BUILDING AND SUSTAINING TRUST IN VIRTUAL TEAMS WITHIN ORGANIZATIONAL CONTEXT

Donata Benetytė 1 , Gražina Jatuliavičienė 2

Vilnius University (Lithuania)

ABSTRACT

The article aims to show why and how trust and its components of are important within organizational context. Trust in virtual teams is a rather new and little studied field. Explicit understandings of what is a virtual team together with which dimensions define such team are provided. Afterwards, the article discuss what specific challenges virtual teams face when attempting to establish trust between its members providing knowledge on what actions and behaviors can build trust in a virtual team and overcome the challenges specific to virtual teams. Due to certain virtual teams' specifics (geographic dispersion, electronic dependence, dynamic structure and cultural diversity) trust in these teams is usually low. Based on the empirical research results methods for building trust in the virtual team are suggested.

KEY WORDS: trust, virtual team, trust building in a virtual team.

JEL CODES: J240, J290, M120, O390.

Introduction

Trust is seen in most of the researches as a voluntary exposure to the ill will of another, with a faith that no such ill will exists (Nandhakumar, Baskerville, 2006). Because trust represents a positive assumption about the motives and intentions of another party, it allows people to economize on information processing and safeguarding behaviors. And even though trust is not the only answer to the organization, according to McEvily et al. (2003), it can generate efficiencies by conserving cognitive resources, lowering transaction costs, and simplifying decision making.

Virtual teams, in this era of technological advantage, are growing in number and importance around the globe. A study by the Gartner Group shows that more than 60 per cent of professional employees work in teams characterized by virtuality (Kanawattanachai, Yoo, 2002). Teams like that potentially make it easier to gain and apply knowledge to critical tasks in international organizations (Madhaven, Grover, 1998; Sole, Edmondson, 2002).

Due to their specifics, the levels of trust in virtual teams are usually low. These same specifics create obstacles for building and/or sustaining trust in such teams. Trust within organizational context has proven to produce many benefits for an organization, and with virtual teams facing specific to them challenges, the knowledge on how to build trust and overcome these challenges is necessary. However, even though there

E-mail: donata.benetyte@mail.com

Tel.: +370 5 865 948 950

E-man, grazma.jatunaviciene@e

Tel.:+370 5 219 32 30

Donata Benetytė – Vilnius University, Faculty of Economics. Postgraduate management student. Scientific interest: trust building.

Gražina Jatuliavičienė – Vilnius University (Lithuania), Faculty of Economics, Business department, associate professor, doctor of social sciences. Scientific interest: trust building, entrepreneurship E-mail: grazina.jatuliaviciene@ef.vu.lt

is a large amount of scientific research on trust and building trust in an organization, as well as scientific research on virtual teams, not much literature exists on building trust in a virtual team.

The research object of this article is trust in virtual team and the main aim is to determine methods to effectively build trust in a virtual team in general and component specific levels. Therefore goals of the article are:

- to provide a theoretical overview on trust and its components, on virtual teams and its specifics, and peculiarities of building trust in a virtual team;
- to conduct a research in order to determine methods to effectively build trust in the virtual team in general and component specific levels.

Research methods: logical analysis and synthesis of related literature, comparison and generalization, deduction and conceptualization, empirical research.

1. Concept and importance of trust within organizational context

Trust and the importance of trust has long been a central focus for sociologists, political scientists and anthropologists. However, many researchers see the concept of trust as very difficult to handle in an empirical research because of the various definitions of trust used in each discipline and the multitude of functions it performs in the society (Misztal, 1996).

Mayer et al. (1995) define trust as willingness to accept vulnerability based on positive expectations about another's intentions or behaviors. Trusting act is "an altruistic act in that it is an act that increases the outcomes for the other while either decreasing or risking a decreased outcome for the truster" (Messick, Kramer, 2001: 90). Fichman (2003) follows the latter definition of trust by Messick and Kramer and takes it further by distinguishing fairness as important component of trust, also, separating reciprocity and emotions as a provider of a commitment mechanism (see Figure 1).



Figure 1. Model of trust

Source: Based on Fichman, 2003: 135-142

Fairness as a component of trust. When a person relies on another individual to deal with him/ her in a certain way when he/she is vulnerable, this is measured against a standard or expectation that can be characterized in terms of fairness. For example, Cummings, Bromiley (1996) in their definition of trust explicitly consider whether someone acts in accord with commitments, is honest in his or her dealings and does not take "excessive advantage" (p. 303). Excessive advantage implies that the individual "can be counted on to put forward a bargain that is not seen as unreasonable, given the norms of the organization or group" (p. 304).

Reciprocity as a component of trust. A fundamental assumption in economics is that behavior is driven by self-interest. One basis for sustaining exchange and interaction between self-interested parties is an approach where an individual behaves nice as long as the other party does the same, and is alienated or even antagonistic when the other party is unkind to him/her. This approach, while not sustainable in all circumstances, has been shown to be robust in many of them (Bendor, Swistak, 1997).

Emotions as a provider of a commitment mechanism. Emotions provide a commitment mechanism even when an action is not in an individual's self-interest (Frank, 1988). For example, Shelling (1978) argues that the reputation for a willingness to punish deter others from betraying this individual's trust,

from cheating. The reputation for being mean lets others know in advance that they will be punished by this individual, if they cheat – the potential cheater would be punished even if it is not the individual's with the reputation for meanness self-interest to respond with anger.

Thus, trust is partially based on a 'leap of faith' (Lewis, Weigert, 1985). Even though this view of trust includes an element of calculated expectation, it also encompasses an impossible to calculate component, recognizing the bounded rationality and uncertainty of organizational life.

A different definition of trust is provided by Shockley-Zalabak et al. (2010) who describes trust as the overreaching belief that an organization in its communication and behaviors is competent, open and honest, concerned, reliable, and worthy of identification with its goals, norms, and values. These five characteristics are defined as dimensions or components of trust (see Figure 2).

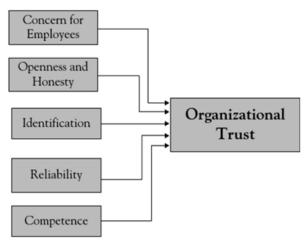


Figure 2. Model of organizational trust

Source: Shockley-Zalabak et al., 2010: 28

The competence dimension is the ability of the organization through its leadership, strategy, decisions, quality, capabilities to meet the challenges of its environment, as well as to achieve the organizations objectives. Competence comes from the capabilities of employees at all organizational levels.

The reliability dimension is about keeping commitments and basic follow-through. It is about telling all organizational members when something has to change and why. Reliability is a steadiness in behavior that builds the trust necessary for uncertain times.

The identification dimension is the connection between the organization and individual employees most often based on core values. Identification relates to an individual establishing a personal connection with management and peers and with the entire organization, i.e. when individuals believe their values are reflected in the values the organization exhibits in day-to-day behaviors.

The openness and honesty dimension shows how the organization communicate about its problems, engage in constructive disagreements and conflicts, and provide input into job-related decisions. Stakeholders evaluate an organization as open and honest when they are provided with information on how jobrelated problems are handled and how major organizational decisions will affect them as individuals. Longterm strategic direction, when available to all stakeholders, is a sign of an open and honest organization.

The concern for employees / stakeholders dimension is about communication and employment practices. It is reflected in the perception and reality of top management wanting to communicate regularly with employees and exhibiting a willingness to hear and act on employee ideas, concerns and needs.

Because trust represents a positive assumption about the motives and intentions of another party, it allows people to economize on information processing and safeguarding behaviors (McEvily et al., 2003). Furthermore, trust is a basic necessity for nearly all forms of exchange. (McEvily et al., 2003) believe that trust influences organization through two main causal pathways – structuring and mobilizing:

- Structuring. Trust shapes the relatively stable and enduring interaction patterns in and between organizations. By influencing the status and reputation of certain actors, trust affects their positions within a social network and changes the shape and structure of the network itself.
- Mobilizing. Trust motivates actors to contribute, combine, and coordinate resources towards
 collective efforts. By increasing openness speed in knowledge sharing, trust facilitates cooperation and joint problem solving, i.e. trust makes decision making more efficient by simplifying the
 acquisition and interpretation of information.

According to Shockley-Zalabak et al. (2010), there are four main effects of trust on the organization: 1) trust is fundamental for bottom-line results; 2) trust impact organizational forms; 3) trust impacts work effort; and 4) trust impacts how organizations learn.

Trust and perceptions of integrity affect bottom-line economic performance. Low-trust organization requires unnecessary duplication and bureaucracy and is a political environment in which disengagement is common, turnover high, and fraud often prevalent (Covey, Merrill, 2008). Meanwhile, high-trust organizations increase value, accelerate growth, enhance innovation, improve collaboration, have stronger partnering, better execution, and heightened loyalty (Covey, Merrill, 2008). Trust also impacts the ability to create adaptive organizational forms, to form strategic alliances, and to work in effective virtual teams. Furthermore, being trusted to do a job independently (versus tightly monitored) creates more productive performance and change. Finally, for creativity and innovation to flourish in the organization, people at all organizational levels must have the motivation to challenge conventional wisdom and push to change status quo. Creativity and innovation are likely to flourish in climates of trust and to literally shut down when distrust is prevalent.

On the other hand, trust also has a downside. Academics have noted that trust by itself does not guarantee trustworthy behavior; as a matter of fact, it may even lead to greater fraud than if it did not exist (Granovetter, 1985; Shapiro, 1987). This arises not only from trust that was displaced, but also from an excessiveness of trust. 'Despite careful calibration, trust in organizational context includes a probabilistic leap of faith, which may lead the trustor astray. As situations change, supporting commitments may unconditionally become untenable for individuals and organizations at some stage' (McEvily et al., 2003).

To conclude, high organizational trust positively transforms individuals and entire organizations. Trust impacts structuring (organizational forms), mobilizing (increases work effort, improves bottom-line results), and how organizations learn (triggers creativity and innovation). Downsides of trust are the risk the 'leap of faith' is connected to and the possibility for the quality of trust to result in flawed and costly judgments.

2. Building trust in a virtual team

Virtual teams, defined as geographically dispersed, electronically dependent, dynamic, or consisting of diverse members working remotely (Martins et al., 2004; Kirkman, Mathieu, 2005) are growing in number and importance. Virtual teams were at first defined as groups of geographically distributed co-workers that are brought together using a combination of telecommunications and information technologies to carry out a variety of tasks (Townsend et al., 1998).

However "recently, scholars have shifted away from this dichotomy recognizing that most teams can be described on a continuum of virtuality" (Gibson, Gibbs, 2006: 453). Shin (2004) suggested that virtuality is the degree to which a group has temporal, spatial, cultural and organizational dispersion and communicates

through electronic means. Harvey et al. (2005) defined virtual teams as geographically and organizationally dispersed, with members who work in different time zones, in different nations around the world, with membership that is often temporary and structure that is transitory, and who communicate primarily via technology. From the definitions of a virtual team across this growing literature one can see that the most common characteristics of such team are geographic dispersion and electronic dependence and national diversity. However, further on, this work will be focusing on the four most common virtual team's defining dimensions, i.e. geographic dispersion, electronic dependence, dynamic structure and national diversity.

The traditional conceptualization of trust supposes that trust resides in personal relationships and past or future membership's in common social networks that define the shared norms of obligation and responsibility (Bradach, Eccles, 1988). As virtual teams are physically isolated and are thereby forced to communicate using technology, they often have less of opportunities to physically come together and share experiences or reciprocal disclosure, which traditionally has been considered as sources of personal trust relationships (Lewicki, Bunker, 1996).

The lack of past and future association decreases the potential existence of trust (Jarvenpaa, Leidner, 1999). The diversity in cultural and geographic backgrounds likewise challenges the potential existence of trust (Bradach, Eccles, 1988; Mayer et al., 1995). Finally, trust needs physical touch, which is eliminated by the technological context (Handy, 1995) – global organizations are often confronted with the situation where virtual team members must frequently meet face-to-face to avoid misinterpreting each other (Maznevski, Chudoba, 2000). In geographically dispersed teams, it is more difficult to coordinate resources, as there are shorter windows of time for synchronized meetings, and many meetings do not take place in standard hours.

What is more, in a virtual team, change occurs frequently among participants, their roles, and their relationships to each other. Many organizations partner through informal, temporary and relatively unstructured arrangements (e.g. outsourcing), or using to some extent more formal but dynamic partnerships (e.g. licensing, networks, project-limited structural arrangements) (Carson et al., 2003). What is more, a dynamic structure reduces the strength of social ties among members of the team – turnover makes it hardly possible to develop strong relationships and organizational memory. It makes it more difficult to plan and structure the flow of development – often parties need to review, renegotiate, or reinterpret their initial agreements (Das, Teng, 1998). This causes uncertainty which in its accord causes attributions and interpretations about the motives of the parties involved, resulting in unwillingness to share information. And even though it has been argued that weak ties potentially lead to greater creativity (Granovetter, 1982) due to new participants bringing fresh knowledge, individuals often feel more comfortable sharing information across stronger ties (Perry-Smith, Shalley, 2003). Finally, it is more difficult to implement knowledge when the structure is dynamic (Granovetter, 2005).

Finally, as national diversity creates different expectations and reduces identification with the team, for communication practices, it is more challenging to establish effective internal communication (Gibson, Vermeulen, 2003). Thus, although teams that consist of members from different nations have access to more information, as a result of different worldviews (Choi et al., 1999), they encounter difficulties that can hinder innovation through misunderstanding, stereotyping, and the inability to reach agreement, make decisions, and take action (Adler, 1997). In addition, high national diversity and members' identification with their nationality possibly leads to social categorization, a process in which individuals make "in-group/out-group" distinctions on the basis of nationality, particularly when they do not have enough information about others involved (Whitener et al., 1998). Nevertheless, all these negative effects can be mitigated by employing a psychologically safe, i.e. trusting environment.

The knowledge on developing trust is closely connected to the relationship development processes. 'Members of organizations actively probe their counterparts to see if they can maintain or increase their level of trust' (McEvily et al., 2003). This makes trust buildable, as well as destroyable. Jarvenpaa, Leidner (1999) have distinguished these trust-facilitating communication behaviors and team's member actions (see Table 1).

Table 1. Trust-Facilitating Communication Behaviors and Member Actions

Communication Behaviors that Facilitated Trust	Communication Behaviors that Helped Maintain	
Early in a Group's Life	Trust Later in a Group's Life	
1. Social Communication;	5. Predictable communication;	
2. Communication of enthusiasm	6. Substantial and timely responses	
Member Actions that Facilitated Trust Early in	Member Actions that Helped Maintain Trust Later in	
a Group's Life	a Group's Life	
	7. Positive leadership;	
3. Coping with technical uncertainty;	8. Successful transition from social to procedural to task	
4. Individual initiative	focus;	
	9. Phlegmatic response to crises	

Source: Jarvenpaa, Leidner, 1999: 807.

Communication behaviors helping to build trust early in a group's life: 1) Extensive social communication foster trust early on in a team's existence, though is insufficient in maintaining trust over a longer term. Social exchange can make connections between members of groups using technology based communication stronger, as long as it is not at the expense of a task focus (Chidambaram, 1996). 2) Even though earlier research indicates that members in computer mediated groups are likely to express less excitement and support, if it is achieved, it increases the appeal to the group, trend for agreement and collaboration (Fulk, 1993).

Member Actions facilitating trust early on: 3) Another trust facilitating action in the early life of a team is to develop a system of coping with technical and task uncertainty, as these factors create mistrust mostly by interrupting technology based communication (e.g., messages missed, inability to meet deadlines and the pressure rising from it) (Jarvenpaa, Leidner, 1999).

4) Individual initiatives strengthen and bring together a team (Meyerson et al., 1996), but the case data (Jarvenpaa, Leidner, 1999) also suggest that responses to the initiatives might be even more important as computer mediated communication result in greater uncertainty than face-to-face communication, which in its turn tends to create an intense need for responses.

Communication behaviors maintaining trust later on: 5) "Inequitable, irregular, and unpredictable communication hinders trust" (Jarvenpaa, Leidner, 1999, p. 798). Regular pattern of communication (explicitly setting an expectation of how regularly communication should take place, forewarning of communication absences) is necessary to maintain confidence between virtual team members. 6) Substantial and timely response verifying that group's members' messages and their contributions to the assignments are thoroughly read and evaluated creates trusting environment as members feel valued. Information on individual and organizational results should be provided constantly (Shockley-Zalabak et al., 2010).

Member actions facilitating trust later on: 7) Ineffective and/or negative leadership (e.g. complaining, comparing the team unfavorably to other teams, etc.) creates distrust between the leader and the team, as members do not feel valued, as well as between team members themselves, as they start doubting each other. Effective leaders constantly engage in positive reinforcement (Jarvenpaa, Leidner, 1999), do not shield themselves from inconvenient facts (Shockley-Zalabak et al., 2010). 8) Successful transition from social and/or procedural focus to task focus allows a group to fulfill its purpose – execute a project, a task. Groups need to set rules and procedures, create mechanisms to enforce them and then swiftly change to a task orientation. Teams that end up stuck in the procedural stage later on start losing trust in other members (Jarvenpaa, Leidner, 1999). 9) Ability to remain phlegmatic, unemotional and calm during turbulences and crises that all teams face at some point creates an environment where everything seems to be under control, which allows team members to feel that they can count on each other (Jarvenpaa, Leidner, 1999).

Shockley-Zalabak et al. (2010) offer list of recommendations for building trust in virtual environments (see Table 2).

Table 2. List of recommendations for building trust

1. Develop norms and expectations for virtual work.	7. Provide information on individual and organizational
Relate expectations to the vision and purpose of the	results
organization	
2. Set meeting and communication standards	8. Ask for feedback and suggestions for improvements
3. Ensure appropriate skills for using technology (in-	9. Deal directly and swiftly with trust breaches
cludes employees and other stakeholders)	
4. Research and design user-friendly work environments	10. Support continual learning and development
(equipment, supplies, technology, and ergonomic work	
features, etc.)	
5. Use multiple methods of communicating including	11. Make personal contacts with virtual workers
voice and face-to-face meetings	
6. Ensure employees and other stakeholders know how	12. Reward and recognize contributions
their work/interaction relates to the overall excellence of	
the organization	

Source: Shockley-Zalabak et al., 2010

Points 1 and 2 supplement: 1) social communication; 3) predictable communication, and the first stage of 7) successful transition from social to procedural task focus. Points 3, 4 and 5 supplement 5) coping with technical uncertainty. Points 6, 7 and 8 supplement: 3) predictable communications; and 4) substantial and timely responses. Point 11 supplements 1) social communication, and point 12 supplements 8) positive leadership.

However, points 9 and 10 are not reflected in the previous trust-facilitating communication behaviors and member actions scheme. With the point 9 Shockley-Zalabak et al. (2010 suggest that leaders and team members should quickly respond to ethical abuses, as "distrust grows when abuses are ignored, action is delayed, or a veil of secrecy surrounds addressing ethical violations" (Shockley-Zalabak et al, 2010, p. 207). With the point 11 authors suggest that training about the concepts of trust for leaders, supervisors, teams, virtual environments and individual contributors has lasting value, as when these competences are understood and recognized, stakeholders become empowered to actively build trust (Shockley-Zalabak et al., 2010).

Finally, one more important trust building factor in a virtual team is face-to face meetings. Maznevski, Chudoba (2000) in their research have found that face-to-face meetings helped to resolve prior uncertainties, to produce ideas, make comprehensive decisions, build loyalty, commitment and relationships in general. Robey et al. (2000) suggest that face-to face meetings build deeper social connection between team members and are required for a long-lasting virtual communication. However, frequency of face-to-face meetings can be reduced over time with the appearance of task accuracy and clarity (Maznevski & Chudoba, 2000).

All these means (actions and behaviors) for building trust in a virtual team facing the challenges provided by its specifics allow diminishing or sometimes even removing the negative effects of these challenges.

3. Empirical research data analysis and interpretation

As per organization's whose virtual team is researched request, no identifying details of the organization will be revealed in the research. However, substantial characteristics of the virtual team researched were provided by the organization and are as follows. The researched virtual team's field of work is information technologies. The team is permanent, members are changing rather often (12 people left and were replaced by others in the last half a year only). The team now exists for three and a half years.

Team consists of 58 members, 39 of who are men (67 %) and only a third are women. Most of the members (38 %) are 20–29 years old, a little less (34 %) are 30–39 years old, and the least of them (13 %) are 50–59 years old. The team is made of members of different nationalities: 28 members are Lithuanian, 13 come from India, and the rest 17 are English. Education acquired by the members of the team is mostly university level education (62 % have a bachelor degree, 23 % have a master degree or higher). Most of the team members have been working 4 to 5 years in a virtual team (not this particular team).

Empirical research was carried out in three stages: evaluation of trust, tailored application of methods for building trust, another evaluation of trust.

The first stage of the research was carried out between the 8th and 19th of October 2012. 58 copies of questionnaire designated to evaluate general and component specific levels of trust in the virtual team were sent to 58 respondents via electronic mail and 58 copies of each questionnaire came back fully answered.

The purpose of the first questionnaire was to find out if any trust building methods are being applied in the researched virtual team. This questionnaire was based on the organizational trust index evaluation provided by Shockley-Zalabak et al. (2010). Questions were divided into several blocks reflecting the six components of trust and their elements. This questionnaire also allowed to measure general level of trust in the virtual team.

Once all the questionnaires were returned and answers counted, an index was calculated in order to see which activities for building trust are in place. The index was calculated by giving a value to each of the answers (very little -1, little -2, some -3, great -4, very great -5), values were summed up and divided by the number of questions relevant to a particular element of the model. The larger the index - the more action is being taken to build trust in a particular area. The largest possible index is 290, the smallest -58.

The results are as follows (see Table 3), components are arranged in a way that indices go from the highest to the lowest).

Trust Component		Index
Competence		203.25
Identification		183.8
Fairness (Reliability)		180
Concern for Stakeholders		163
Openness and Honesty		155.11
	Total:	172.04

Table 3. Indices on how strong is each component of trust in the researched team

To summarise the first stage of the research, one can see that while the researched virtual team's trust is rather high in components of competence (of the team and the organization), identification (with colleagues and organization) and fairness/reliability (of colleagues and supervisors), the researched team faces some big problems with trust in the component of concern for stakeholders, and especially in openness and honesty. This shows that team members do not feel that their colleagues and management are open with them, as well as they do not feel being cared for.

This should not be unexpected as the weakest elements for building trust in a virtual team in the researched team are positive leadership, social communication, predictable communication, communication of enthusiasm and initiative and face-to-face meetings – all of which are directly connected to a direct and open communication (see Table 4), the results are as follows (starting with the highest index and going to the lowest).

Elements for building trust in a virtual team		
Substantial and Timely Responses	212.3	
Coping with Technical Uncertainty	202	
Transition from social to procedural to task focus	201.5	
Phlegmatic Response to Crises	190.5	
Direct and Quick Dealing with Trust Breaches	184	
Positive Leadership	176.5	
Social Communication	163.5	
Individual Initiative	148.5	
Predictable Communication	133.5	
Communication of Enthusiasm	133	
Face-to-face Meetings	61	
Trainings on Trust	58	
Total:	160.7	

Table 4. Indices on actions taken to build trust

One can see that elements that have their indices quite high are those that are not connected to direct internal communication between the team members (substantial and timely responses, coping with technical uncertainty, transition from social to procedural to task focus, phlegmatic response to crises). However, the rest of the elements which are closely connected to direct internal communication have their indices rather low (face-to-face meetings, communication of enthusiasm, predictable communication, individual initiative, social communication, positive leadership, dealing with trust breaches – all below 190). Trainings on Trust element has received the lowest possible index which indicates that either there were never any trainings on trust provided or there were very little of them.

Thus, taking into account all of the above, the second stage was focused on improving communication between team members, as well as team members and organization's management, expecting that this in its turn would improve component level of trust together with general level of trust.

The second stage of the research was carried out in the period between the 20th of October and the 18th of November 2012. The purpose of this stage was to apply methods for building trust in a virtual team to improve the index of the elements, as well as the components of trust that were discovered to have the lowest index in the first stage of the research.

As it was identified that *positive leadership* had a rather low index (176.5), it was decided to provide trainings on positive leadership for the immediate supervisor of the team just before the rest of the team was introduced with what actions are going to be taken in order to increase trust in their team.

Further, as it was identified that no or very little *trainings on trust* were provided to the team members and management, the next step was to provide such trainings to the team and its immediate supervisor, expecting that understanding of trust and its functions will enhance the effect of further actions taken in the second stage of the research. This course was provided using video conference technology. Both courses were provided by an external organization specializing in organizational trainings, they took 8 hours each.

As the first stage of the research has identified that the lowest index regarding components of trust belonged to *openness / honesty and concern for stakeholders*, it was decided to organize a meeting with the researched team and the top management of the organization. Means of the meeting was video-conference. The purpose of the meeting was for the top management to present and later discuss with the team members the long-term strategies and tactics of the organization, to provide detailed information on how the team's work is incorporated in these strategies and tactics, also, how decisions affecting team's work are being made.

Furthermore, on the basis of the results drawn from the first stage of the research, it was decided to develop *standards for official communication*. It was decided by the team and its immediate supervisor to divide communication periodically: daily, weekly, monthly, quarterly and yearly. The main work-related matters then were assigned to these periodic categories and a responsible person for the communication of each of the matters was assigned to it. Virtual team's immediate supervisor agreed to monitor, if the communication was in process as agreed upon. Team members together with their immediate supervisor agreed to meet once per month to discuss work-related matters – goals, progress, and problems the team faces.

The meeting later continued for two more hours in order to define incentives for the team members that show *initiative and to generate ideas* on how to become closer and work more as a one team instead of three. Firstly, the team decided to create an electronical space where everyone could express their work-related ideas, suggest improvements – an internal website which was put online the same evening by several team members. Secondly, three persons (one from each country) were assigned to monitor the flow of ideas on the website; an opportunity to discuss the ideas on the website was created. Finally, team members and their immediate supervisor have agreed to start electing the best idea of the month the owner of which would be awarder with a cheque for dinner for two.

Finally, it was agreed to try to organize a *face-to-face meeting* of the whole team which later turned into a top management's approved opportunity for interchange of colleagues, i.e. team members were divided into groups of three and were arranged to go and work with their colleagues in other countries for five days. In the period of the research three groups interchanged: three Lithuanians went to work for five days to the United Kingdom, three Englishmen went to India, and three Indians came to Lithuania.

In the third stage of the research, that was carried out in the period between the 19th of November and 2nd of December, in order to evaluate changes brought by the second stage, the first stage, evaluating only general and component specific level of trust in a virtual team, was repeated with the same respondents. Once all the questionnaires were returned and answers counted, again indices were calculated for the general level of trust, as well as for each component of trust separately so they can be compared (see Table 5).

Trust Component	Index Stage 1	Index Stage 2	Difference
Competence	203.25	205	1.75
Identification	183.8	189.4	5.6
Fairness (Reliability)	180	182	2
Concern for Stakeholders	163	167.57	4.57
Openness and Honesty	155.11	168	12.89
Total:	172.04	178.62	6.58

Table 5. Comparison of indices on how strong is general and component specific trust

From the Table 5 we can see that general level of trust has grown, as well as did component specific trust. The components where trust grew the most were openness and honesty, identification, and concern for stakeholders – two of which (openness and honesty and concern for stakeholders) are strongly connected to communication between the team members and team members and management. Competence and fairness (reliability) indices have not changed much, although it did grow.

This brings a conclusion that the choice to focus on communication in the researched team in order to increase trust between team members and team members and management was correct as indices of the two weakest (as revealed in the first stage of the research) components of trust in the researched team (openness and honesty and concern for stakeholders) increased significantly. Moreover, it also shows that focus on communication also positively affected the growth of other components' indices (indices of all the components grew, although it was focused only on the two weakest), especially identification, even though they are not directly connected to communication.

Conclusions

Trust – willingness to accept vulnerability base on positive expectations about another's intentions or behaviors – has been proven to bring many benefits to an organization: structuring (positive impact on organizational forms); mobilizing (improves bottom-line results, increases work effort of stakeholders); positively affecting an organization's learning (triggers creativity and innovation).

Virtual teams are growing in number and importance around the globe but due to their specifics and the challenges these specifics bring, levels of trust in virtual teams are usually low. Just as trust brings benefits to an ordinary organization, it can also bring those same benefits to a virtual team. Thus, the knowledge on how to tackle obstacles created by a virtual team's specifics and how to build and sustain trust in such team within organizational context is necessary.

The research has shown that trust levels in a virtual team can be improved. A guideline for building trust in a virtual team can be tailored after evaluation of where the trust of a virtual team is weakest (taking into account the components and elements of trust) and methods which in their turn would improve trust in a virtual team. This was proven by the research during which methods focusing on communication were applied – they improved general and component specific levels of trust in a virtual team in a very short time (four weeks).

The research has also shown that focus on communication improve trust levels not only in components directly connected to communication (openness and honesty, concern for stakeholders) but also in other components (identification, competence, fairness/reliability). This is not surprising considering that many elements for building trust in a virtual team are connected to communication. Thus, although defining commu-

nication standards, establishing communication outside work environments, making communication regular and predictable might not level up trust in all components of trust, but it can definitely improve levels of trust in some of them, as well as the general level of trust.

References

- Adler, P. S. (1995). Interdepartmental interdependence and coordination: The case of the design / manufacturing interface. *Organization Science*, Vol. 6 (2), p. 147–167.
- Bendor, A., Swistak, P. (1997). The evolutionary stability of cooperation. *American Political Science Review*, Vol. 9 (2), p. 290–307.
- Bradach, J. L., Eccles, R. G. (1989). Markets versus hierarchies: From ideal types to plural forms. *Annual Review of Sociology*, Vol. 15, p. 97–118.
- Carson, S. J., Madhok, A., Varman, R., John, G. (2003). Information processing moderators of the effectiveness of trust-based governance in inter-firm R&D collaboration. *Organization Science*, Vol. 14, p. 45–56.
- Chidambaram, L. (1996). Relational development in computer supported groups. *MIS Quarterly*, Vol. 20 (2), p. 143–165
- Choi, I., Nisbett, R. E., Norenzayan, A. (1999). Causal attributions across cultures: Variation and universality. *Psychological Bulletin*, Vol. 125, p. 47–63.
- Covey, S. M. R., Merrill, R. R. (2008). *The speed of trust: the one thing that changes everything*. New York: The Free Press.
- Cummings, L. L., Bromiley, P. (1996). The organizational trust inventory: development and validation. In: R. M. Kramer, T. R. Tyler (eds.). *Trust in organizations: Frontiers of theory and research*.
- Das, T. K., Teng, B. (1998). Between trust and control: Developing confidence in partner cooperative alliances. *Academy of Management Review*, Vol. 23, p. 491–512.
- Fichman, M. (2003). Straining towards trust: some constraints on studying trust in organizations. *Journal of Organizational Behavior*, Vol. 24 (2), p. 133–157.
- Frank, R. H. (1988). Passions within reason: The strategic role of emotions. New York: Norton.
- Fulk, J. (1993). Social construction of communication technology. *Academy of Management Journal*, Vol. 36 (5), p. 921–950.
- Gibbs, J. (2002). Loose coupling in global teams: Tracing the contours of cultural complexity. Unpublished Ph. D. dissertation. University of Southern California.
- Gibson, C. B., Cohen, S. G. (2003). *Virtual teams that work: Creating conditions for virtual collaboration effectiveness*. San Francisco: Josey-Bass.
- Gibson, C. B., Gibbs, J. L. (2006). Unpacking the concept of virtuality: The effects of geographic dispersion, electronic dependence, dynamic structure, and national diversity on team innovation. *Administrative Science Quarterly*, Vol. 51 (3), p. 451–495.
- Gibson, C. B., Vermeulen, F. (2003). A healthy divide: Subgroups as a stimulus for team learning. *Administrative Science Quarterly*, Vol. 48, p. 202–239.
- Granovetter, M. S. (1982). The strength of weak ties. American Journal of Sociology, Vol. 78, p. 1360–1380.
- Granovetter, M. S. (1985). Economic action and social structure: the problem of embeddedness. *American Journal of Sociology*, Vol. 91, p. 481–510.
- Granovetter, M. (2005). The impact of social structure on economic outcomes. *Journal of Economic Perspectives*, Vol. 19, p. 33–50.
- Handy, C. (1995). Trust and the virtual organization. Harvard Business Review, Vol. 73 (3), p. 40–50.
- Harvey, M., Novicevic, M. M., Garrison, G. (2005). Global virtual teams: A human resource capital architecture. *International Journal of Human Resource Management*, Vol. 16, p. 1583–1599.
- Jarvenpaa, S. L., Leidner, D. E. (1999). Communication and trust in global virtual teams. *Organizational Science*, Vol. 10 (6), p. 791–815.
- Kanawattanachai, P., Yoo, Y. (2002). Dynamic nature of trust in virtual teams. *Journal of Strategic Information Systems*, Vol. 11, p. 187–213.
- Kirkman, B. L., Mathieu, J. E. (2005). The dimensions and antecedents of team virtuality. *Journal of Management*, Vol. 31, p. 700–718.
- Lewicki, R. J., Bunker, B. B. (1995). Trust in relationships: A model of trust development and decline. In: B. B. Bunker, J. Z. Rubin (eds.). *Conflict, cooperation and justice*. Jossey-Bass, San Francisco, CA.
- Lewicki, R. J., Bunker, B. B. (1996). Developing and maintaining trust in work relationships. In: R. M. Kramer, T. R. Tyler (eds.). Trust in Organizations: Frontiers of Theory and Research. Thousand Oaks, CA: Sage Publications.

- Lewis, J. D., Weigert, A. J. (1985). Trust as a social reality. Soc. Forces, Vol. 63 (4), p. 967–985.
- Madhaven, R., Grover, R. (1998). From embedded knowledge to embodied knowledge: New product development as knowledge management. *Journal of Marketing*, Vol. 62 (4), p. 1–12.
- Majchrzak, A., Rice, R. E., Malhotra, A., King, N. (2000). Technology adaptation: The case of a computer-supported inter-organizational virtual team. *MIS Quarterly*, Vol. 24, p. 569–600.
- Manusov, V., Winchatz, M. R., Manning, L. M. (1997). Acting out our minds: Incorporating behaviour into models of stereotype-based expectancies for cross-cultural interactions. *Comm. Monographs*, Vol. 64, p. 119–139.
- Martins, L. L., Gilson, L. L., Maynard, M. T. (2004). Virtual teams: What do we know and where do we go from here? *Journal of Management*, Vol. 30, p. 805–835.
- Mayer, R. C., Davis, J. H., Schoorman, F. D. (1995). An integrative model of organizational trust. *Academic Management Review*, Vol. 20, p. 709–734.
- Maznevski, M., Chudoba, K. (2000). Bridging space over time: Global virtual team dynamics and effectiveness. *Organization Science*, Vol. 11, p. 473–492.
- McEvily, B., Perrone, V., Zaheer, A. (2003). Trust as an Organizing Principle. Organization Science, Vol. 14 (1), p. 91–103.
- Messick, D. M., Kramer, R. M. (2001). Trust as a form of shallow morality. In: K. Cook (ed.). *Trust in society*, Vol. 2. New York: Russell Sage.
- Meyerson, D., Weick, K. E., Kramer, R. M. (1996). Swift trust and temporary groups. In: R. M. Kramer, T. R. Tyler (eds.). *Trust in Organizations: Frontiers Theory and Research*. Sage Publications, Thousand Oaks, CA.
- Misztal, M. B. (1996). Trust in Modern Societies. Oxford: Polity.
- Nandhakumar, J., Baskerville, R. (2006). Durability of online teamworking: patterns of trust. *Information Technology & People*, Vol. 19 (4), p. 371–389.
- Perry-Smith, J. E., Shalley, C. E. (2003). The social side of creativity: A static and dynamic social network perspective. *Academy of Management Review*, Vol. 28, p. 89–106.
- Robey, D., Khoo, H. M., Powers, C. (2000). Situated learning in cross-functional virtual teams. *IEEE Transactions on Professional Communication*, Vol. 43 (1), p. 51–65.
- Shapiro, S. P. (1987). The social control of impersonal trust. American Journal of Sociology, Vol. 93 (3), p. 623-658.
- Shelling, T. (1978). Altruism, meanness, and other potentially strange behaviors. *American Economic Review*, Vol. 68(2), p. 229–230.
- Shin, Y. Y. (2004). A person-environment fit model for virtual organizations. *Journal of Management*, Vol. 30, p. 725–743.
- Shockley-Zalabak, P. S., Morreale, S., Hackman, M. (2010). Building the high-trust organization: strategies for supporting five key dimensions of trust. San Francisco, CA: Jossey-Bass.
- Sole, D., Edmondson, A. (2002). Situated knowledge and learning in dispersed teams. *British Journal of Management*, Vol. 13, p. 17–34.
- Townsend, A. M., DeMarie, S. M., Hedrickson, A. R. (1998). Virtual teams: Technology and the workplace of the future. *Academy of Management Executive*, Vol. 12 (3), p. 17–29.
- Whitener, E. M., Brodt, S. E., Korsgaard, A. M., Werner, J. M. (1998). Managers as initiators of trust: An exchange relationship framework for understanding managerial trustworthy behaviour. *Academy of Management Review*, Vol. 23, p. 513–530.

PASITIKĖJIMO KŪRIMAS IR STIPRINIMAS VIRTUALIOSE KOMANDOSE ORGANIZACINIAME KONTEKSTE

Donata Benetytė, Gražina Jatuliavičienė Vilniaus universitetas (Lietuva)

Santrauka

Straipsnyje siekiama atskleisti, kodėl pasitikėjimas bei jo komponentai yra svarbūs organizaciniame kontekste. Pasitikėjimas virtualiose komandose yra gana nauja ir nedaug nagrinėta sritis, todėl būtina aiškiai suprasti, kas yra virtuali komanda, kartu išryškinant pagrindinius šių komandų veiklos ypatumus. Straipsnyje aptariami specifiniai iššūkiai, su kuriais susiduria virtualios komandos, siekdamos sukurti pasitikėjimą tarp

savo narių, taip pat kokie veiksmai ir elgesys gali padėti sukurti pasitikėjimą virtualioje komandoje ir padėti priimti iššūkius. Dėl specifinių šių komandų bruožų (geografinis išsisklaidymas, elektroninė priklausomybė, dinamiška struktūra ir kultūriniai skirtingumai) pasitikėjimo lygis šiose komandose dažniausia būna žemas. Remiantis empirinio tyrimo rezultatais, pateikiama pasiūlymų ir būdų, kaip didinti pasitikėjimą virtualiose komandose.

PAGRINDINIAI ŽODŽIAI: pasitikėjimas, virtuali komanda, pasitikėjimo kūrimas virtualiose komandose.

JEL KLASIFIKACIJA: J240, J290, M120, O390.