THE CONDITIONS OF WORKING IN A SUCCESSFUL VIRTUAL TEAM

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Abstract

Virtual teams are becoming ubiquitous in contemporary organizations. Many managers stress their positive influence on organizational flexibility, cost saving, better allocation of resources, and increase of innovations. There are also many challenges coming from the geographic dispersion of team members and electronic, indirect communication between them. Managing this kind of team is much more complicated than the traditional one and requires specific knowledge. This article examines differences between traditional and virtual teams and what these differences mean for management.

Keywords: *virtual team, communication in a virtual team, organizing a virtual team, effectiveness of a virtual team*

1. Introduction

The remarkable development of communication technology in recent years has created a great opportunity for firms to grow faster and to act in a more effective and flexible manner. It allows organizations to reduce the time needed to accomplish tasks, enhance innovation, cut costs, broaden access to resources and markets. We can say that thanks to the Internet and mobile phones firms have "entered upon a virtual path". Virtualization, which means the development of electronic communication, revolutionized patterns of work organization. Now, specialists from all over the world do not have to meet in one place to work together, instead they can use computer networks to cooperate, exchange ideas, share knowledge, and create new products. But even sophisticated electronic systems do not guarantee the success of an organization. It still depends greatly on interpersonal relations between employees (people/members). However, technology is an important contextual variable which influences organizational behaviours. The analysis of mutual connections and changes between technical and social systems of the organization is vital for managing effectiveness.

When virtual structures become more popular, the question arises: are traditional methods of management adequate for supervising employees in

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modified conditions? If not, what are the differences and how to stimulate efficacy in a changed working environment? These problems are especially interesting in relation to teamwork, because teams are an inherent part of each organization.

The aim of this article is to present the character of a virtual team in comparison to a traditional one, and to describe differences in managing them on the grounds of forgoing empirical knowledge.

2. The character of a virtual team

According to one definition: (Sikorski, 2001) "a team is a group of people who have to rely on cooperation and co-action if each member wants to achieve their objectives and success" (p. 59).

The specific traits of the team are (Sikorski, 2001; Katzenbach and Smith, 2001):

- Focus on the accomplishment of particular tasks – which means that, objectives are much more important than social relations between members,
- Individual and collective responsibility for outcomes – each person is responsible equally for the achievement of their own tasks and for group tasks,
- Free data flow between members – open communication,
- Coordination of actions and group decision-making – team members do not only report to each other, but they systematically accord what to do next,
- Complementary skills of members,
- Mutual help and cooperation,
- Limited role of the leader – he or she is responsible for creating conditions for cooperation, not for making decisions or giving orders. Team members should be partners.

Team work is desired by organizations because it increases productivity, improves communication in the organization and develops a cooperative organizational culture. Furthermore, it can encourage openness, enable better use of employees' competencies, facilitate *learning in action* and thus augment engagement.

We can differentiate various types of teams depending on such factors as: main purpose, period of work, diversification of members' functions and nationality, geographic localization of teammates. When it comes to the first factor – the purpose, we can specify three categories: a problem-resolution team – set up to solve a particular problem, a creative team – designed to come up with innovative solutions, a tactical team – created to implement solutions. The second criterion is the period of working and we can distinguish

standing and ad hoc teams (after: Franz, 2012). Using another criterion – the diversification of members, we have multifunctional teams (e.g. managers from different departments) and multinational teams. The last factor is the geographic localization of teammates, which distinguishes teams working in the same place (e.g. building or town), from teams whose members are situated in different, outlaying places so they have to communicate indirectly by telephone or internet. The first team is called traditional because people interact and communicate face-to-face, using e-mails only as an additional support. The second is called dispersed, but if such team members communicate and cooperate only or mainly via the internet, we can call it virtual[2] (Berry, 2011).

Thus, the first and primary difference between a virtual and traditional firm is the predominant way of communication. Virtual teams use specific e-tools like: Skype, Yahoo Messenger, Microsoft Exchange, Novell GroupWise, Intranet, NetMeeting, WebEx, Collaborative Websites, FPT, Voice Over Internet Protocol, etc. The disparity in communication forms has a direct impact on the process of socialization of employees, not only as team members but also as members of a specific organization. It influences the interpretation of organizational reality (*sense making*), decision-making and in turn it shapes the process of building group identity and organizational culture.

The next important feature of a virtual team is the localization of members in many geographic places, e.g. in distinct regions of the same country or continent, or on disparate continents, and this often implies different time zones and cultures. Geographical dispersion causes asynchrony in communication. Hence, in contrast to traditional teams, virtual team members have a limited ability to continuously agree on a common position and joint planning of next steps, their work needs to be more structured and clearly divided. These characteristics may also limit the scope of mutual assistance, which is important in solving emerging problems.

Among other features that characterize a virtual team researchers mention: the nature of the interaction, the use of resources and the control and responsibility, their specific work environment, cultural background and educational facilities. A summary of these differences is shown in Table 1.

2 The name „a virtual team" may be unacceptable by some people because it suggests that members of such a group are unreal (no real people there). But this name is only a very convenient brachylogy and the definition clearly states that this is a group of people who use a computer network to communicate and cooperate to accomplish a specific task. By contrast, the term "a dispersed team" does not emphasize, in the author's opinion, the character of e-interactions.

Table 1. The differences between traditional and virtual teams

Criterion	Traditional Teams	Virtual Teams
Localization	team members localized in one place	Team members localized in dispersed places
Communication	direct (face-to-face)	Communication based on IT technology
Nature of interactions	ability to share information related and not related to work	Exchange of information not related to work is reduced to a minimum
Use of resources	increased ability to share the resources available	Each member has the access only to similar technical infrastructure
Control and accountability	manager has power to influence members of the team (direct supervision, ability to use disciplinary measures)	Manager has restricted power to influence team members
Work environment	possible difficulties in accessing information and contacts with members of the company outside the group	There may be restrictions on the sharing of ideas and problems working in solitude
Cultural and educational background	usually similar „facilities" cultural and educational	Team members usually differ in terms of cultural and educational facilities.

Source: Author's calculations based on: (Ebrahim, Ahmed, Taha, 2009; Berry, 2011).

Paradoxically, the conditions in which virtual teams operate, such as: large distance, lack of informal contacts, high diversity, uncertainty, lack of confidence, limited scope, etc.. are the opposite of the factors that affect the smooth operation of traditional teams. Therefore, two areas that are major challenges in managing this type of groups are: ensuring effective communication, ensuring such relationships between team members that enable collaboration, organization of team work, sharing knowledge, selection of team members and leadership.

3. Communication and the development of social relationships in virtual teams

A central issue for each group is communication, which is the process during which members of society inform each other using language, gestures and symbols. The primary purpose of communication is to make sure that the thoughts, desires and knowledge of the message sender were known and understood by another person, so that it is possible to establish and maintain social bonds. The transmission of information means that people give common meanings to the concepts they are using, and to enable communication people

must agree on a definition of these concepts. It is also a process of a symbolic nature, which means that apart from verbal communication an important thing is non-verbal communication like: gestures, facial expressions, posture, vision, tone of voice, clothing or space. Some researchers believe that as many as 55% of communication is received by observing facial expressions, 38% by the tone of voice and only 7% by the word (Błaszczyk, 2005; Stoner, Freeman, Gilbert, 1998). What about communication via the Internet? *Does* electronic communication reduce the quality and clarity of information? Can it hamper receiving information? How does e-communication influence the process of the formation of social ties in the group and willingness to cooperate?

As stated earlier, electronic communication in distributed teams is often asynchronous because of the different time zones or flexible working hours of team members. Its advantage is the freedom to express ideas without abrupt interruption from recipients. *It also w*eakens competition between speakers and the likelihood to dominate discussions by one of the members. It can also facilitate a more deliberate and calmer expression of opinion, which will have a positive impact on the number of potential conflicts. Despite appearances, the limitation of symbolic communication can be beneficial, because there is no room for ambiguity and misinterpretation of meanings, which is especially important in multicultural teams. Another advantage is a lower tendency to stereotyping team members and, what is typical for traditional groups, the struggle for power and influence, which may result in the formation of informal cliques. In a study conducted by Johnson and colleagues (2003), it was stated that electronic communication does not limit the freedom of expression to the same degree as face-to-face interactions, therefore, members of virtual teams are more honest in their opinions (after: Berry, 2011).

Among a number of positive aspects of e-communication there are also problems that can adversely affect the efficiency and innovation of work teams. The sole contact via the computer actually impedes the development of social ties, mainly by weakening the group cohesion. *C*ertainly, communication like this stifles processes associated with the evolution of group norms such as trust, and additionally hinders the identification of members with the team (this is a group of people "without history, without shared experiences and often with "no future"). It is especially dangerous for teams working in the short term. The researchers found that in the initial period co-workers tend to have lower willingness to share information, which negatively affects the determination for the expected outcomes (there are disagreements and difficulties to agree on a common stance). However,

this situation changes when the period of cooperation is extended (Berry, 2011; Cummings, 2011).

Another identified barrier is the lack of physical proximity and its impact on creativity and the sharing of knowledge by team members. Many years of research have shown that random encounters on the corporate corridors, at the photocopying area, in a cafeteria or even in the toilet, are not just a waste of valuable time, but favor the spread of new ideas and encourage people to work through the development of informal contacts. If it disappears, the group may waste an opportunity to establish closer relationships and exchange ideas. Thus, to let the ideas spread easily, the following requirements should be met (Fayard, Weeks, 2011):

- The Properties of Proximity – understood as a space for joint attention, such as a place where employees meet to copy documents,
- The Importance of Privacy – that is the feeling that you can speak freely without the disruption and fear of being heard, but also the feeling that you are not forced into such a contact, which can be avoided by proper arrangement of office space.

The Power of Permission – this means that managers accept informal contacts and there are no contradiction between what is fostered by the office architecture and managers' requirements.

Undoubtedly, online communication does not give such possibilities, even more it could limit informal contacts by electronic monitoring and work recording. As a result of research and observation Fayard and Weeks (2011) came to the conclusion that managers can try to create such conditions also for virtual teams. In this case:

The Properties of Proximity – should mean greater access to team members in the selected virtual locations (e.g., Twitter, Facebook). This requires a greater initial activity of a few members who will initiate and develop contact. Also, of great importance is the ease and quick access to individuals, "no more than a mouse click away ".

The Importance of Privacy – the creation of ways in which you can freely move from group interaction to an individual conversation, as well as the opportunity to mark your availability status and freely decide when to undertake such informal communication. It is also a transparent company policy on regulations related to privacy of on-line exchanges.

The Power of Permission – consent for the informal contacts that can be achieved through video links started long before the virtual meeting and closed long after its completion. This way, properly animated by the leader, should encourage random contacts and conversations, not necessarily related to the project (Fayard, Weeks, 2011).

4. Organization of virtual team

Virtual teams are focused on implementing a particular purpose, often at a predetermined time. In addition, having a limited possibility of "mutual break-in" and clarifying doubts, team members have to get at the beginning a clear set of operating rules that will allow them to go into action quickly. These rules relate to the following issues (Berry, 2011):

- Clear rules and expectations of the use of certain types of technology,
- A clear interpretation of what effective (satisfactory) work completion means,
- Reconciliation of general labor standards and requirements of team members (e.g., working hours),
- Planning deadlines of the subsequent tasks and the effects required of each team member,
- Principles of recording and reporting systems, including the creation of electronic archives and the security policy (the protection of information).

Work of virtual teams requires careful arrangements and good structuring, since it must be absolutely clear how the group works and what is expected of it. *The* process of a typical group formation includes: forming, storming, norm forming and performing activities, but in virtual teams the second step –storming is often ignored or reduced. This phase is important to create a climate of openness and encourage team members to express their views, agree on common standards, but it also promotes conflicts Berry, 2011).

Observation of traditional teams indicates that they are most effective when there is trust between members, reciprocity (e.g., exchange of information, assistance), openness and commitment to achieve a common goal (e.g., devoting adequate time to work and team contacts). Virtual teams have a limited ability to gradually develop such standards, but does it mean that they can function without them? The answer is – no. Since there is no time for their development, they must be quickly "imported". Members must apply them *a priori* from the very beginning of the joint action. Trust, in this case, is based on the partner's goodwill and on the assumption of his credibility. Meyerson, Weick and Kramer (1996) call it *swift trust*. According to them *swift trust* is possible in temporal conditions because relationships between co-workers are based on their competence and as stated by Kirkland et al. (2002) 'level of confidence based on professionalism compensates for lack of social interaction'. This approach is a matter of both cultural environment of team members, as well as individual characteristics. *It* also depends on the principles which are promoted by team leaders (after: Zakaria et al., 2004).

Other problems are caused by geographical distribution of co-workers. As Cummings stated "Just because a team is virtual, it doesn't mean geography is

dead". Differences in time zones, even with the date changes, bring disturbance in coordination of work hours. This makes it impossible to communicate at the right time and forces people to work at night, and can even cause work overload because of the need to maintain communication with other team members.

Another issue that he pointed out is the amount of time devoted to work with a specific team and on a particular task, since adding jobs to other duties or simultaneous participation in other teams reduces efficiency of the team member. *Lack of* direct observation of employees can lead to an incorrect evaluation and planning of a time necessary to work effectively. *When* defining responsibilities and the time that a person has to spend on co-operation (i.e. the time actually spent in front of the computer), managers must take into account the geographical distribution and the degree of workload (Cummings, 2011).

5. Requirements for employees and the leader of a virtual team

Working in a virtual team apart from the relevant technical knowledge also requires a range of skills and personal attributes. In the first place, these include: knowledge and technical skills related to the use of e-tools, then personality traits such as openness, willingness to share knowledge, tolerance of uncertainty, the ability to cope with stress, the ability to accept different points of view, and in the case of global teams, cultural intelligence. A particularly important feature that distinguishes members of virtual teams from traditional ones is conscientiousness and self-discipline. The significance of conscientiousness results not only from the need to complete tasks on time, but also from the need to comply with the standards imposed by team cooperation, which as we know has to do with the need for high-structuring of virtual team work (Krumm, Terwiel, Hertel, 2013).

In the research report *The Challenges of Working in Virtual Teams. Virtual Teams Survey Report – 2010* respondents stress the validity of such competencies of team-mate as: the ability to share information (18%), pro-active attitude and commitment to the work of the team (17%), collaboration (17%), organizational skills (14%), social skills (13%), the ability to give feedback (11%) (The Challenges of Working in Virtual Teams, 2010).

When it comes to the manager who is in charge of people working in a virtual environment, there is an increase in requirements like: coordination skills, participation development, conflict management. As mentioned earlier, the team manager is not a kind of a traditional leader, because his or her role is to create conditions for partnership rather than to give fixed solutions. Therefore, formal leaders should play the role of guardians of the standards which were set in the initialization stage of a team. In addition, managers should model behaviors consistent with the principles, through their demonstration (e.g. trust, exchange of information). Finally, formal leader have to explain the expectations

of the organization to team members, and in case of a conflict re-explain and communicate again the rules of cooperation. Although it is emphasized that e-communication limits the possibility to motivate and control virtual workers, managers can influence behaviors by using electronic monitoring and evaluating work (also evaluation by co-workers). However, leaders should be careful not to turn it into electronic surveillance that can be regarded by employees as excessive interference in the way they work (Berry, 2011).

6. Conclusions

An analysis of available literature indicates the existence of differences, sometimes significant, in the functioning of virtual teams. It relates to the manner of constructing social relationships in order to maintain the integrity of a team, the successful implementation of tasks, as well as fostering creativity, so this requires the change in the way of structuring, organizing and leading virtual teams. Attention is also drawn to the slightly different requirements for members of the team, from whom it is not collectivism, but rather self-discipline and self-reliance in solving encountered problems are expected. It is clear, therefore, that despite the increasing pressure on virtual teamwork, not everyone will be able to accept it and reap satisfaction. This also applies to managers because directing a distributed team of people is a complex task, which increases the level of stress and anxiety, and who need to get rid of these (typical?) managerial behavior that could be called "domineering". Therefore, more research is needed on management in virtual settings, as well as research in the area of HR, concerning the selection of virtual employees, training, remuneration, career development and performance management.

Another interesting research topic that emerges on the occasion of virtual teams is their impact on organizational culture. How does online communication and distribution of workers create "the community of practice"?

To complete deliberations Table 2 presents a summary of the most important advantages and disadvantages of a virtual team.

Table 2. Advantages and disadvantages of virtual teams

Advantages	Disadvantages
• Reduced time to complete a task, for example by using different time zones to work on particular project 24 h	• Sometimes need to invest in expensive technologies to ensure the safety of information
• Reduced travel costs	• Limited social function
• Increased diversity of members, which has a positive effect on innovation	• Risk of inadequate conceptualization of the problem due to a difficulty in agreeing on the effects and the extent of the work required

• Flexible working hours (within certain limits)	• Increased risk of work overload resulting from poor estimates of time when the employee remains at the disposal of the employer
• Greater flexibility in the organization, the ability to work on projects in different locations	• Delays in transmission of information due to time differences
• Improved productivity due to increased focus on completing the task	• Difficulties in managing a virtual team
• Improved access to labor resources located in different parts of the world	• The need to formalize cooperation and exchange of information

When deciding on the organization of work in a virtual form, managers need to take into account the aspects mentioned above, as well as the specificity of the existing organizational culture to ensure that team members receive appropriate training and support.

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