ACTA UNIVERSITATIS DANUBIUS

Vol 6, No. 1/2012

The Impact of Information Technologies upon the Organizational Communication

Cristina Petronela Durneac¹

Abstract: This paper aims at bringing a contribution to understanding the role of information technology tools in the organizational communication, starting from the framing of concepts like organizational communication and information technology approached by authors such as: Shannon, Weaver, Neilson, Pasternack & Viscio, Kearney etc. Then, the paper aims to go further into identifying certain explanatory dimensions of the information technology tools. This paper moves from the social interaction aspects to the virtual ones, once with the development of modern means of communication. In this aspect, the paper tries to shed light on how the use of new information technology tools, mainly the Intranet, Extranet and the Website, affects the ways in which organization's employees interact inside the organization.

Keywords: organizational communication; Intranet; Extranet; Website

1. Introduction

The researches on organizational effectiveness have led to the formulation of theories about factors within an organization that can make a difference in performance. Because it is an important lever in enhancing organizations' key capabilities and how they function, the organizational communication is a popular business topic in both academic research and the business press. Organizational communication is one such variable that has received much attention in organizational behavior literature. The organizational sociology may seem to have to answer to a series of challenges regarding the impact of information technology tools upon the organizational communication. The modern technology allows light-speed communication and shifted space outside the sensorial perception making it

¹ PhD in Progress, National School of Administration and Political Science of Bucharest, Faculty of Sociology, Povernei St., no. 6-8., Bucharest, Romania, Tel: +4(0)1-6594417, Fax: +40-(0)1-3122535, Corresponding author: cristina_durneac@yahoo.com, Beneficiary of the project "Doctoral scholarships for the development of the knowledge-based society", co-funded by the European Union through the European Social Fund, Sectorial Operational Programme Human Resources Development 2007-2013.

virtual. As Mackenzie (1986) indicates, because society and hence organizations are continually evolving, there is really no universal paradigm or theory for examining organizational communication that is valid in all contexts. Over the years, both the organizational communication and information technology have been extensively studied by many theorists. Organizational communication is a difficult concept to examine and numerous arguments have been presented in the literature concerning the ability to define it and observe it. The article presents the concept of organizational communication and the concept of information technologies. After that, attention is focused on the role of the information technology within the organizational communication. The article ends with conclusions.

2. Literature Review

2.1. Organizational Communication

There are many definitions of organizational communication and the concept is difficult to define. It is, however, important to have clarity on what is meant by the term organizational communication, if it is to be analyzed and managed. Organizational communication is the discipline which deals with the study of communication processes within the organizational field. The organizational field is defined in new institutionalism as an intermediate level between society and organizations – on that level socially constructed practices and expectations are disseminated and reproduced. The actors' actions must be legitimized according to the regulations, norms and cognitive mechanisms binding in the given organizational field. Researchers have primarily focused on defining and describing the variables of organizational communication. The literature on organizational communication taps essential ideas, but the theory and technology to utilize the theory in improving organizations has remained fuzzy (Mackenzie 1986).

In the literature, the concept of organizational communication is used with the following meanings: (a) the direct or mediated interpersonal communication between the organization's members: employees, managers, experts, collaborators; (b) the communication of organizational structures: between departments, divisions, subsidiaries, departments; (c) the manner in which the organization communicates its own values, symbols and believes to the employees, to the customers and to other organizations: the personnel policy, internal marketing,

ACTA UNIVERSITATIS DANUBIUS

advertising, public communication market policies. For any organization, the concept of communication is an essential requirement for targets achievement, a "sine qua non" condition to operate effectively and also for establishing the most basic human relationships inside the organization (Cândea, 1996, p.182). Classical approaches of communication are generally enrolled in two categories: communication theories that place the concept of communication in relation to the technologies used as support (Shannon, Weaver) and communication theories that deal with the concept of communication by psycho – sociological perspective (School in Palo Alto). Thus, for an effective management of organizational communication, we must consider the following plans: (a) in terms of technological innovations that affect communication, the organization lies at the intersection of new developments in computing, telecommunications etc.; (b) in terms of interpersonal relations, the organization faces every day the communication problems that arise between various categories of staff: between employees and the persons in leadership positions, between managers and syndicates and between employees, etc.; (c) in terms of organization policies and management strategies, the organization must formulate its objectives of reception, and those involving the emission of messages to achieve the maximum of efficiency in this area. This third dimension is generally most often ignored. In the case of the adoption of technological innovations that support the communication, most enterprises in transition are facing first the lack of funds for purchasing such technologies; while the formulation of communication strategies is a relatively new idea in the West.

Organizational communication is a process usually intended for exchanging messages between individuals, groups and organizational levels within the organization, with the purpose of achieving the individual and the collective objectives. Organizational communication is a spontaneous and natural process. It must be designed as to allow both coordination (the process that aims to achieve a predetermined goal, necessary to achieve the ultimate goal of the organization) and harmonization (the activity that aims to define a common goal). One of the promoters of the concept of organizational communication was Chris Argyris ("Personality and Organization", 1954), who wrote as a response to the scientific management concept developed by Taylor whom promoted a radical gap between managers and workers. Taylor sustained that "the managers". This turning point

in the science of management for improving organizational communication had become one of the basic objectives of organizational development.

The study of organizational communication is very important for the following reason: when you wish to communicate something inside of an organization, the employees may perceive differently the message, each of them having a different perception (personal and subjective) on what it means. Individuals may be attracted to organizations that have values that are perceived as similar to their own and therefore they will be more committed to their job. (Smith, 2003, p. 249) Another reason is that it is very difficult to define a message to be sent within an organization that would not have deficiencies in organizational communication.

Therefore, when using phrases like: "we have communication problems in the organization", "we need to improve organizational communication" or "our objective is to increase interdepartmental communication", a misconception in understanding the nature of problems and the optimization' goals and intentions is created. Frequently, the organizational communication was analyzed using the following components: (a) formal (official) and informal (b) horizontal (at the same hierarchical level), ascending (from subordinates to superiors) or descending (c) internal (in organization), external (with the partners, customers, employees, suppliers, etc.) (Cândea, 1996, p. 182)

Organizational Communication is also the premise of the management activity and of the management functions. Only an efficient communication strategy makes planning and scheduling, coordination and control, motivation, consultation and active participation of the organization members in implementing the proposed purposes possible. Each moment in the organization's work is based on efficient communication as a way of focusing and correlating efforts. Organizational communication occurs at all levels of management, is performed on all hierarchical levels, both horizontally and vertically. Scholastic, the concept of communication can be understood as the transfer of meanings between the transmitter and receiver through a communication channel. Most theorists consider that there is communication and not just "transfer" when the receiver sent feedback. In the organizational communication not only the feedback is important but also the quality and the speed with which it is offered. Thus, the organizational communication becomes the touchstone of any modern organization. Greenberg and Baron (2003, p. 163) believe that the obligatory feeling to remain within their organization may be a result of the employee incorporating conscious or subconscious guiding principles that are exerted on an individual before they enter into

an organization, through familial or cultural socialization; or after entry into an organization, through organizational socialization. An individual will be socialized within the society they come from, which takes place before the individual becomes an employee of an organization and begins an organizational socialization process (Clugston et al., 2000, p. 5).

2.2. Information Technologies

In modern management, organizational communication has gained an extra dimension because of the information technology that has created serious changes in the concept use. For instance, the interaction is fundamental in defining communication, but more important is the communication channel (electronic, wireless), the processing of information, the encoding and decoding of the communication process. It commences developing new concepts such as network communication and virtual teams. Edgar Schein (1997) states that for an organization to face with a changing environment, especially in a global context, it must meet certain conditions such as: "to import information efficiently; to transmit the information where it has to be examined and assimilated for establishing an action; to achieve internal changes based on new information available, and receive feedback for the influence of new responses" (p. 277). All the information transmission and processing is performed using information technology.

Initially, the Internet was mainly used as a technology that supported communication between limited communities of researchers, universities and military communities. Starting in 1985 it has been expanding its use, because other communities decided to use the computer in carrying out daily communication. This was due to the different programs that provide funding for the development of Internet connection. Currently, the Internet has become a global information infrastructure that supports various business services, which led to the development and immediate adoption of search engines and "www" technology and allowed them the access to information, connecting users worldwide. Thus, it can be said that the internet era has at least three periods. In the first stage we talk about the inequality of access, and we enhance the differences between those who have access to the internet and those who have not. In the second stage we outline the variations of use, namely what people are doing on-line. In the third stage we

examine the inequality in digital skills, precisely what users are able to do, when they go on-line.

Internet is used for efficient communication within organizations, between different departments and branches, in addition to improving research and development by sharing knowledge and innovative ideas of employees. For Kearney (2006, p. 209) the organization that uses the information technology is, in fact, "a temporary or permanent coalition of individuals, groups, organizational units or entire organization that share the same resources, skills and information to achieve common objectives". By resources the author refers to information, content, software, knowledge, brands and innovation skills (Filos, 2006, p. 2). Byrne (1993) defines the virtual corporation as a "temporary network between independent companies - suppliers, customers and even rivals - linked by information technology to share skills, costs and access to mutual markets (Franke, 2002: 2). Neilson, Pasternack & Viscio (2000), believes that at this point, most companies find it selves in one of the three positions identified by them. In the first category they include companies that "create brochure ware". They mainly use the Internet to provide information to potential customers and to other stakeholders through the company's website. Through these Web pages, the companies have global presence and can more effectively manage their knowledge. These organizations were labeled as being e-aware E-aware companies. The second category is represented by the E-launch companies that use technology and electronic infrastructure to connect existing processes and operations through automation. These organizations have already begun to redefine their relations with customers and suppliers. At the same time, it facilitates communication through virtual communication technology in the company by sharing knowledge between various business units and union the organizational processes. The third category includes companies that "make business". These are the organizations that use the possibilities of the Internet as a computing platform and marketing to develop a distinct and dominant business on the web. In the reorganization they had suffered, these organizations have recreated new business models providing valuable new proposals to customers and shareholders.

3. The Impact of Information Technology Tools upon the Organizational Communication

Nowadays the issue of information technology influence and its effects on group interaction is long debated in what concerns the nature of the influence and the size of these effects. Electronic mail (e-mail) is the main way of communication in organizations today with a significant impact on the quality of the work of organization members. Thus, besides its use for transmitting messages for the related activities, the e-mail is also used to liaising with those who do not belong to the working group.

3.1. The Intranet

The Intranet is a private network inside of the company, used for dissemination of information, through the basic architecture of the Internet technology. For this, those who are using the Intranet do not need to be connected to Internet. These networks became so popular when it was discovered that they can exploit the internal components of the Internet. Intranet can co-exist with other technologies for local area networks. Chin (2004a) points out that the intranet should be flexible, to be built on an expandable infrastructure, to use a standard technology, to implement a modular intranet and encourage knowledge transfer. The intranet is used by companies as a means of publishing their purpose of disseminating information among employees. It can be used to facilitate the employees' access to the company's internal regulations, product catalogue; to display the latest news from the human resources department etc. Fisher gives the example of Lockheed Company: the human resources department has developed a program listed on the intranet with the vacant positions. Employees could apply online for the available jobs, comparing to what extend their skills and qualifications for the positions correspond to those requested. Following this analysis, they could have decided sending their CV and after that they could have watched from their monitors how the examination of the documents is conducted. Referring to MCI Worldcom Inc.,, Neilson, Pasternack & Viscio (2000) stated that the employees of this company can enter the intranet and submit for one of the available online courses offered by the company. Thus, the manager is notified immediately and the system automatically sends a confirmation to the employee. The authors show that over 55% of the employees of this company have access to classes and virtual classes under the organization's intranet. For example, Watchfire, a company dealing with the

development of software programs to monitor web sites and intranet systems, developed intranet systems for those customers who reach on average 100,000 pages. Interested in the type of information found on the intranet, Watchfire, conducted a study among the employees of companies that it serves. Thus, 78% of respondents mentioned that on their intranet systems are found confidential information regarding the human resources, 30% said they posted information about their clients and 41% said that they use the intranet to find information on health insurance. Meanwhile, only 9% felt that the system was secured enough (Pastore, 2005b).

Moreover, Lucas (2002), in his paper focuses on organizations that use the network in their daily activity ("net centric organization"). According to the author, in such an organization, the information is constantly moving, being available to those involved in decision making. Internet technology allows tracking of information and very efficient operations, accompanied by an attempt to optimize the supply chain post-production. Also, the company can reach new customers and suppliers, can create innovative markets, reduce administrative costs, change management practices and change the structure and the operations of the organization. Following a survey in companies in Italy and Great Britain, Pellegrino (2003, p. 282) concluded that the intranet was designed primarily as a tool aimed at promoting the company's image and products/services at inter and intra organizational level. Also Pedley (2003, 138) argues that because of the fact that every company is different and has its own identity and its own way to conduct business, the Intranet should reflect all these characteristics. Pastore (2005a) considers that the intranet is as unique as the company which had developed it and is, above all, a product of the organizational objectives. For Raduchel (cited in Fisher, 1997), the Intranet allows the organization members to be asynchronous and to participate in decision making, without being all present in the meeting room at a specific time to discuss topics of interest. The use of the Intranet shortened the time needed for a decision. Moreover, Raduchel says that a company is actually "a massive system of information and in its centre is a way of taking decisions". On the Web it could be identified the latest information compared to the information that can be found on the various reports and printed product catalogs. In the organizations, there are many problems keeping the employees interest in using the intranet. Therefore, no fewer Intranet die because administrators fail to update information as necessary. Chin (2005b) considers that if organizations give up the prints and it focuses on the preservation of information on digital media, the Intranet is an essential tool in improving organizational performance. The assurance of employees' access to public resources on the Internet and the Intranet will help improve their morale and create a healthy working environment. Unlike other applications, there are no specific Intranet templates or pre-defined patterns. In fact, this technology supports all applications, from knowledge management systems to the building of a support network for the user or as a portal company that can allow the connection to the different database applications. This makes the author to assert that the intranet is nothing but "... drawing a blank canvas ..." and depends only by the creators what will it contain (Chin, 2005a).

3.2. The Extranet

The Extranet can be considered as part of the company's intranet but is designed for users outside the company: strategic partners, suppliers, customers, general public etc. Based on different technologies and architectures, Pedley (2005, p. 99) considers that the reasons for an increasing number of organizations using the Intranet and the Extranet are: they can be useful sources of information for the company, can be used as a marketing tool that informs customers and buyers on the latest companies' innovations and products, can be used by organizations with geographically dispersed offices and staff who although located in different countries can work together as a true virtual team, also could be used as a competitive tool in developing special marketing strategies when it is intended to conduct research to support proposals for new business or new product development. Du & Wagner (2006) mention that there are many companies developing Intranet and Extranet to allow better communication between employees and the diverse communities they are coming into contact.

3.3. The Website

Boardman (2005) defines the website as a collection of interlinked web pages which have the same web address, the same URL (Uniform Resource Locator). This page is structured in a certain manner, centered on a page title (known as "home page"). The website promotes the identity of organizations or individuals both in content and style as approach. Boisvert & Caron (2006) considers the website as a communication tool in a company, addressed to multiple audiences.

This affirmation is sustained when taking into account the activities and tasks that have specific objectives such as developing and marketing products and services, selling products, providing after-sales services etc. The authors realized that, in fact, companies develop various types of websites considered appropriate to their goals, but taking into account the organizational processes. There are companies that can choose to develop a promotional website to be used for marketing and promoting products. If performing a transactional site, then the main goal is to sell products. If the goal is to develop a relational site, it means that it will be used to develop preferential relations with suppliers, customers, employees, investors, shareholders etc.

From Potts' (2007, 2) point of view, one can say that has an efficiently website if it accomplished three requests: (a) Marketing - targeting new customers (offensive); (b) Supporting the current customers (defence); (c) Providing general information on the organization to support the above two (coaching). However, for exceptional results, there are certain key components that should not be overlooked: quality content, clear design, elegant architecture, communication and proactive interaction. All that because the site visitors seeking to find some information that may be made available as: text, video, photos, diagrams, etc. For this, however, Web site designer must ensure that content is available and accessible. Perhaps we should consider this statement that the web author has only to standardize the battlefield, meaning that "any company can serve any customer who has an Internet connection at any time of day or of any part of the world" (Potts, 2007, 23).

4. Conclusions

The organizational communication is a complex process and, in order to be effective, it is required that all its steps and components function accordingly. The communication and information technologies tools such as the Intranet, the Extranet and the website benefit by a large area of expression and a high range of accessibility, across the world, for companies, its employees and consumers likewise. The development of the information technologies captured the organizations' attention at an unexpected level, which started to point out the advantages and disadvantages of these communication facilities, taking into account characteristics such as: the level of change of information (and type of information exchanged), privacy to organizational expression, online risks and appropriate or inadequate behaviors. Organizational communication became one of the most frequent online activities, its success resulting from its main attributes, as it offers new and various resorts of communication and interactivity using the technological instruments.

5. Acknowledgments

This work is part of the project "Doctoral scholarships for the development of the knowledge-based society", co-funded by the European Union through the European Social Fund, Sectorial Operational Programme Human Resources Development 2007-2013.

6. Reference

Boisvert, H., & Caron, M.-A. (2006). Benchmarking web site functions in *Benchmarking: An International Journal*, Vol. 13, No. 1-2, © Emerald Group Publishing Limited.

Cândea, R. (1996). Comunicarea manageriala/Management Communication. Bucharest: Expert.

Clugston, M., Howell, J.P., and Dorfman, P.W. (2000). Does cultural socialization predict multiple bases and foci of commitment?. *Journal of Management*, 26(1): 5 – 30.

Chin, P. (2004). Back to the Intranet Future: Planning For Tomorrow. *Intranet Journal* 3/25/2004. Retrieved from: <u>http://www.intranetjournal/com/articles/200403/ij_03_25_04a.html</u>. Date: 7.01.2012.

Du, H.S. & Wagner, Ch. (2006). Weblog success: Exploring the role of technology. *International Journal of Human-Computer Studies*, Vol. 64, Issue: 9, © 2006 Elsevier Ltd.

Filos, E. (2006). Smart Organizations in the Digital Age in Mezgár, I. (ed.). Integration of Information and Communication Technologies in Smart Organizations. Idea Group, Inc., Hershey, PA.

Fisher, L.M. (1997). The Wired Enterprise: Here Come the Intranets. Strategy & Business Magazine. First Quarter.

Greenberg, J. & Baron, R.A. (2003). *Behavior in Organizations: Understanding and managing the human side of work* (8th ed). Upper Saddle River: Pearson Education, Inc.

Kearney, P. (2006). Trust and security in virtual organizations. *BT Technology Journal*, Vol. 24, No. 2, retrieved from: <u>http://journals.ohiolink.edu:20080/local-cgi/send-pdf/06072215232201850.pdf</u>. Date: 10.05.2012

Lucas, H.C. (2002). Designing Netcentric Organizations Presentation. 2nd Annual NetcentricityConference,UniversityofMaryland,Retrievedfrom:http://www.rhsmith.umd.edu/netcentricityconference/presentations/lucas.ppt.Date: 14.01.2012.

Neilson, G.L., Pasternack, B.A. & Viscio, A.J. (2000). Up the (E)Organization! A seven-Dimensional Model for the Centerless Enterprise. *Strategy & Business Online*, First Quarter.

Pastore, M. (2005). Something to Watch Over Your Intranet. *Intranet Journal*. Retrieved from: http://www.intranetjournal.com/articles/200508/ij 08 11 05a.html. Date: 14.01.2012.

Pedley, P. (2003). Implementing an intranet in a global organization. *Business Information Review* [0266-3821(200309)20:3] Vol. 20(3): 136-143:039450.

Potts, K. (2007). Web Design & Marketing Solutions for Business Websites. New York: Springer-Verlag.

Schein, E. (1997). Organizational Culture and Leadership. 2nd Ed. Jossey-Bass, San Francisco, CA, USA.