# Chapter XIII The Impact of Technology in Organizational Communication

# **Roberta** Cuel

University of Trento, Italy

**Roberta Ferrario** Laboratory for Applied Ontology (ISTC-CNR), Italy

## ABSTRACT

In this chapter a case study is presented, in which the ethnomethodological approach is used to analyze the impact of the implementation of an information system, called Sispes, on organizational communication processes in the residence for elderly Giovanelli (Italy). Sispes is a Web-based platform which sustains communication processes and knowledge management according to a customized workflow management system. Adopting structuration theories in the analysis of the case study, and taking inspiration from the philosophical tradition, especially in epistemology and in the analytic philosophy of law, an innovative perspective is adopted, which specifically acknowledges the role played by the communication processes in shaping both the attitudes of the involved actors and the social reality in which they are immersed. According to this perspective, three types of communication processes are presented, namely the normative, descriptive and constructive approach. These latter are then applied to a concrete case study.

## INTRODUCTION

It is commonly known that the introduction of any technology system in an organizational reality causes some relevant changes in internal processes and in the workers' attitude to share knowledge. This chapter investigates the evolution of communication processes within the organization and the impact of the use of information systems (ISs from hereafter) on knowledge management assets. In order to overcome some problems deriving from the adoption of classical theories on organizational communication processes, a new approach based on a philosophical analysis is introduced, that distinguishes communication processes into three main categories: normative, descriptive and constructive. These latter allow the analysis both of the attitudes of the involved actors and of the social reality in which they are immersed<sup>1</sup>. By applying this new vision to the analysis of the impact of technology on communication processes within a small firm in Italy, the residence for elderly Giovanelli, the chapter investigates how the introduction of an IS, named Sispes, has affected the information strategy of the firm, the workers' attitude to share information and knowledge, and some communication processes. Finally, the chapter shows that the proposed normative, descriptive an constructive approaches allow to better understand the communication processes' dynamics. In the two following sections, some background literature (e.g. theories on technological impact and on communication processes within organizations) is presented. In the main part of the chapter, theories on communication processes and a case study are described. Finally, some future trends and final remarks are discussed.

## BACKGROUND

In the last decades, organizations had to deal with dynamic markets, characterized by specialization of work, outsourcing processes, just in time and distributed production, etc. In this scenario the continuous innovation in technology solutions and its contradicting empirical effects on organizations have maintained a strong interest for researchers who try to develop new and more complete theoretical models.

Even if non profit organizations (such as cooperative and social based firms) are working in a more stable environment, the turbulent network of stakeholders influence them. In this scenario, public or private residences for elderly are not an exception, they become part of interorganizational or informal networks, opening their virtual value chain to other companies, outsourcing their non core services and, finally, specializing their core activities such as nursing, medical, and physiotherapeutic services (see for instance Child, 1972; Child and Faulkner, 1998; Cook, 1977; Lowndes and Skelcher, 1998; Murray, 1997; Vangen and Huxham, 2003). This allows residences for elderly to offer a good quality service, improving the guests' welfare. In order to do that, they have to coordinate a constellation of specialized units, some of which are part of the organization (administration, R&D, etc.) while others refer to different companies (such as restaurant, cleaning, transportation and logistic services).

In order to stimulate coordination in a complex environment, innovative Information and Communication Technologies (ICT) solutions are implemented and communication processes are continuously reengineered. The following paragraphs describe some organizational coordination and communication processes, and how ICT, information or knowledge management systems might sustain these processes. Finally, it is argued that these latter are not neutral assets in organizations, but are strictly related to pre-existing coordination processes and types of production.

# Organizational Coordination and Communication Processes

The importance of coordination and communication processes has constantly increased at any level of the organization: technical, managerial and institutional (Parsons, 1951). This very complex organizational issue can be studied in accordance with contingency theories, which consider the organization as dependent on the complexity and the dynamicity of the environment in which the 18 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/impact-technology-organizational-

## communication/27331

# **Related Content**

### Computer-Aided Diagnosis of Cardiac Arrhythmias

Markos G. Tsipouras, Dimitrios I. Fotiadisand Lambros K. Michalis (2011). *Clinical Technologies: Concepts, Methodologies, Tools and Applications (pp. 305-313).* www.irma-international.org/chapter/computer-aided-diagnosis-cardiac-arrhythmias/53590

### AI Methods for Analyzing Microarray Data

Amira Djebbari, Aedín C. Culhane, Alice J. Armstrongand John Quackenbush (2011). *Clinical Technologies: Concepts, Methodologies, Tools and Applications (pp. 877-884).* www.irma-international.org/chapter/methods-analyzing-microarray-data/53625

### Successful Online Teaching and Learning Strategies

Mary D. Orioland Gail Tumulty (2009). Nursing and Clinical Informatics: Socio-Technical Approaches (pp. 110-123).

www.irma-international.org/chapter/successful-online-teaching-learning-strategies/27326

### Current Challenges in Empowering Clinicians to Utilize Technology

Jean M. Roberts (2011). *Clinical Technologies: Concepts, Methodologies, Tools and Applications (pp. 1623-1636).* 

www.irma-international.org/chapter/current-challenges-empowering-clinicians-utilize/53671

### Comparisons of Patient Severity Indices

Patricia Cerritoand John Cerrito (2010). *Clinical Data Mining for Physician Decision Making and Investigating Health Outcomes: Methods for Prediction and Analysis (pp. 249-286).* www.irma-international.org/chapter/comparisons-patient-severity-indices/44274