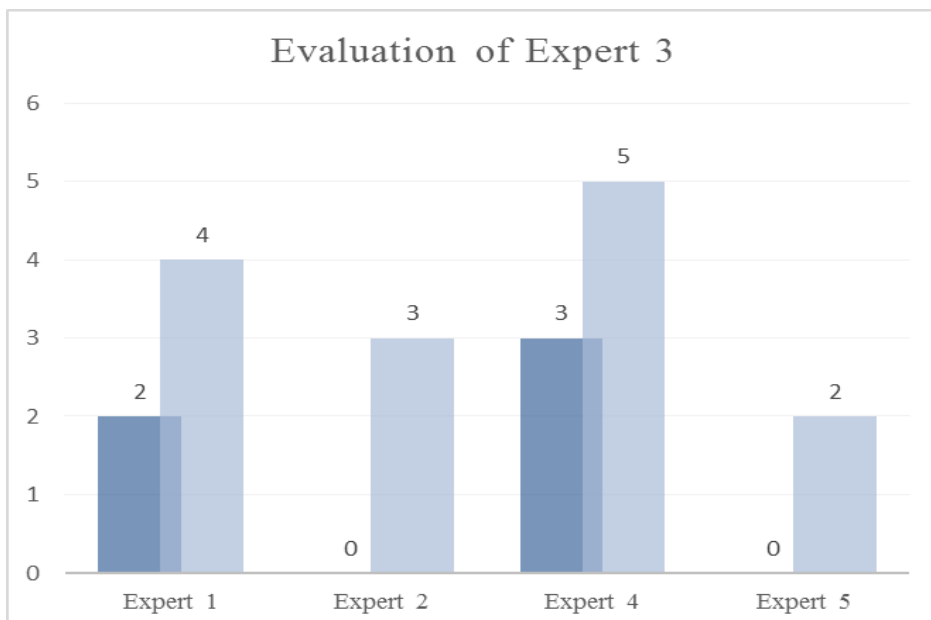


Figure 9. Trust and face-to-face meetings connection. Expert 3

Moving on to the evaluation of Expert 4 in a Figure 10 a slight similarity to the pattern of Expert 3 could be noticed. Once again the more times this member has met with other virtual project team members – the higher is the score of trust evaluation.



Figure 10. Trust and face-to-face meetings connection. Expert 4

Looking into Figure 11 details where Expert 5 has been evaluated no concrete patten could also be noticed. The evaluation of this virtual project team member is similar as of the Expert 2 when expert has received high scores of trust evaluation despite the fact that mostly no face-to-face meetings have happened.

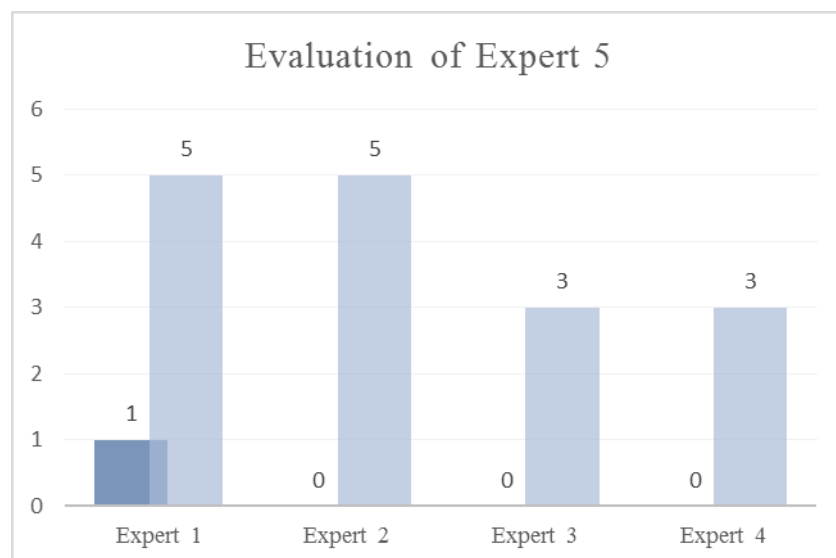


Figure 11. Trust and face-to-face meetings connection. Expert 5

In conclusion of additional research it could be said that no connection could be found in between of times that virtual project team members have physically met and their level of trust with

one another in this particular case study. Even though, such possibility for future research should not be rejected.

4.3.3. Trust and Critical dimensions connection evaluation

Anyhow, despite the opinion of experts, to investigate on top if connection between trust and critical dimensions of the virtual project team actually exist as it was already mentioned the experts have been asked to evaluate every other team member in regards of trust they feel. In the Figure 12 below the overall result of the assessment of every individual and evaluation of trust result could be seen.

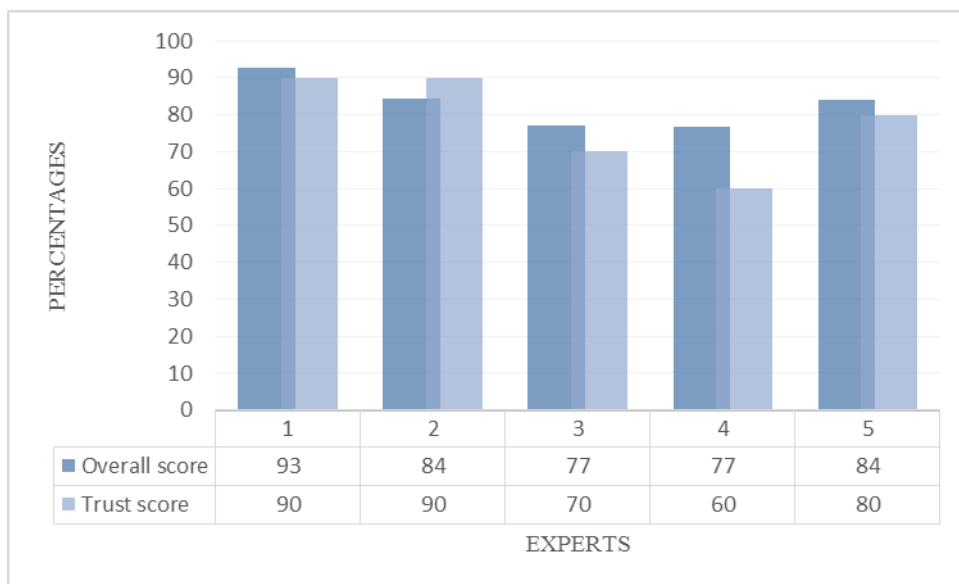


Figure 12. Results of the assessment and trust evaluation

In the Figure 12 all the given results have been turned into percentages as an actual score gap was too broad. Overall score represents individual score of an expert after the evaluation with adapted 360-degree tool and trust score stand for the results of the evaluation of a sense of trust for the exact expert. Even though such data is particularly small it is still possible to see connection between these two dimensions – the higher the overall score – the higher evaluation in trust.

Herewith in the conclusion it is useful to remind that to achieve well-working relationships all the virtual project team parties need to grow from a low-trust culture to a high-trust team in their relating. Therefore, by confirming the hypothesis that virtual team member attributes 360-degree assessment tool can be used for trust evaluation in virtual project teams, this tool is set to help organizations and virtual project teams to evaluate its current position and critical points for the growth to high-trust base in the future.

4.4. Limitations

There have been several limitations during the research. The access to the company data was extremely limited due to the business ethics and internal privacy policies, lots of information is kept confidentially and given for internal use only. Therefore, the researcher could not acquire all the necessary information. Based on accessible data assumptions were drawn, yet it is important to know that due to company privacy policies gathered assumptions might be as not precise, as it could be, if all data would be available for the researcher to use in this paper.

In addition, there was a time limit bound. The time scale was quite short therefore some of the research results were poorer rather if there was more time given.

Data gathered in this research represents only one company point of view making it relatively undiversified sample which cannot be generalized, identical research could yield different results in other companies.

As not all respondents were native English speakers, this might lead to slight misunderstanding or misinterpretation of questions asked, meaning that questions that had been asked should be regarded with caution.

The model does not explain the causes of respondent disagreement to the given statements about the variables.

4.5. Recommendation

In order to continue the research there would be an advantage in selection of another company and/or another virtual project team and to compare the results of both researches. Due to such additional investigation much more precise results could be achieved.

In continuation, it would be interesting to compare the evaluation results of similar or identical cases in smaller geographical split.

Moreover, it would be suggested to try out and select the bigger sample of the survey in order to get more in scope as well as evaluate if selected method and questionnaire is suitable for trust evaluation in quantitative research. As well as to try such method for continuous research in a regular, tradition team.

Finally, as trust is a complex matter, it would be useful to review more literature on this subject.

As for managerial implications it would be highly recommended for virtual and for traditional teams to use virtual team members attribute 360-degree assessment tool not only for trust evaluation, but for overall team evaluation to assess its weaknesses and strengths.

CONCLUSIONS

1. Virtual project teams are temporary groups with temporary organizational structure that work on a same assignment, task or other organizational activity and transcend distance, time zones, organizational boundaries, national borders or continental entities. Such teams due to their organizational complexity encounter various challenges, such as differentiation of tools for the performance and team management compared to the traditional ones, mentoring, training, team building and trust challenges. Moreover such teams have an increased probability of consisting of rather very different people than the similar ones, which could cause negative team processes as stress, conflicts, lowered satisfaction and once again – trust issues. Accordingly, to achieve well-working relationships between the parties of the virtual project team it needs to develop from a low-trust base virtual project team to a high-trust base. In conclusion, in order to manage a successful project, to ensure its ease and friendly environment it is important to make sure that trust is one of the core, most significant virtues, that have been established within virtual project team.

2. The inputs-processes-outcomes (I-P-O) model have been reviewed, where trust was found as one of the components of the I-P-O model in the processes section. Though section consists of more variables than just trust, accordingly to the aim of the thesis only the author's findings on trust have been covered. Relations of trust with other variables found have been grouped into three sections – environmental factors effecting trust, factors effected by trust and factors effecting trust. Nonetheless, none of research results suggested a possible tool for the evaluation of trust. Herewith, it may be concluded, that unfortunately, during I-P-O model review, an answer to the main research problem have not been found and the presented model could not be adapted for the evaluation of trust in virtual project teams.

Further, the dimensions of trust model have been reviewed. It was concluded that trust has three core dimensions of attitudinal characteristics, project environment characteristics and behavioral characteristics with overall of fifteen variables. Even though throughout the review the characteristics have been supplemented by additional authors' visions of trust, once again none of research results suggested a possible tool for the evaluation of trust. Herewith, it may be concluded, that unfortunately, during the dimensions of trust model review, an answer to the main research problem have not been found and the presented model could not be adapted for the evaluation of trust in virtual project teams.

Fortunately a tool of Virtual Team member attributes 360-degree assessment have been found. This performance evaluation tool consists of ten critical dimensions of a team: commitment, collaboration, credibility, communication, community, continuous improvement, conflict resolution, curiosity, contributions and finally consideration. Accordingly it lead to the probability that these dimensions could be recognized in dimensions of trust, therefore overview of critical dimensions of

a team in a combination with the dimensions of trust has been performed. In continuation a new conceptual model has been introduced and herewith the research hypothesis followed - virtual team member attributes 360-degree assessment tool can be used for trust evaluation in virtual project teams.

3. Qualitative research method have been selected for this paper. Case study evaluation have been performed with the interviews with a virtual project team members as an experts and virtual team member attributes 360-degree assessment tool questionnaire prepared in advance which has been answered by the same expert team.

4. Case study, interviews and questionnaire results analysis summarized key attributes for trust evaluation in virtual project team of a virtual team member attributes 360-degree assessment tool. The six extracted attributes were as follows: Collaboration, Credibility, Communication, Community, Contribution and Consideration. Furthermore, these attributes were used for hypotheses testing case study analysis, which revealed congratulatory results: adapted version of the assessment tool can be used for trust evaluations in virtual project teams. Finally, research revealed – that no connection could be found in between of times that virtual project team members have physically met and their level of trust with one another in this particular case study.

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Full virtual team member attributes 360-degree assessment tool

Characterizing Virtual Team Members 91

**APPENDIX 4A VIRTUAL TEAM MEMBER ATTRIBUTES
360-DEGREE ASSESSMENT TOOL**

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always

	1	2	3	4	5
1. Possesses a strong COMMITMENT to the goals and objectives of the project					
a. Completes assigned tasks according to the project schedule when faced with competing priorities between the work of this project and other assigned work					
b. Recognizes how his or her assigned tasks support the project's goals and objectives and the organization's strategic goals and objectives					
c. Establishes objectives for the project that are aligned with the overall organizational goals and objectives					
d. Keeps track of details, and follows up on action items and tasks					
e. Affirms priorities frequently so less important tasks do not dominate more important ones					
f. Considers risks to be opportunities to enhance overall project value					
g. Plans ahead and follows through to complete work on schedule					
h. Considers organizational and project constraints and project assumptions in planning and executing assigned tasks					
i. Completes requests from others on the project team in a timely manner					
j. Puts forth more effort and takes more initiative than expected in order to complete assigned project work					

**APPENDIX 4A VIRTUAL TEAM MEMBER ATTRIBUTES
360-DEGREE ASSESSMENT TOOL (CONTINUED)**

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always					
	1	2	3	4	5
k. Takes corrective action as required to ensure that all work is done on schedule and meets performance specifications					
l. Works to ensure that he or she is considered to be among the most reliable and dependable in all aspects of the work of the project					
m. Actively works to prepare the project team's charter and other accompanying policies and procedures					
n. Takes initiative to identify and resolve any project-related problems that need to be solved					
o. Works to improve one's own results on assigned tasks in order to fully contribute to the work to be done by the project team					
<i>Commitment summary</i>					
2. Establishes and supports a COLLABORATIVE environment for project work					
a. Encourages cooperation and teamwork on the project					
b. Seeks the opinions of others on work in progress or completed					
c. Seeks the advice of others who are perceived as subject matter experts in areas of the project in which he or she may lack expertise to advance knowledge					
d. Makes it easy for others to disclose information, share ideas, and openly talk about problems and concerns					

**APPENDIX 4A VIRTUAL TEAM MEMBER ATTRIBUTES
360-DEGREE ASSESSMENT TOOL (CONTINUED)**

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always					
	1	2	3	4	5
e. Takes initiative and offers both informal and formal assistance to others on the team					
f. Develops cooperative, rather than competitive, working relationships with others on the team					
g. Involves others in his or her decision-making and problem-solving tasks when appropriate					
h. Maintains friendly relationships with other team members					
i. Determines innovative ways to optimize cooperation among project team members					
j. Strives to unite the team in common actions and rewards					
k. Ensures all team members participate in discussions concerning the team's mission, scope, and deliverables and how best to work toward success					
l. Encourages team members to work toward consensus before decisions are made					
m. Expresses confidence in the team's ability to meet or exceed the project's goals and objectives					
n. Examines different perspectives and alternatives concerning issues that are being discussed					
o. Develops an appreciation for the views and ideas of other team members					
<i>Collaborative summary</i>					

**APPENDIX 4A VIRTUAL TEAM MEMBER ATTRIBUTES
360-DEGREE ASSESSMENT TOOL (CONTINUED)**

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always					
	1	2	3	4	5
3. Demonstrates CREDIBILITY in all aspects of project work					
a. Appears to be thoughtful in personal interactions in team situations					
b. Shows respect for other team members					
c. Helps team members establish a foundation of trust among one another					
d. Handles issues that arise on the project according to procedures defined by the team					
e. Provides information to others promptly on developments that may affect project work					
f. Expresses confidence in the skills and abilities of others					
g. Displays a nonjudgmental attitude toward the ideas and work of other team members					
h. Prepares for project team meetings					
i. Is able to cope in situations that are ambiguous or uncertain					
j. Takes time to gather and analyze information before making decisions that affect the project					
k. Demonstrates high performance standards, acting as a role model for others on the team					
l. Organizes and manages time productively					

**APPENDIX 4A VIRTUAL TEAM MEMBER ATTRIBUTES
360-DEGREE ASSESSMENT TOOL (CONTINUED)**

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always					
	1	2	3	4	5
m. Takes responsibility for statements and points of view					
n. Has a well-developed sense of personal standards and principles to guide behavior					
o. Works to ensure that the project's technical and performance goals are met, even if this requires compromises in terms of cost and schedule					
<i>Credibility summary</i>					
4. Promotes effective COMMUNICATION among project team members and stakeholders					
a. Recognizes the most important information and communicates it to others effectively, concisely, and clearly					
b. Summarizes what others have said to clarify understanding					
c. Prepares written communication in a way that all members of the project team easily understand					
d. Seeks additional information by asking for information to clarify items					
e. Provides clear, concise, and logical answers to questions from other team members					
f. Encourages the expression of diverse points of view in communication with other team members					
g. Avoids the tendency to dominate project team meetings					

**APPENDIX 4A VIRTUAL TEAM MEMBER ATTRIBUTES
360-DEGREE ASSESSMENT TOOL (CONTINUED)**

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always					
	1	2	3	4	5
h. Listens to what others say in a way that expresses understanding					
i. States opinions in a persuasive, clear, and logical manner					
j. Establishes processes for interpersonal communication among project team members					
k. Appreciates and recognizes individual differences in communications with project team members					
l. Asks open-ended questions to encourage information exchange					
m. Establishes and manages formal and informal communications networks with project stakeholders					
n. Considers the nature of the alliance with the people involved in the communication					
o. Relates to other team members as a person of equal worth and value so that communication is based on reciprocal and mutual respect					
Communication summary					
5. Establishes a sense of COMMUNITY within the project team with a focus on professional responsibility in all activities					
a. Shows an awareness of the social and cultural contexts of problems					
b. Shares information appropriately within the professional community					

**APPENDIX 4A VIRTUAL TEAM MEMBER ATTRIBUTES
360-DEGREE ASSESSMENT TOOL (CONTINUED)**

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always					
	1	2	3	4	5
c. Shows sensitivity to project confidentiality requirements					
d. Elicits and respects the values of others					
e. Exhibits sensitivity to others who are from a different culture					
f. Shows awareness of the impact of different values, obligations, moral rights, and personal principles in choices and decisions that are made					
g. If there is evidence of unethical behavior, identifies it and suggests the most appropriate corrective action					
h. Exercises tolerance and compromise in interaction with team members and project stakeholders					
i. Adheres to legal requirements and ethical standards in project work					
j. Demonstrates the desired skills, behavior, and attitude to follow on project work					
k. Exercises appropriate judgment in order to protect the community and project stakeholders					
l. Gathers, analyzes, and integrates information in order to determine methods of fair resolution if there are competing requirements and objectives					
m. Exhibits empathy toward other team members, especially in the face of competing pressures among project objectives					

**APPENDIX 4A VIRTUAL TEAM MEMBER ATTRIBUTES
360-DEGREE ASSESSMENT TOOL (CONTINUED)**

	1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always				
	1	2	3	4	5
n. Recognizes that a team decision will generally be more complete than a decision made solely by one person on his or her own and works to involve others as appropriate					
o. Shares lessons learned and best practices with other team members in a manner that is unobtrusive in order to contribute toward overall team success					
<i>Community summary</i>					
6. Emphasizes CONTINUOUS IMPROVEMENT in personal and team skills and knowledge					
a. Leverages the contributions of others and available resources to the greatest extent possible in order to increase personal knowledge and skills					
b. Redefines problems so they are viewed as possible opportunities					
c. Looks for opportunities to continually upgrade knowledge and skills					
d. Performs a self-assessment of his or her strengths and weaknesses					
e. Actively seeks feedback from others on the project team on project performance					
f. Values feedback that is received on working relationships					
g. Provides feedback to other team members regarding working relationships and project performance in a nonthreatening manner					

**APPENDIX 4A VIRTUAL TEAM MEMBER ATTRIBUTES
360-DEGREE ASSESSMENT TOOL (CONTINUED)**

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always

	1	2	3	4	5
h. Uses those constructive comments that are provided by others to their maximum extent					
i. Applies new information and practices to improve project performance					
j. Determines changes to the team's procedures as defined in its charter to increase their effectiveness					
k. Determines changes to the organization's project management methodology to increase its effectiveness					
l. Identifies lessons learned throughout the project and communicates them to other team members as appropriate					
m. Compiles internal and external best practices in project management and makes them available to project team members					
n. Provides mentoring and coaching to other team members, as appropriate, in order to transfer knowledge and best practices					
o. Strives to keep options open, and looks for new alternatives or breakthroughs to obtain desired performance results on technical project issues					
<i>Continuous improvement summary</i>					
7. Strives for effective CONFLICT RESOLUTION among team members					
a. Seeks agreement on specific actions when conflicts arise among team members					

**APPENDIX 4A VIRTUAL TEAM MEMBER ATTRIBUTES
360-DEGREE ASSESSMENT TOOL (CONTINUED)**

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always					
	1	2	3	4	5
b. Discusses possible win-win solutions to help resolve conflicts on the project team					
c. Helps the team members involved generate possible alternatives if asked to help resolve a conflict					
d. Remains neutral when asked to resolve a conflict between other team members					
e. Focuses on issues and not on personalities					
f. Tries to avoid the need to escalate the resolution of conflicts to those outside the project team					
g. Displays openness and flexibility to conflicting opinions when presenting points of view					
h. Resists reacting defensively, and keeps an open mind when others disagree with his or her point of view					
i. Uses creativity to resolve differences among team members					
j. Identifies conflicts to maximize achievement of project objectives					
k. Exercises judgment in determining the fair resolution of project conflicts among team members					
l. Productively challenges existing paradigms when conflicts arise, so that they are viewed as opportunities rather than solely as problems to be solved					

**APPENDIX 4A VIRTUAL TEAM MEMBER ATTRIBUTES
360-DEGREE ASSESSMENT TOOL (CONTINUED)**

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always					
	1	2	3	4	5
m. Fosters an attitude among team members that conflict can be useful in reducing the risk of intellectual compliance or a tendency toward groupthink					
n. Ensures that conflicts are addressed in a way that people do not withdraw from one another and in a way that overall team motivation is strengthened					
o. Considers a resolution approach that is most appropriate given the specific phase of the project life cycle					
<i>Conflict resolution summary</i>					
8. Demonstrates CURIOSITY and CREATIVITY in project activities					
a. Strives to generate new ideas and creative solutions to problems					
b. Suggests changes to existing processes and procedures in order to minimize bureaucracy and maximize effectiveness					
c. Identifies any team-related barriers in order to remove them to improve effectiveness					
d. Determines innovative ways to optimize cooperation among project team members					
e. Seeks opportunities for adding value to the project's product or service					
f. Considers alternatives and generates contingency plans when solving problems					

**APPENDIX 4A VIRTUAL TEAM MEMBER ATTRIBUTES
360-DEGREE ASSESSMENT TOOL (CONTINUED)**

	1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always				
	1	2	3	4	5
g. Pilots the use of new tools and technologies to facilitate project work					
h. Challenges existing approaches in order to determine optimum ways to meet project objectives					
i. Acquires new knowledge to refine/expand potential alternatives to problems					
j. Seeks innovative solutions to meet the project's goals and objectives					
k. Shows genuine interest in the work under way by other team members in order to contribute new ideas whenever appropriate					
l. Experiments with new approaches in order to later inform team members of possible changes in team processes to promote effectiveness					
m. Helps the team to establish guidelines, rather than strict rules and procedures, to promote flexibility and innovation in project work					
n. Asks probing questions during team meetings or one-on-one communication with a genuine interest in taking the discussion beyond the general level					
o. Listens to as many stakeholders as possible, even to those people who may not have a direct interest in the project's outcomes, in order to broaden perspectives					
<i>Curiosity and creativity summary</i>					

APPENDIX 4A VIRTUAL TEAM MEMBER ATTRIBUTES
360-DEGREE ASSESSMENT TOOL (CONTINUED)

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always

	1	2	3	4	5
9. Recognizes the CONTRIBUTIONS of other team members to the project's goals and objectives					
a. Sends personal e-mails to or telephones others on the team when they accomplish something significant on the project					
b. Acknowledges and recognizes the contributions of other team members to his or her work					
c. Recognizes those team members who champion ideas as well as those team members who support the ideas of others					
d. Relates to team members by recognizing and appreciating individual differences					
e. Analyzes internal and external influences on team performance to remove any barriers that may hinder performance					
f. Takes action to reduce any negative impact on project performance					
g. Compares project outcomes against the defined scope and uses this information to recognize the work done by other team members					
h. Works with the team to establish agreed-upon performance measurement criteria for the team and each individual member					
i. Provides feedback to team members in a way that is both constructive but also recognizes success					

**APPENDIX 4A VIRTUAL TEAM MEMBER ATTRIBUTES
360-DEGREE ASSESSMENT TOOL (CONTINUED)**

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always					
	1	2	3	4	5
j. Works to help unite the team in common actions and rewards					
k. Develops win-win strategies for both individual and team goals					
l. Works to make sure that everyone has an opportunity to contribute ideas and concerns					
m. Requests information from others in order to fulfill assigned responsibilities in a timely manner					
n. Works to ensure that all types of project tasks, even administrative ones, are considered essential to overall project success					
o. Recognizes that one's personal success is dependent on the overall team's success in terms of project goals and objectives					
<i>Contribution of others summary</i>					
10. Shows CONSIDERATION toward other team members during the project					
a. Treats other team members in a fair and consistent manner					
b. Shows a willingness to take time to listen to and understand the points of view expressed by other team members					
c. Shows genuine concern and interest even if he or she disagrees with another team member					
d. Avoids making personal accusations toward other team members					

**APPENDIX 4A VIRTUAL TEAM MEMBER ATTRIBUTES
360-DEGREE ASSESSMENT TOOL (CONTINUED)**

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always

	1	2	3	4	5
e. Realizes the importance of taking the appropriate time to provide advice and direction to others					
f. Provides feedback focused on problems or solutions, not on personalities					
g. Remains attentive and interested in team meetings and conference calls even if one's own work progress is not being discussed					
h. Demonstrates empathy toward others					
i. Communicates in a manner that is not condescending to others on the team					
j. Shares beliefs and feelings with others on the team so as to be self-disclosing					
k. Appears to be in control of any personal differences in interpersonal relationships					
l. Provides opportunities to promote long-lasting relationships among team members					
m. Volunteers services and support to others from the very early stages of the project					
n. Works to ensure that other team members recognize his or her assistance as instrumental toward their success					
o. Refrains from attributing self-serving motives to other team members					
Consideration summary					
TOTAL SCORE					

Adapted model of virtual team member attributes 360-degree assessment tool for evaluation
of trust in virtual project team

Establishes and supports a COLLABORATIVE environment for project work

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always		1	2	3	4	5
a.	Encourages cooperation and teamwork on the project					
b.	Seeks the opinions of others on work in progress or completed					
c.	Seeks the advice of others who are perceived as subject matter experts in areas of the project in which he or she may lack expertise to advance knowledge					
d.	Makes it easy for others to disclose information, share idea, and openly talk about problems and concerns					
e.	Takes initiative and offers both informal and formal assistance to others on the team					
f.	Develops cooperative, rather than competitive, working relationships with others on the team					
g.	Involves others in his or her decision-making and problem-solving tasks when appropriate					
h.	Maintains friendly relationships with other team members					
i.	Determines innovative ways to optimize cooperation among project team members					
j.	Strives to unite the team in common actions and rewards					
k.	Ensures all team members participate in discussions concerning the team's mission, scope, and deliverables and how best to work toward success					
l.	Encourages team members to work toward consensus before decisions are made					
m.	Expresses confidence in the team's ability to meet or exceed the project's goals and objectives					
n.	Examines different perspectives and alternatives concerning issues that are being discussed					
o.	Develops an appreciation for the views and ideas of other team members					
<i>Collaborative summary</i>						

Demonstrates CREDIBILITY in all aspects of project work

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always		1	2	3	4	5
a.	Appears to be thoughtful in personal interactions in team situations					
b.	Shows respect for other team members					
c.	Helps team members establish a foundation of trust among one another					
d.	Handles issues that arise on the project according to procedures defined by the team					
e.	Provides information to others promptly on developments that may affect project work					
f.	Expresses confidence in the skills and abilities of others					
g.	Displays a nonjudgmental attitude toward the ideas and work of other team members					
h.	Prepares for project team meetings					
i.	Is able to cope in situations that are ambiguous or uncertain					
j.	Takes time to gather and analyze information before making decisions that affect the project					

k.	Demonstrates high performance standards, acting as a role model for others on the team					
l.	Organizes and manages time productively					
m.	Takes responsibility for statements and points of view					
n.	Has a well-developed sense of personal standards and principles to guide behavior					
o.	Works to ensure that the project's technical and performance goals are met, even if this requires compromises in terms of cost and schedule					
<i>Credibility summary</i>						

Promotes effective COMMUNICATION among project team members and stakeholders

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always						
		1	2	3	4	5
a.	Recognizes the most important information and communicates it to others effectively, concisely, and clearly					
b.	Summarizes what others have said to clarify understanding					
c.	Prepares written communication in a way that all members of the project team easily understand					
d.	Seeks additional information by asking for information to clarify items					
e.	Provides clear, concise, and logical answers to questions from other team members					
f.	Encourages the expression of diverse points of view in communication with other team members					
g.	Avoids the tendency to dominate project team meetings					
h.	Listens to what others say in a way that expresses understanding					
i.	States opinions in a persuasive, clear, and logical manner					
j.	Establishes processes for interpersonal communication among project team members					
k.	Appreciates and recognizes individual differences in communications with project team members					
l.	Asks open-ended questions to encourage information exchange					
m.	Establishes and manages formal and informal communications networks with project stakeholders					
n.	Considers the nature of the alliance with the people involved in the communication					
o.	Relates to other team members as a person of equal worth and value so that communication is based on reciprocal and mutual respect					
<i>Communication summary</i>						

Establishes a sense of COMMUNITY within the project team with a focus on professional responsibility in all activities

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always						
		1	2	3	4	5
a.	Shows an awareness of the social and cultural contexts of problems					
b.	Shares information appropriately within the professional community					
c.	Shows sensitivity to project confidentiality requirements					
d.	Elicits and respects the values of others					
e.	Exhibits sensitivity to others who are from a different culture					
f.	Shows awareness of the impact of different values, obligations, moral rights, and personal principles in choices and decisions that are made					
g.	If there is evidence of unethical behavior, identifies it and suggests the most appropriate corrective action					
h.	Exercises tolerance and compromise in interaction with team members and project stakeholders					
i.	Adheres to legal requirements and ethical standards in project work					
j.	Demonstrates the desired skills, behavior, and attitude to follow on project work					

k.	Exercises appropriate judgment in order to protect the community and project stakeholders					
l.	Gathers, analyzes, and integrates information in order to determine methods of fair resolution if there are competing requirements and objectives					
m.	Exhibits empathy toward other team members, especially in the face of competing pressures among project objectives					
n.	Recognizes that a team decision will generally be more complete than a decision made solely by one person on his or her own and works to involve others as appropriate					
o.	Shares lessons learned and best practices with other team members in a manner that is unobtrusive in order to contribute toward overall team success					
<i>Community summary</i>						

Recognizes the CONTRIBUTIONS of other team members to the project's goals and objectives

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always						
		1	2	3	4	5
a.	Sends personal e-mails to or telephones others on the team when they accomplish something significant on the project					
b.	Acknowledges and recognizes the contributions of other team members to his or her work					
c.	Recognizes these team members who champion ideas as well as those team members who support the ideas of others					
d.	Relates to team members by recognizing and appreciating individual differences					
e.	Analyzes internal and external influences on team performance to remove ant barriers that may hinder performance					
f.	Takes action to reduce any negative impact on project performance					
g.	Compares project outcomes against the defined scope and uses this information to recognize the work done by other team members					
h.	Works with the team to establish agreed-upon performance measurement criteria for the team and each individual member					
i.	Provides feedback to team members in a way that is both constructive but also recognizes success					
j.	Works to help unite the team in common actions and rewards					
k.	Develops win-win strategies for both individual and team goals					
l.	Works to make sure that everyone has an opportunity to contribute ideas and concerns					
m.	Requests information from others in order to fulfill assigned responsibilities in a timely manner					
n.	Works to ensure that all types of project tasks, even administrative ones, are considered essential to overall project success					
o.	Recognizes that one's personal success is dependent on the overall team's success in terms of project goals and objectives					
<i>Contribution of others summary</i>						

Shows CONSIDERATION toward other team members during the project

1 = Never 2 = Seldom 3 = Sometimes 4 = Often 5 = Always						
		1	2	3	4	5
a.	Treats other team members in a fair and consistent manner					
b.	Shows a willingness to take time to listen to and understand the points of view expressed by other team members					
c.	Shows genuine concern and interest even if he or she disagrees with another team member					
d.	Avoids making personal accusations toward other team members					
e.	Realizes the importance of taking the appropriate time to provide advice and direction to others					

f.	Provides feedback focused on problems or solutions, not on personalities					
g.	Remains attentive and interested in team meetings and conference calls even if one's own work progress is not being discussed					
h.	Demonstrates empathy toward others					
i.	Communicates in a manner that is not condescending to others on the team					
j.	Shares beliefs and feelings with others on the team so as to be self-disclosing					
k.	Appears to be in control of any personal differences in interpersonal relationships					
l.	Provides opportunities to promote long-lasting relationships among team members					
m.	Volunteers services and support to others from the very early stages of the project					
n.	Works to ensure that other team members recognize his or her assistance as instrumental toward their success					
o.	Refrains from attributing self-serving motives to other team members					
<i>Consideration summary</i>						

Overall performance summary table for the comparison to highest and lowest possible rate:

Collaboration		
Credibility		
Communication		
Community		
Contribution		
Consideration		
		MIN
TOTAL		
		MAX