

## Chapter 2.2

# Design Patterns for Facilitation in E-Collaboration

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### INTRODUCTION

Collaboration is essential for the creation of organizational value (Hlupic & Qureshi, 2002, 2003). In our current global economy, there are many groups that have few possibilities to meet face to face, and therefore must hold their collaboration processes in a distributed electronic environment. Collaboration and e-collaboration can be challenging (Nunamaker, Briggs, Mittleman, Vogel, & Balthazard, 1997), especially in a distributed environment. When groups face complex tasks, they often find it difficult to follow a focused, effective, and efficient path to accomplish their goals. Groups therefore frequently resort to the use of facilitators and facilitation techniques. However, facilitation itself is a challenging undertaking (den

Hengst & Adkins, 2005; Niederman, Beise, & Beranek, 1993; Romano, Nunamaker, Briggs, & Mittleman, 1999; Zhao, Nunamaker, & Briggs, 2002), particularly in a distributed setting.

Facilitators are group process professionals who design and conduct processes to help a group achieve its goals. Facilitation is a complex task. Facilitators must master a collection of techniques skills and interventions, and must attend to many simultaneous details in their work (Clawson, Bostrom, & Anson, 1993). Effective facilitation therefore requires extensive training and experience. Experienced facilitators typically know and use a larger set of techniques than novice facilitators (Kolfshoten, den Hengst, & de Vreede, 2005). Communities of facilitators often draw upon libraries with facilitation techniques

(Briggs & de Vreede, 2001; FacilitatorU, 2005; Jenkins, 2005).

This article will discuss the added value of capturing and sharing facilitation techniques. Facilitation technique libraries can offer a learning source for novice facilitators, but can also function as a language among facilitators. In order to use facilitation techniques predictably, we need to capture techniques that are frequently used and that have predictable outcomes. In this research we will show research results in which collaboration patterns are identified on different levels. Patterns in collaboration can be recreated through the documentation of design patterns, scripts to capture reusable solutions to recurring problems. We will first explain what design patterns are, and how they are used in facilitation. Next we will present results from an analysis of the transcripts of 93 group support systems (GSS) sessions that took place between 2000 and 2002. In these sessions we identified patterns of facilitation interventions. We will explain these interventions and how they can be documented and used to recreate specific patterns in e-collaboration, and thus create predictable facilitation techniques.

## **BACKGROUND**

Design patterns are reusable solutions to recurring problems. They were originally introduced by Alexander, Ishikawa, Silverstein, Jacobson, Fiksdahl-King, and Angel (1977), in the domain of architecture. However, design patterns can be created for many design disciplines. For example, design patterns were introduced in the object oriented software modeling in the beginning of the 1990s (Gamma, Helm, Johnson, & Vlissides, 1995), and have been applied to the development of communication software (Rising, 2001), productivity software (Harrison & Coplien, 1996), and e-learning (Niegemann & Domagk, 2005). When a number of patterns are collected in libraries, they constitute a pattern language.

Alexander (1979) suggests the following benefits for design patterns and pattern languages:

- As a common language. Design patterns are a language, a vehicle for communication. It enables users to name and share complex concepts without having to explain them over and over again.
- For design and as inspiration for new or improved design patterns. Design patterns describe solutions to problems that occur over and over again. These solutions can be used separately, or to inspire designers to create new solutions.
- To design solutions in a specific domain.
- For teaching, to capture and share expert knowledge.
- To enable anyone to design the specific solutions or objects. Alexander's idea was that with his books people could build houses by themselves.
- To enable the creation of objects that are lively and improve the quality of human life. Alexander's pattern language serves a higher purpose; the patterns he and his colleagues described should create morally sound objects.
- To enable the creation of a whole coherent system, instead of loose individual objects that are not in harmony with their environment.

## **DESIGN PATTERNS FOR FACILITATION**

Recently, researchers have begun to document a design pattern language called *thinkLets* for collaborative work practices (Briggs, de Vreede, & Nunamaker, 2003). A thinkLet is a named, documented facilitation technique that produces a known pattern of collaboration among people working toward a goal. ThinkLets are meant to be the smallest unit of intellectual capital needed

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