

## VIRTUAL ORGANIZATION – THE FUTURE HAS ALREADY BEGUN

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### *Abstract*

A virtual organization is a collection of geographically distributed, functionally and/or culturally diverse entities that are linked by electronic forms of communication and rely on lateral, dynamic relationships for coordination. Virtual organizations provide employees the freedom to work from any place and at any time. Identification has been considered to be the glue linking virtual workers and their organizations. In this context the question may be raised how employees in virtual organizations sustain organizational identification. However, the real question is whether organizational identification is needed at all and whether any glue, except communication, is needed to link virtual workers and their organization. The virtual organisation in the future will have an almost infinite variety of structures, all of them fluid and changing. The focus of virtual organizations will inevitably shift from “who we are” to “what we are doing”, from organizational structure to projects or products.

### *Key words*

virtual organization, organizational identification, communication, shared vision

### **1. Introduction**

For most of the last century, large corporations have created mass-production systems that have required the congregation of organizational employees at central places of work /1/. The advent of information technologies, however, has enabled a decentralization of work /2/. Specifically, it is now possible for organization members to work together while being spatially and temporally decoupled from one another.

Due to the rapid advances in information and communication technologies, virtual organizations are expected to play an increasingly important role in the global economy. A number of companies in some sectors will soon exist only at a virtual level. The main difference between virtual organizations and traditional ones is in the way they deal with knowledge: the traditional corporation stores knowledge by binding employees long-term; the virtual enterprise of the future buys knowledge on the market as the need arises! The result will be /3/

a "company without walls" that acts as a collaborative network of group of people working together, regardless of location or who owns them. Today, it is widely alleged that the business organisation of the future will be virtual. But precise definitions of what it means to be a virtual organisation are not easy to find.

It is clear where from is the origin of the phrase. It comes from the expression “virtual reality”, an experience in which electronically created sounds and images are made to resemble reality. The organizational process in virtual organizations is not restraint by space and time. Members of a virtual organization may never meet face to face or do not have to. The virtual organization has an appearance of classical organization but it is certainly not. A virtual company resembles a normal traditional company in its inputs and its outputs. It differs in the way in which it adds value during the journey in between.

In other words, a virtual organization can be defined as a goal-oriented enterprise com-

posed of multiple members who reside in geographically dispersed locations and use technology media to communicate and coordinate the fulfilment of a defined objective or task /4/. First, a virtual organization is an enterprise composed of multiple members. A member of a virtual organization could be defined as any individual, group of individuals, or formally organized enterprise recruited to serve as a satisfier of an input requirement /5/. Second, members of virtual organizations reside in geographically dispersed locations i.e. they do not live within reasonable driving distance of each other and are restricted by location from sharing the same physical workspace Often, members of virtual organizations live in different countries and across multiple time zones. Third, members of virtual organizations communicate and coordinate activities through technology media e.g. email and or Internet applications like Skype, Instant Messenger, and GoToMeeting /6/, /7/.

What can motivate a group of people and organization to create a virtual organization, considering that a virtual organization is one among many of specific forms of organizations from a continuum of various possibilities? The reasons for organizations becoming virtual may include:

- Globalization, with growing trends to include global customers;
- Ability to quickly pool expert resources;
- Creation of communities of excellence;
- Rapidly changing needs;
- Increasingly specialized products and services; or
- Increasingly required to use specialized knowledge.

The creation process raises new challenges for organizing in a virtual setting. Traditional organizations can rely upon relatively explicit and concrete factors to serve as the basis for linkages between employees and the organization. These elements are less readily available and less indicative of meaning in a virtual context. So the question is what is the “glue”, besides communications, that links employees in a virtual setting?

## 2. Virtual organization

The intensive use of information technologies brings too many challenges and changes within/through organizations that a great deal of papers has been written on new forms of organization generated by the development of information technology. Nowadays, the real debate relating to new forms of business is summed up to virtual organizations. What is a virtual organization?

Pang /8/ simply defines a virtual organization as: “a flexible network of independent entities linked by information technology to share skills, knowledge and access to others' expertise in non-traditional ways“. Despite its diffuse nature, a common identity holds the organization together in the minds of members, customers, or other constituents. Relationships within the virtual form are tenuous. In fact, a key implication of virtual organizing is that these forms are more reconfigurable, their boundaries are considerably more blurred, and their relationships are more likely to be contractual than traditional forms. The components (individual workers, teams, departments, units or firms) that make up a virtual organization are geographically distributed, functionally or culturally diverse, electronically linked, and connected via lateral relationships. In such an organization, employees work in a virtual work environment in which human, physical and technical resources are located where they contribute most effectively to attaining business objectives.

The process of virtualization may be taken at different levels. There can be several levels in the process /9/:

- Group level is regarding local tasks involving a group of people in a distinct organization via distance communication process.
- Organizational level where information technologies are used to coordinate the activities of the organization as integration.
- Inter-organizational level is the highest layer where numerous organizations uti-

lize the information technologies to coordinate an economic activity.

operation and trust. Integration leverages the synergy of individuals.

Outcomes of the virtualization process of an organization may be /10/:

- *Virtual team* as the simplest form of a virtual organization using information technologies to coordinate their connectivity and share their knowledge at lower cost.
- *Virtual project* can involve several people or organizations in the realization of certain task with a beginning and designated end.
- *Temporary virtual organization* is likening a virtual project involving several organizations in a designated period of time.
- *Permanent virtual organization* with an indefinite period of existence.

Pang /11/ noted the attributes of virtual organizations as:

- A dispersed network of skills and capabilities - The structure of a virtual organization is distributed among multiple locations resulting in the capacity of bringing in a wider pool of skills and capabilities.
- The use of communications and computing technologies - These technologies serve as the enabler that makes a virtual organization exist. Barriers of distance and time have been overcome by technology.
- Flexible, dynamic, restless - Organizations no longer are constrained by traditional barriers of place and time. Virtual organizations support dynamic changes to the organization including employee work environments and processing structures. Restlessness refers to the attitude to willingly change products and services, geographic dispersion or communication patterns. This has the potential of leading toward higher levels of innovation and creativity.
- Integration - When different individuals, groups and organizations get together in a virtual organization, they need to interact collectively to achieve success. This implies greater levels of collaboration, co-

Identification is a means by which organizational members define the self in relation to the organization. Thus, identification represents the social, psychological and spiritual ties binding followers and the organization, a tie that exists even when identification determines some critical beliefs and behaviours. Identification motivates members to coordinate their efforts to achieve organizational goals by enhancing interpersonal trust and cooperation.

In a virtual setting the same technologies that offer followers the flexibility to work “anytime and anywhere” may also separate the ties that bind organization members to each other and to their employer. Specifically, the clues that pull followers together in more traditional organizational settings include dress codes, shared language, shared organizational routines, and organizational identifiers such as organization charts, office buildings, and co-located followers. The links between virtual followers and their organizations may be less tangible and more social and psychological in nature. Additionally, the dispersion and dislocation characterizing employment in virtual systems strain the psychological ties between organizations and their members.

It seems that it is organizational identification which helps organizations meet some of the most critical challenges of the virtual work context, such as ensuring coordination and control. Research suggests that members who identify strongly with the organization are more likely to accept organizational goals as their own personal goals, are more likely to attend to superordinate goals, and are more likely to be loyal and obedient /12/. Organizational identification is expected to correlate with work effort, willingness to perform extra-role behaviours, and task performance. Thus, it has been believed that through its impact on employees’ motivations, organizational identification facilitates coordination and control without the need for costly systems of supervision and monitoring.

Research /13/ provides a theoretical link between organizational identification and communication. Specifically, research has found that communication can affect employee attitudes that may be strongly related to organizational identification. Communication can strengthen member identification because it provides organization members with an opportunity to create and share their subjective perceptions of the organization's defining features – its norms, values and culture.

Communication is fundamental to any form of organizing, but it is preeminent in virtual organizations. Without communication, the boundary-spanning among virtual entities would not be possible. Electronic communication enables parties to link across distance, time, culture, departments, and organizations, thereby creating "anyone/anytime/anyplace" alternatives to the traditional same-time, same-place, functionally-centred, in-house forms of organizational experience /14/. Communication in a virtual organization is critical for success. Virtual groups must share a broad range of information. If they are to act together as a single strategic unit, they must be capable to share relevant and consistent information. It is also necessary to develop the technological capability and compatibility to accomplish this goal.

Culo and Skendrovic /15/ describe the communication within in virtual organizations as interactive, complex and limiting process:

*Communication interaction* is due to the facilities given by information technology. Sending the message by means of Internet technology makes the relation between sender and receiver to be established in a very short time even if the messages are not directly sent to the receiver. Due to the use of information technology, coding and decoding the messages are made automatically without important modifications of the message.

*Communication complexity* is the result of diverse competences of the virtual team members, instability and weak demarcation of the roles within the virtual team. The members of a team with diverse competences gather much more abilities, skills and knowledge /16/ that

can contribute on one hand to improving the performance, and on the other hand it can affect negatively the cohesion of the group, because of some lacks in the communication process. Cultural diversity within virtual teams can lead to an inexact understanding of the message, especially if taking into consideration the lack of body and nonverbal language that, in some cases, has the role of emphasizing or completing certain essences of the message.

*Communication limitation* is due to the lack of expressivity of the message that has been sent, since the exchange of some informal information is practically limited both in time and in space due to the lack of "face-to-face" communication. Messages within a traditional team include series of formal and informal signals or information that gives the recipient more clues about the way how to interpret the message.

This puts limits on the kinds of work that might be managed via external, contractual relationships among entities in the virtual network. Further, it suggests that some tasks may require more structured or formal relationships when managed across boundaries whereas others might be effective with less structured or formal relationships.

In virtual context two facets must be considered (i) the "system of work" – which refers to the technical facets of production of goods or services in the organization; and (ii) "system of meaning" – the institutional facets of the organization, specifically the values attached to the work engaged in. Certain visible signs of affiliation, such as shared dress and other artefacts surrounding one in a conventional office (e.g., architecture and mementos that remind employees of their link to the organization) facilitate organizational identification /17/. This model of organizational identification seems primarily applicable to individuals who work under traditional conditions, but much less in virtual settings.

### 3. Debate

The question, however, is whether organizational identification is or will remain the

“glue” which keeps the employees together in a virtual setting as it has been argued earlier. In other words, will the organizational identification be needed at all as a vital characteristic of future virtual organizations?

Guyverson /18/ defines more recently a virtual organization as:

- A network of people or organizations which are independents.
- Those people and organizations are realizing a common project or common economic activity.
- The communication and information processes are held through information technologies.
- The organization does not depend on time and space to be made up.

It is important to note here the three essential characteristics of the virtual organizations as described above: (i) a virtual organization is a network of independent people or organizations who work jointly in teams of core competence groups, (ii) the “shared vision” and (iii) the importance of communications. Furthermore, the reason for working together can be “a common project” or “economic activities”. The virtual organisation of today, and even more so in the future, has an almost infinite variety of structures, all of them fluid and changing. Some of them need virtually no long term employees. This can be achieved by tightly focusing on the company’s core competence: its marketing. Everything else can be done by someone else. A virtual organisation relies for the most part on a network of part-time electronically connected companies, groups or individuals. Hollywood is often cited as a template for the virtual organisation. The way that movies have been made since the film industry freed itself from the studio system has been virtual. A number of freelancers, from actors to directors via set builders and publicity agents, come together with a common purpose: to make a movie, to tell a story. They then go their separate ways and another (unrelated) bunch of people (with a similar set of skills) comes together to make another movie. And so it goes on, very productively. The economy in the future will work largely in the same way movies are produced: complete

strangers will be required to produce an excellent result within the briefest space of time. While today industrial production requires transportation of the production factor “human being” to production facilities, computer networks bring the production factor “information” to us. Therefore, in a world in which data can be conveyed at the speed of light on to wherever it is needed, there is no longer any point in making armies of staff march into the office every morning. The virtual organisation is becoming inevitably ephemeral because it has no repository of long-term memory, no individuals who have worked for the same organisation for years and years. Nor has it any long-term geographical presence or a local community that remembers the company. The virtual organisation has few physical assets, reflecting the fact that adding value is becoming more dependent on (mobile) knowledge and less dependent on (immobile) plant and machinery. As companies withdraw more and more into their core competencies, so they become more virtual. The virtual organisation is able to leverage this core into almost any industrial sector. Thus it can be in the pensions business and the railway business at the same time. It can then rapidly desert any one of those businesses, and equally rapidly move into something completely different by establishing strategic alliances with organisations that have the essential skills that it lacks. It can do this anywhere in the world. The “glue” that keeps the members of these unrelated groups together cannot be anymore the organizational identification, because the team members do not necessarily belong to the same organization. Actually, the “glue” is the “shared vision”.

Peter Senge /19/, in his book "The Fifth Discipline" describes a shared vision as "... a force in people's hearts, a force of impressive power....At its simplest level, a shared vision is the answer to the question "What do we want to create?". He describes shared vision as shared pictures of the future that foster genuine commitment and enrolment, rather than compliance to organizational goals. With shared vision it no longer matters what we think but what thoughts and concepts we share with the team. It allows everyone to work together. It

creates a common identity and a sense of purpose. The discipline of shared vision moves us into the realm of group process. In other words, shared vision is the point where we actually “harness the horses” so that we can get some work done. The key here is that the project is based on the vision of delivering a product that meets or aligns with certain goals. With a shared vision everyone has a common destination and a common picture. They then work together as a team, supporting and encouraging each other. Shared vision allows everyone to work together. It creates a common identity and a sense of purpose. A virtual organization can be developed through two different mechanisms: (i) strategic partnerships, and (ii) outsourcing. A strategic partnership is formed when two business partners (e.g. supplier and manufacturer) agree to act together as a single strategic unit in order to realize a common project or product. Outsourcing occurs when a business elects to have an external organization assume a business activity that had formerly been accomplished on an “in-house” basis /20/.

Based on the above considerations, we may foresee that a future virtual organization will be a network of independent people or organizations who:

- does not depend on time and space to be made up;
- realize a common project or product;
- have a shared vision;
- cluster activities around their core competencies; and
- process and distribute information in real time throughout the entire network, which allows them to make decisions and coordinate actions quickly.

Communication is vital in creating and maintaining shared vision. According to Wilkins /21/ communication is the core of the shared vision creation process. Communication is fundamental to core existence of virtual organizations. Without communication, the boundary-spanning among virtual entities would not be possible. Electronic communication enables parties to link across distance, time, culture,

departments, and organizations, thereby creating “anyone/anytime/anyplace” alternatives to the traditional same-time, same-place, functionally-centred, in-house forms of organizational experience. Virtual groups must share a broad range of information. If they are to act together as a single strategic unit, they must be capable to share relevant and consistent information. Communication in future virtual forms is expected to be rapid and customized in response to customer demands. This implies that communication content and direction are likely to be more temporary, as links between virtual network entities are formed and dissolved over time. To the extent that lateral relationships in the virtual form substitute for hierarchical channels, greater volume of communication should occur, as two-way exchanges among a greater number of people are more likely. To the extent that communication volume is greater, there may be pressure to make some communication more formal or programmed in order to gain efficiencies and bring routine to otherwise customized work. Simultaneously, some communication is likely to become more relationship-based. Parties may seek a relational basis for transactions so that intimacy can be created in the face of distance, and trust can be established and maintained. Consequently, a likely tension in the virtual form will be simultaneous needs for more and richer communication, on the one hand, and pressures for greater transaction efficiencies, on the other.

#### 4. Conclusions

The focus of virtual organizations in the future will inevitably shift from “who we are” to “what we are doing”; from organizational structure to projects or products. Therefore, organizational identification will become of much less importance if important at all. The structure of an organizational network will be changing as projects/products are changing and the only “glue” that will keep the team of people or organizations together will be the “shared vision”.

Companies which stick to dated traditions that require “all the chickens to be present in the henhouse” for most of their working hours

will inevitably lose out to those businesses that take a flexible approach. The task will be how to link virtual groups from all corners of the planet to work together on joint projects/products in virtual rooms. The result will be a "company without walls" /22/[Pang, 2001] that acts as a collaborative network of group of people working together, regardless of location or who owns them. This appears to be the shape of virtual organization in the future – the future that has already begun

#### Notes

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## VIRTUALNA ORGANIZACIJA – BUDUĆNOST JE VEĆ POČELA

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### *Sažetak*

Virtualna organizacija je skup više geografski distribuiranih, funkcionalno i / ili kulturno različitih subjekata koji su povezani elektroničkim oblicima komunikacije i oslanjaju se na lateralne, dinamične odnose za koordinaciju. Virtualne organizacije daju zaposlenicima slobodu da rade s bilo kojeg mjesta i u bilo koje vrijeme. Identifikacija se smatra ljepilom koje povezuje virtualne radnike i njihove organizacije. U tom kontekstu, može se postaviti pitanje kako zaposleni u virtualnim organizacijama održavaju organizacijsku identifikaciju. No, pravo je pitanje da li je organizacijska identifikacija uopće potrebna i da li je bilo koje ljepilo, osim komunikacije, potrebno da poveže virtualne radnike i njihove organizacije. Virtualna organizacija u budućnosti će imati gotovo beskonačnu raznolikost struktura, a sve će biti promjenjive. Fokus virtualnih organizacija neminovno će biti pomak od "tko smo" prema "ono što radimo", iz organizacijske strukture prema projektima ili proizvodima.

### *Ključne riječi*

virtualna organizacija, organizacijska identifikacija, komunikacija, zajednička vizija