

## Chapter 3.5

# Using Collaborative Technology in Group Facilitation

**José-Rodrigo Córdoba**

*University of Hull, UK*

### INTRODUCTION

It has not been long since the use of information technologies and systems has pervaded group processes in organizations. There is a vast amount of literature that suggests that software tools are beneficial to groups, although there are still questions about what appropriate combination of tool/human support is required to achieve efficiency and efficacy in electronically-mediated meetings (DeSanctis & Gallupe, 1987; Dickson, Partridge, & Robinson, 1993; Niederman, Beise, & Beranek, 1996; Nunamaker, Dennis, Valacich, Vogel, & George, 1991). (Un)fortunately in this literature, one can find several terms of the technology available, including group decision support systems (GDSS), group support systems (GSS), groupware, computer supported cooperative work (CSCW), Web-based meeting tools, blogs, wikis, RSS, and so forth. The current availability of technology tools (i.e., browsers, electronic forums, discussion

groups, chat rooms, etc.) and their increasing pervasiveness at work creates opportunities to share information and help people to perform their jobs either individually or collectively. For those individuals and groups using collaborative technology, there are opportunities and challenges that need to be considered in relation to aspects like the creation and dissemination of information, decentralized authoring, and centralized control (Castells, 2001; Evans & Wolf, 2006; Wilkins, 2006).

To date, an important number of tools have evolved from their name as “GDSS” (as they were named during the 90s) and can be described as collaborative, as they provide support group activities across departments and geographical locations. Often, these activities aim to achieve a particular outcome in a business (e.g., a decision, a product). In this regard, technologies being offered still have many of the features of group support systems or electronic meeting systems

(EMS) (Nunamaker et al., 1991), because they enable people to come together “whether at the same place at the same time, or in different places at different times” (p. 41) and (re)generate ideas and organize and priorities them (Ibid). For the purposes of this chapter, we will focus on the support that can be available by collaborative technology to group meetings and facilitation. Whether these meetings result in decisions being implemented or goods being designed or manufactured is out of the scope of our discussion. To begin with, we now show different dimensions of support that collaborative technologies can offer to individual and group interactions.

## **DIMENSIONS OF SUPPORT OF COLLABORATIVE TECHNOLOGIES**

De Sanctis and Gallupe (1987) provide a comprehensive description of collaboration which combines communication, computer, and decision technologies to support problem formulation and/or problem solving in group meetings. The nature and type of support has several dimensions, some of which can be matched with the capabilities offered by the tools themselves. A first dimension to consider is the type of group activities that are to

be conducted and their objectives. As De Sanctis and Gallupe (1987) argue, a common question that those designing, studying, or using collaborative technologies is that of “what is the purpose of using them?” This means that careful planning and assessment of what is to be achieved with collaborative technologies, as well as a discussion of the benefits these can provide, needs to be done before engaging with their use.

With the variety of tools available and now with Web-based technologies that make easier the authoring and updating of information, a second dimension to consider is the embedded facilities that the tools offer. De Sanctis and Gallupe (1987) provide a classification of different levels of support that collaborative tools can offer with a view that they influence (positively or negatively) the ways in which people interact. The following table presents the three (3) different levels of support that collaborative technologies can embed.

Most of the current collaborative tools available embed facilities that allow the removal of common communication barriers, and act as an “electronic messaging board.” In this board, group members can freely see the information that is inputted by them and their peers. As a way of improving the coordination of group members and leveling up their knowledge, a more sophisticated

*Table 1. Levels of support to group activities (Source: DeSanctis and Gallupe, 1987)*

	<b>Features</b>	<b>Embedded Facilities</b>
<b>Level 1</b>	Removing common communication barriers	Large screens (electronic boards) for instantaneous display of ideas, voting solicitation and compilation, anonymous input of ideas and preferences, electronic message exchange
<b>Level 2</b>	Provide decision modeling and group decision techniques	Automated planning tools, computer simulation models
<b>Level 3</b>	Machine-induced group communication	Expert advice in the selection and arranging of meeting rules; control of information exchanges

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