VIRTUAL WORKPLACE AND TELECOMMUTING: CHALLENGES THAT REDEFINE THE CONCEPT OF WORK AND WORKPLACE

Gorski Hortensia

Romanian-German University of Sibiu, Economic and Computer Science Faculty, Calea Dumbravii Street, no. 28-32, Sibiu, Romania, tenzig11@yahoo.com, Phone: 0744 475361

Abstract: Virtual organizations that perform the activity in the virtual workplace (cyberspace) will play a more and more important role within the global economy. Telecommuting (teleworking) is a concept strongly related to cybecorporation and cyberspace. In order to determine: (a) the usage level of telecommuting according to the field of activity and the size of the organization; (b) the reasons that determine the organizations to appeal to telecommuting; and (c) the teleworker profile, I carried out a survey based on a sample of 150 managers from all types of organizations: commerce, production, services. The survey highlights the fact that only a reduced number of organizations have started „ to make a move" related to teleworking. Some of the organizations do not understand the concept; others have heard about it but are still reluctant to it, while other organizations have not heard of this concept.

Key words: telecommuting, teleworker, information technology, cyberspace, cybrcorporation.

Introduction

Lately many organizations have undergone the process of reengineering: they modify their size; they decrease the number of hierarchic levels; they eliminate departments' barriers; they create teams on projects and products; they externalize activities; they organize virtual workplaces and encourage teleworking (from home or other locations outside the organization). All these changes obviously lead to **a fundamental rethinking of the manner in which organizations develop their activities**. Within this context, the virtual workplace and the telecommuting are the key elements that should be carefully considered by managers and organizations.

In the new age of **information technology (IT)**, of the Internet and e-commerce, the virtual organizations will play a more and more important role in global economy. The **virtual organization** or the **cyber-corporation** is a business specially designed for virtual space. The **virtual workplace** (**cyberspace)** is a working space without walls and boundaries, created with the help of IT that allows the work to take place at any time of the day (24 from 24 hours), in any location and that connects people and information no matter of their location (Keohan, M).

The concepts of cyberspace and virtual workplace focus on using the **communication technology** – *fax, e-mail, voice mail, software for video conferences* – so that the employees can perform their tasks in a location different from the headquarters. **Telecommuting** or **teleworking** is a concept strongly related to cybercorporation and cyberspace. Telecommuting refers to the use of information and communication technology in order to achieve remote working activities (respectively to work in a place different from the central location). For telecommuters that place can be their own home, or the plane, a hotel room or even the customers' offices. Strongly related to teleworking and to the use of communication technology – with the goal of connecting different locations with the central location – has emerged the concept of telecommuter. By **telecommuter** or **teleworker** we understand a person that works for an organization and that performs this activity from home or from other satellite location – at least a part time of the working hours – and that is connected to the central location by means of communication technology (Langhoff, J).

Even if currently teleworking implies a multitude of styles and organization models, the most important ones are the **telecommunities** – satellite offices located at the teleworker's workplace and witch are connected to the central location through communication technology tools. Any organization and any telecommuter or teleworker that develops an activity that can be realized in such a pattern could be a part of this teleworking system. As mentioned above, teleworkers are individuals that work at their own home or in working telecentral or persons that frequently go to the customers' place. Consequently, due to the fact that individuals can work in a location different from the central one, being also able to send the results

of their work through communication technology, the telecommuting and the virtual workplace can offer **new professional opportunities** for each involved person.

In practice teleworkers can be classified in **two categories**: (a) Those that work outside the organization because the situation is required by work that they are performing (for example many sales agents must go to the customers' offices instead of waiting for customers' calls); (b) Those that can work in a remote location from the central one because the tasks' achievement do not depend on the place where they develop the activity.

Telecommuting is also related to the tele-cooperation facilities and it offers to the worldwide specialists the possibility to collaborate by means of IT. Telecommuting usually implies sales and marketing workers, advertising field workers, analysts, architects, design engineers, auditors, economists, jurists, programmers, software engineers and other jobs related to computers and communications.

As a result of the detailed analysis of all teleworking aspects and of the specialized materials research one can underline the **advantages** that telecommuting generate not only for the teleworkers but also for the organization (Ghilic-Micu, B., Stoica, M).

- **Advantages for teleworkers**: Better management of time and increased flexibility of working schedule; Productivity improvement due to the fact that they are not disturbed by colleagues or by superiors (however, we should mention the fact that also at home there can be a productivity reduction if the teleworkers do not manage their activities very well or if they are repeatedly interrupted by other persons or by other problems); Better focus on tasks to be performed; Reduction or even elimination of transportation costs; Reduction of time required for going to the office; Reduction of stress (in an office where many persons develop their activity, the stress level can be rather high).
- **Advantages for organizations**: Reduction of expenses involved by the necessity of using working spaces – rent, maintenance, insurances etc.; The judicious usage of offices' space, in the case when some employees work according to the traditional system, while others prefer the teleworking system; Diminishing utilities expenses – gas, electricity, water etc.; Reduction of the consumption of consumable materials; Decrease of salary expenses, as the teleworkers are paid for their task and not for their time spent at work; Possibility to have experts located in any part of the globe; Possibility to hire low cost but qualified labor force (recruiting the personnel can be done in geographic areas where the labor force is low cost and well trained); Increase of productivity and performances due to the fact that teleworkers can better focus on the results to be achieved; Reduction of the number of absentees´, because the teleworkers work at home; Creation of jobs and employment opportunities in rural or disadvantaged areas.

In some organizations a part of the personnel can perform the activity off-site and be in permanent contact with the central location. Using *mobile phones, portable computers/laptops,* and *communication networks* the registered orders and other information of great interest can be sent to the central location and processed in due time. As a consequence, decisions process can be faster, based on updated and real time information. It is possible that the personnel working off-site at the customer, would have to spend more time away from the central location – sometimes weeks – and, as a result the need of offices and spaces is substantially reduced.

In the circumstances of globalization and sharp competition, the organizations are trying to offer products/services of a good quality at the lowest prices possible. Within this context they can use teleworkers – a qualified labor force, that involves low costs and who can provide increased flexibility for the organizations. Presently, the Internet allows the organizations to search, to find very quick, and to use workers from any place on the globe. We can notice more and more frequently that there is **a task transfer towards the geographic area with low cost labor force**. The telecommuting has a significant economical and social impact and it obviously influences **the international division of labour**, offering to the developing countries the possibility to improve, and to the organizations from these countries the chance to become more competitive on the global market.

The organizations that resort to this manner of work should have **performing hardware and software,** in order to realize information and documents remote transmissions. The success of virtual workplace and of teleworking greatly depends on the organizations' ability to manage their businesses electronically, respectively to use **e-commerce** and the facilities offered by **Electronic Data Interchange (EDI).** However, we should consider the fact that the infrastructure is a vital element and, in this context, the involved countries and organizations must greatly **invest in the infrastructure**, and this implies high costs. Moreover, the informational system should base on computers.

Market Research Regarding Teleworking

In Romania the first forms of teleworking emerged in 1995. At the beginning there were „pseudo activities" of teleworking in which the impact of IT was rather low. Out of the teleworkers' group we could mention the sales agents that used to perform their work off-site, the journalists that used to report from the scene location, the field workers etc. In the year 2000, more evolved forms of teleworking started to appear in Romania too. Presently, there are organizations that partially or totally use the teleworking system, mainly in commerce activities, web design, computerized programming, Database Management, Computer Aided Design, consultancy in the filed of information and communication technology.

In order to identify the level of telecommuting usage, a survey has been realized based on a questionnaire applied on a sample size of 150 managers from Sibiu County organizations.

Main objectives of the survey:
- Highlighting the usage level of telecommuting;
- Analyzing the usage level of telecommuting according to field activity and organization size;
- Determining the reasons that make the organizations not to appeal to telecommuting;
- Determining the teleworker profile.

Usage of telecommuting option

From the analyzed results we can conclude that most organizations (74,7%) do not employ „telecommuting" (figure 1).
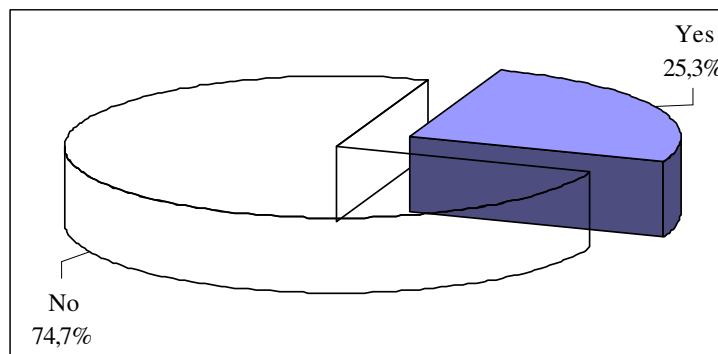

Figure 1 Organizations' option regarding the telecommuting

Moreover, it is quite interesting to underline the usage level of this working method with regard to the organizations that resort to it. Subsequently, it was necessary to calculate the weighted average (mean) for the 38 organizations that resort to telecommuting. The results (minimum, maximum and average) are presented in table 1.

Table 1 Telecommuting Usage Level

	N	Minimum	Maximum	Mean / Average
Usage of telecommuting	38	5	70	27,34

After processing the data we can conclude that from the organizations resorting to telecommuting, the lowest usage percentage is 5%, the highest is 70%, and the mean is of a rather low value (27,34%). To conclude, the hypothesis mentioned before research (*Organizations resort very little to telecommuting*) has been confirmed.

For more details there is an *analysis according to the field of activity* and an *analysis according to the organization scale*. The results are graphically represented in figure 2.
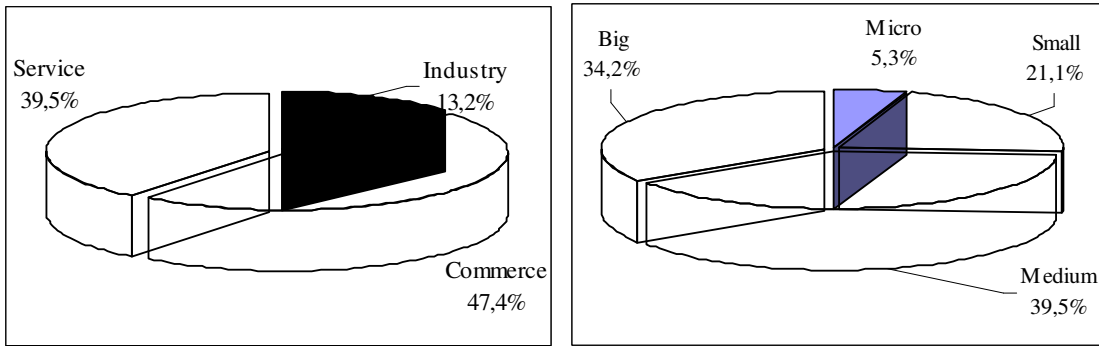
Figure 2 The usage of telecommuting –
classification according to the field of activity and to the size

From this combined analysis we can highlight that the highest weight of the organizations resorting to telecommuting are in the filed of commerce (47,4,9%), followed by services (39,5%). In opposition, the industry field includes just 13,2% organizations that use this facility.

As we can notice in the above mentioned figure, the combined analysis emphasizes that the highest weight of the organizations employing telecommuting are registered within the medium organizations (39,5%), followed by big organizations (34,2%). On the third and fourth place there are the small organizations (21,1%) and micro enterprises (5,3%). The possibility to implement a teleworking system obviously depends on the financial resources and on the organization endowment with computers, communication equipments and specialized computer software. Taking into consideration all these premises, the micro enterprises and the small organizations can slightly afford to resort to telecommuting. On the contrary, the medium organizations are on the top place with regard to this aspect. An interesting conclusion refers to the fact that the big organizations do not appeal so much to telecommuting as the medium ones tend to do, even if they usually dispose of the necessary resources. The explanation could be that big organizations are probably more conservative than the medium ones, namely more connected to the traditional way of working, and thus more rigid.

The market research underlines also the most frequently mentioned **reasons** that determine the organizations not to use telecommuting: It requires an infrastructure that they do not dispose of; It does not fit to the their activities; This option has not been considered yet; It is more difficult to control the employees etc.

Teleworkers Profile

Out of the data obtained via the market research, we can highlight the fact that within the organizations using telecommuting most of the teleworkers (60,5%) are employees that perform their activity off-site (for example at the customers' place); 31,6% are experts to whom the organizations occasionally appeal and only 7,9% are employees that permanently work at home (figure 3).
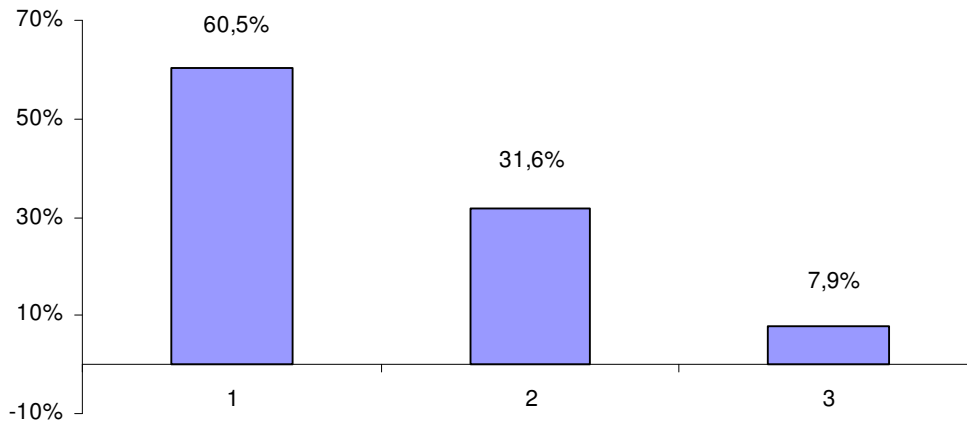

272

Figure 3 Teleworkers' profile

Location:

       1 – Employees performing the activity off-site (customers' place)

       2 – Experts to whom the organization appeal occasionally

       3 – Employees that permanently work at home

To conclude, the hypothesis mentioned before the research (*Most of the teleworkers are employees that perform their activity off-site)* has been confirmed.

Conclusions

As mentioned at the beginning of this paper, the teleworking and the virtual workplace can offer a lot of advantages not only for individuals, but also for organizations. By using information and communication technology the individuals can work in a location different from the central one, being able to send the work results to the central location. In some organizations– especially in the commerce field – there is the necessity that a part of the personnel performs the activity away from the company and permanently keeps contact with the central location. In digital era, the mobile phones, portable devices (laptop, PDA etc.), and the communication networks can support not only the managers – so that decisions are made faster – but also the organizations – so that they become more flexible and more adaptive. These arguments can explain the survey conclusions namely that: (a) the commerce organizations make the most use of telecommuting, these being followed by the services field organizations; (b) the most frequent teleworkers are those that have to perform their activity off-site, (at the customers' place , this being the case of sales agents).

The organizations that appeal to telecommuting should take into consideration the necessity of highly relying on computers, communications and performing software and of using the facilities offered by Electronic Data Interchange – EDI. As a consequence, the possibility to implement telecommuting obviously depends on the financial resources and on the organization endowment with computers, communication equipments and specialized software. Taking into consideration all these premises, we can explain also the fact that the micro enterprises and the small organizations just slightly afford to use telecommuting, as many of them do not dispose of the necessary financial resources. Usually, the big companies have the necessary resources, but they are probably more conservative than the medium ones, being more connected to the traditional way of working, and thus more rigid.

We should admit that in Romania just a very reduced number of organizations have started „to make a move" related to teleworking, while some of them do not understand this term, others have heard about it but are reluctant, and others have never heard about this concept. Starting from the advantages offered by teleworking, we still hope that in the future teleworking will develop also in Romania according to the international tendency.

Another important aspect that should be mentioned is the fact that besides the infrastructure and financial facilities, the teleworking also implies other issues that relate to **mentality** and to **organizational culture**. Consequently, even if they have resources necessary for the telecommuting implementation, the organizations must carefully **analyze if they are ready for this challenge**. The organizations should take into consideration the fact that this new type of work can develop only if there is an adequate mentality and if managers have an attitude prone to telecommuting. The managers used with permanently checking the way in which the employees divide their working time, the managers that enjoy seeing the employees „stuck" in their chair and working in their offices during the eight hours of work, the managers that like to permanently control their subordinate employees will probably face difficulties in accepting the telecommuting system.

Bibliography

1. Coulson-Thomas, C.– Transforming the Company, Kogan Page Limited, London, 2002
2. Creighton, J.L., Adams, J.W.R. - Cybermeeting: How to Link People and Technology in Your Organization, AMACOM, New York, 1998
3. Evans, N.D. – Business Agility: Strategies For Gaining Competitive Advantage Through Mobile Business Solutions, Prentice Hall, Upper Saddle River, NJ, 2001

4. Freeman, C., Soete, L. - Work for All or Mass Unemployment: Computerized Technical Change into the Twenty-First Century, Pinter, London, 1994

5. Geier J.– Wireless LANs (2nd Ed.), Person Education, Upper Saddle River, NJ, 2001

6. Ghilic-Micu, B., Stoica, M. – eActivitățile în societatea informațională, Economic Publishing House, București, 2002, pp.71-72

7. Keohan, M. – „The Virtual Office: Impact and Implementation", in Business Review, 11 September, 1995, pp. 95-98

8. Langhoff, J. – „Telecommute America", in Fortune, 30 October, 1995, pp. 229-235