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Ivana Simić

Faculty of Economics

Niš

VIRTUAL TEAM – THE BASIC UNIT OF THE VIRTUAL ORGANIZATION

Summary

A virtual organization (VO) represents a specific organizational form towards which, through the process of organizational changes, contemporary organizations strive, with the aim of improving flexibility, that is, maintaining and advancing its competitive position.

The basic unit of the virtual organization is a virtual team (VT). The aim of this paper is to, having determined the virtual team, point out its basic characteristics, with special review of the key questions of creating the virtual teams, of the problems connected to their functioning, as well as of the ways how to solve or moderate them.

Key Words: Virtual Organization, Virtual Team, Flexibility, Information Technology

The Virtual organization

In time, virtual teams will become the natural way to work, nothing special.

Lipnack, Stamps

The problems that the managers have frequently encountered in the last few decades are the problems in the following fields: the business globalization, the changes in the competitive surrounding, rapid technological changes, the changes in the work force structure, etc. The aim of their efforts has accordingly been to discover new organizational forms

that could make possible the existence and development of the new organizations through a higher level of flexibility.

Even though the concept of the virtual organization was theoretically set in the period of the 80s, XX century, it can be said that a unique, widely-accepted definition of this phenomenon has not yet been formulated. Thus, there can be found the following definitions of the virtual organization:

1) Pascal Sieber, described virtual organizations as having a strong customer orientation, and usually consisting of networks of independent companies with core competencies of behaviors and skills (Sieber, Griese, 1998, p.18) ;

2) Wassenaar described virtual organizations as: "configurations of semi-permanent, interdependent, geographically dispersed organizational units enlarging their overall performance in responsiveness on changing market needs and ICT (Information and Communications Technologies) capabilities by continuously adapting their organizational forms" (Aspin, 1999, p. 6);

3) "A geographically distributed organization whose members are bound by a long-term common interest or goal, and who communicate and coordinate their work through information technology (Vartiainen, 2003, p. 9);

4) "The key factors that we believe set a virtual organization apart that its members work across space, time and organizational boundaries... virtual organizations can be defined as those that are multi-site, multi-organizational and dynamic" (Snow, et al., 1999, p. 16).

The differences in the definitions of the virtual organization represent a result of the various points of view of the numerous authors, as well as of the attempts of certain scientists and authors to point out the specific characteristics of the virtual organization. Thus, for example (Sor, p. 826):

1) Aris (1998) lists four defining characteristics of virtual organizations:

- dispersion (multiple locations),
- empowerment (devolution of powers),
- restlessness (acceptance/enthusiasm for change),
- interdependence (cooperation and synergy between autonomous units);

2) Dembski (1998) lists the following characteristics of virtual organizations:

- opportunism,
- excellence,
- technology,
- no borders and
- trust.

3) Vartiainen (2003, p. 5) cites that virtual organizations have been described, for example, with the following characterizations:

- an alliance for a common goal,
- concentration on knowledge products,
- temporary nature of an organization (a project),
- flexibility of working time and place (e.g. telework),
- diversified and multicultural workforce,
- mobility of work force,
- vertical integration,
- no hierarchy,
- decentralized,
- decreased use of offices, etc.

Vartiainen gives the following as the basic dimensions of the virtual organization: space (same place - dispersed); time (synchronous - asynchronous) and mode of interactions (face-to-face - electrical). Individual diversity (similar-different) could be the fourth dimension. The same author points that "in virtual organizations, employees work geographically dispersed, often asynchronously and are linked with each other by using various communication technologies. People involved may speak several languages and have diverse cultural, educational and vocational backgrounds. This brings along a strong cultural emphasis. Thus - the virtual organization challenges the traditional working here and now, and communicating face-to-face. In order to overcome temporal, spatial and organizational disablers, ICT is utilized both as a means of communication and as a collective memory (Vartiainen, 2003, p. 6).

Virtual teams

The team is generally defined as "a small number of people with complementary skills who are committed to a common purpose, performance goals, and the approach for which they hold themselves mutually accountable" (Katzenbach, Smith, 2001, p. 2).

In general, a group of people becomes a team if all the members of that group consider the goals of the group (team) to be their own goals, as well; if the members of the group manage to create a common approach or method of action whose only purpose is to accomplish the mutual goal, and finally, if every single member of the group holds themselves responsible for the results they achieve.

The creation of groups, that is, teams, "is a normal part of human social behavior". Their importance for the organization lies in the fact that teams can make the organization "more flexible, quality-conscious and competitive. Accordingly, "the organizations that recognize the impact of teams on productivity can use that knowledge to their advantage " (Roberts, 1999).

The virtual team (VT) is one of the forms, characteristic for virtual organizations. It can be often heard (Vartiainen, 2003, p. 8) that virtual teams represent the basic cell of the virtual organization. This is clearly shown in figure 1.

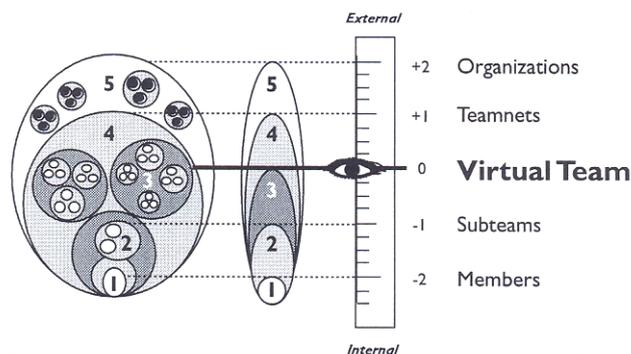


Figure 1 The position of VT- inside VO.

Source: Lipnack, Stamps, 2000, p. 247.

The significance of the virtual team for the successful functioning of the virtual organization was described by Gould who points that virtual organizations, being flexible organizations, are "centered on people and information, not on technology alone, on people using technology in creative ways" (Gould, p. 2). The significance of people (who are the basic elements of the virtual team) for the successful functioning of the virtual organization was pointed by Lipnack and Stamps in the subtitle of their well-known book *Virtual Teams - People working Across Boundaries with Technology*.

There are various definitions of the virtual team. What most of these definitions have in common is the fact that they emphasize that the members of the team are, besides being the representatives of the team, separated (in space and/or time) and that they interact primarily by e-mail.

So, the virtual team is defined as:

- 1) "team(s) of people who primarily interact electronically and who may meet face-to-face occasionally" (Gould, p. 1);
- 2) "a self-managed knowledge team with distributed expertise, that forms and disbands to address a specific organizational goal" (Cantu, p. 55);
- 3) "a group of people who interact through interdependent tasks guided by common purpose", that "works across space, time, and organizational boundaries with links strengthened by webs of communication technologies" (Lipnack, Stamps, 2000, 113).

It is precisely in this definition that Lipnack i Stamps give four essential dimensions of the basic model of VT-a (that make it possible) "to

hold something as distributed as a network and something as immediate as a virtual team-people linking with purpose over time" (figure 2). These are the following dimensions (Lipnack, Stamps, 2000, p. 115):

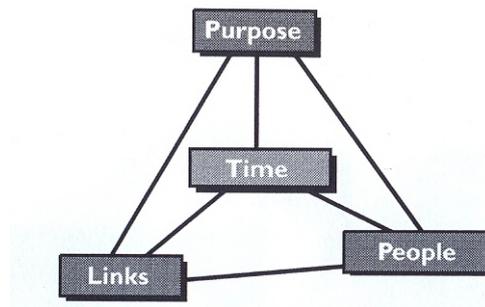


Figure 2 Four-Dimension Model (VT)

Source: Lipnack, Stamps, 2000, p. 116.

The purpose, important in any organization, becomes a key factor in virtual organizations and teams, since it is the "glue" that holds them together. In fact, it requires the establishment of co-operative objectives, individual tasks and specific results. People make up the heart of the virtual team. One of the most stressed aspects is their high degree of independence or autonomy, while the need for interdependence and collaboration is also recognized. Connections between the team members are critical and must be able to be made both by face-to-face interactions and through ICT (Information and Communication technology). Calendars, include team-specific result deadlines, task-completion milestones, and scheduled events, as well as holidays and other organizationally significant dates that impact timing.

Cynthia Cantu has a very interesting approach to defining the dimensions of virtual team and she points that "teams become virtual when you add any of the following three components (Cantu, p.1):

1) Different geography of locations of team members: virtual team members can be located in different parts of a city or in different parts of the world. As the distance increases and more time zones are crossed, the window of synchronicity in the workday narrows.

2) Team members from different organizations are parts of the organization: Team members can be from different organizations or from different parts of the same organizations.

3) Different durations or lengths of time that members work together as a team: Depending on its mission, a virtual team may unite for a project that lasts a few days, months, or years.

There exist different variants of the virtual teams. Certain authors (see: Snow et. al, 1999, p.18) speak about, the so called, "distributed teams" and some variants of the so called "cross-organizational teams".

Distributed teams are (teams) composed of people in the same organization who work in different places, either interdependently, or separately. The basic variants of the distributed teams are "task forces and project teams (as temporary teams). Such teams are formed specifically to solve a particular problem or to perform a specific task. When the problem is solved, or the task completed, the virtual team disappears (and team members go back to their normal duties). The basic variants of the so called "cross-organizational teams" are "collocated cross-organizational teams" i "distributed cross-organizational teams". "Collocated cross-organizational teams comprise people from different organizations who work together in the same place. On the other hand, the so called "distributed cross-organizational teams" involve people from different organizations who work in different places.

The creation of the virtual team

The creation of the VT, regarding its key characteristics and already stated dimensions, is not a simple process. According to Lipnack and Stamps (2000, p. 212) the creation of a successful virtual team comprises of seven obligatory steps. They are:

- 1) Create identity,
- 2) Draft mission,
- 3) Determine milestones,
- 4) Set goals,
- 5) Identify members,
- 6) Establish relationships,
- 7) Choose media.

(1) The virtual team is created by the people with a common idea who are over a period of time connected by the information and communication technology. Even during the first contacts, which are the result of the common idea, there emerges the need for the creation of the team identity. The name of the team symbolically represents its identity.

(2) After the creation of the identity of the VT there follow the activities whose aim is to show the purpose of the existence of the team. The team mission has to be formulated in due time, that is, it has to be understandable and, what is especially important, it has to be accepted by each member of the VT. Having that in mind, the mission postulates have to be stated with accuracy and precision. For some, this means writing down the purpose in a formal mission statement; for some it is a list of outcomes; still other will embrace a diagram or picture that captures the essence of what the team is about. Every mission statement and its proposed result sit inside a broader vision, whether explicit or implicit. Written down, the vision serves as the preamble to missions and goals.

(3) For many teams, virtual or not, the period from the first quickening of vision to the stating of a clear purpose may take as long as the whole rest of the life of the team. Start-up can be frustratingly long or

bewilderingly brief. Setting milestones signifies a quickening of the pace and advance preparation for implementation.

(4) Goals serve as headings for groups of tasks and results. Well-conceived goals mark the major ingredients of the team's work and are the seeds around which subteams take shape to actually do the work.

(5) The team is the result of the goal-oriented people. If the team states with precision certain details in accordance to its aim, it, at the same time, identifies those to whom they should be entrusted. The table with the names of the team members represents a very practical file model of the virtual team members (that can also be used for creating the so called virtual team directory). The starting list of the team members is rather dynamic. The people who entered the team having the original idea need not be the regular team members. The crucial people have to be recruited, and the team may identify the places that are not filled, and that call for the necessary education, experience, or representation. The list of the names give some necessary information about the team (for example, the size of the team). In order to contact the people in the virtual world, one must know their addresses. The contact addresses are of crucial importance for the team functioning and they usually provide the following: the office location, the post code, telephone numbers (office, home, car, cellular), fax number, e-mail. The people who are included in the VT have to be carefully selected. They have to possess necessary skills such as, the so called "virtual behavior", which enables them to be the strong "team players" and which simultaneously establishes the necessary flexibility. The VT members have to possess the skills of information managing, running the on-line meetings and discussions and successfully dealing with technological changes. What is more important, the team members have to possess a whole set of modes of behavior which, among other things, includes everyday "logging", formal and informal communication, the ability to deal with an overdose of information, etc.

(6) What is extremely important for the creation of a successful VT is the creation of the corresponding relations among the members. These relations include the following: who will contact whom and what the goal of their mutual contacts will be. That is the reason why the teams, especially those newly formed, are advised to anticipate the mutual relations of their members by forming, the so called, "relation maps" which are necessary for the VT goal accomplishment. The idea that each member of the VT should be involved in all the team tasks is a very serious danger to the team. That is why it must be clearly stated which tasks require which members of the team to be included and how.

(7) A very significant moment in the creation of the VT is the choice of the suitable medium (the way or means of communication and information). When choosing the suitable medium, different things have to be taken into consideration: the activity that the team members do, the

media that are already being used, the team members preferences towards certain media, the readiness of the team members to accept the media that are not momentarily used, etc. There are three basic media types: face-to-face, virtual same-time (synchronous), virtual asynchronous.

The VT problems and how to solve them

The fact is that the processes of the creation and functioning of the virtual team are not simple. They are accompanied with various problems, from those arising from the cultural differences among the team members, their sometimes quite unreal expectations of what they and other team members can and cannot do, to the problems concerning the coordination of all virtual team members. Yet, the following may be singled out as the key problems:

- 1) the problems of (un)trust among the team members, and
- 2) the problems of communication inside the virtual team.

(1) It is supposed that the essential problem of the virtual team is not the physical, but, the so called, psychological distance, among the members. The all present danger in most virtual teams is that the members who are from different places, belonging to different cultures and possessing different level of technological knowledge feel some kind of fear concerning the way in which their information will be used, or whether other members of the team will give the same contributions to the realization of the mutual task, etc. Sikka Jarvenpaas states in *Virtual Organization Conference VoNet 1998*, that "trust is the artery of the virtual organization" (Aspin, 1999, p. 6). It is the trust which prevents the physical (space) distance from becoming the psychological barrier in the communication of the team members. It takes some time to develop the "on-line" trust, although a little time is usually spent on that.

(2) Different problems concerning communication represent the serious problem in the functioning of the virtual team. One of such problems is the inability to view the whole project. The members of the virtual team know what they as individuals do, but they are not always quite certain whether and how the results of their work "fit" in the total, overall picture of the team task.

Consequently, there sometimes can arise problems like the delay of the information needed for accomplishing certain tasks, and accordingly, the delay of completing the whole work.

The specific communication inside the virtual team may even create some situations in which a member of the virtual team does not understand the received message completely (especially in case of ambiguous information).

What is needed in order to solve or moderate, lessen, the above mentioned problems of the virtual team is a very adequate managing. The

virtual team managers have to be oriented, among other things, towards [compare to Gould, p. 3]:

1) The development of trust. This question has to be of the central importance to the team managers. It is the fact that the old-fashioned ways of the management based on the permanent supervision and control are not suitable for the virtual situation.

2) The encouragement of direct (face-to-face) contacts, if at all possible. It is often suggested to the virtual team managers to organize at least one initial meeting for the virtual team members, so that they can meet one another in person and develop some personal contacts. Such meetings, if they are possible at all, make interpersonal contacts and relations among the virtual team members stronger.

3) To introduce the team members into the way and time schedule of the task realization. The basic idea is to enable the team members to realize their own position in the whole team. This can be done by showing the complete plan through the electronic means.

4) To find the model how to avoid "delays". This model can include, for example, the obligatory reply to the sent question, or the necessity to give the needed information for the stated time period (24 hours, or 48 hour, etc.), or the obligation to send the return information to the person looking for the answer that the question has reached the proper address and that giving the answer will take some time.

5) to take records of each team member. Although it can be difficult to take records every day, it is advisable to send the information concerning the absence of each team member to other members (absence from home, town) on time..

Conclusion

The virtual team is one of the forms of the teams typical for the virtual organizations. The virtual team represents a group of people who primarily interact electronically and who may meet face-to-face occasionally. It is the team which, thanks to its specific traits, exceeds areal, temporal and organizational borders, and with its numerous advantages enables the organization to attain superior results.

The virtual team creation represents a rather complex process that includes several phases: Create identity, Draft mission, Determine milestones, Set goals, Identify members, Establish relationships, Choose media. The virtual team functioning is accompanied with various problems which can be successfully solved only with an adequate action of the virtual team management.

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Ивана Симић, Ниш

ВИРТУАЛНИ ТИМ – ОСНОВНА ЋЕЛИЈА ВИРТУАЛНЕ ОРГАНИЗАЦИЈЕ

Резиме

Виртуална организација (ВО) представља специфичну организациону форму којој, кроз процес организационих промена, савремене организације теже, са циљем унапређења флексибилности, односно одржања и побољшања сопствене конкурентске позиције.

Основну ћелију виртуалне организације чини виртуални тим (ВТ). Циљ овог рада је да након детерминисања виртуалног тима, истакне његове основне карактеристике, са посебним освртом на кључна питања креирања виртуалних тимова, проблеме везане за начин њиховог функционисања, као и начин решавања или ублажавања тих проблема.

Кључне речи: виртуална организација, виртуални тим, флексибилност, информациона технологија