Chapter XII
Knowledge Sharing in the Context of Information Technology Projects:
The Case of a Higher Education Institution

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ABSTRACT

The proposal for this chapter is to analyze the influence of knowledge sharing in the context of an IT project management. This study is a result of field research that enabled an investigation of the way knowledge sharing figured among the parties involved in the ERP (SAP R/3) system implementation project in a Brazilian Higher Education Institution, as well as the analysis of how this sharing influenced the project in question. Data was collected in semi-structured interviews, open questionnaires and from documentary analysis. The research enabled us to verify that the factors that influenced knowledge sharing and consequently the project itself can be related to the context and dynamics of the institution in which the system was installed, to the way in which the project was planned and conducted, and also to the individual characteristics of the participants.

INTRODUCTION

Knowledge has always been part of organizations. However, conceptions of its value and role have changed along with the society and organization’s development. The transition from industrial society to knowledge society, according to Toffler (1980), is represented by the third wave of change, and has been accompanied by a new group of values and by the perception that
intangible assets are strategic and indispensable resources for organizations.

Knowledge has come to be seen as an asset that needs to be managed as any other tangible asset. Many of the factors which have led to increased interest in intangible assets are consensual, such as changes in the global economy, increasingly competitive companies, the need for ever faster and more flexible organizations and the huge advances in technology in the fields of information and communication.

The recognition of intangible assets as strategic resources that need management has led to growing discussion and attention to knowledge management throughout organizations in general and in the context of project management in particular. According to Kasvi, Vartiainen, and Hailikari (2003), project management success is based on accumulated knowledge and on individual and collective competence.

However, knowledge management in the context of project management faces several challenges considering the nature of a project. Projects involve people with different knowledge, cultures and languages. Projects are limited to one period of time and the people involved and the lessons learnt are frequently dispersed at the end of the project (Bresnen, Edelman, Newell, Scarbrough, & Swan, 2003; Kasvi et al., 2003). It can therefore be difficult to develop a systematic process that can maximize information flow and learning. Knowledge sharing constitutes a central challenge.

The inherent challenges in project management also need to be considered in information technology (IT) projects. IT project examples are development and implementation of a new product, service or process (Karlsen & Gottschalk, 2004). This study examines an IT project for the implementation of an ERP (Enterprise Resource Planning) system in a Brazilian higher education institution.

An ERP integrates information and processes among different organizational areas—production, finances, accountability, human resources, and so forth. Its purpose is providing support for running and managing most of a company’s operations (Kummar & Hillelgersberg, 2000). The critical issues related to these systems rely essentially on change from a traditional departmental management to one centered on processes, and on organizational difficulties for aligning systems’ technological features to business needs (Davenport, 1998). This alignment demands knowledge of the critical organizational processes, as well as detailed knowledge of the system (Soh, Kien, & Tay-Yap, 2000).

This means that complex IT projects, such as ERP ones, are knowledge intensive and involve people interaction with different expertise and skills: on the one hand, the company represented by its collaborators who have knowledge of the organizational requirements and the infrastructure of the existing technology and on the other, the system suppliers and/or consultants who have knowledge of its functionality and have experience in its implementation.

Project group members’ knowledge basis and distinct languages may make knowledge sharing more problematic (Soh et al., 2000; Bresnen et al, 2003; Ko, Kirsch, & King, 2005). As well as this, much knowledge is tacit, and this can make sharing it even more difficult. Taking into account the diversity of knowledge involved in an IT project, it is necessary to consider a way of sharing and integrating this knowledge that will contribute to the success of the project (Clegg, Waterson, & Axtell, 1997; Soh et al., 2000; Mabert, 2001).

Considering this, the proposal of this chapter is to analyze the influence of knowledge sharing in the context of IT project management. This study is a result of field research that enabled an investigation of the way knowledge sharing figured among people involved in the ERP (SAP R/3) system implementation project in a Brazilian higher education institution, as well as the analysis of how this sharing influenced the project in question.