Chapter 10

Experience with Self-Guiding Group Support Systems for Creative Problem Solving Tasks

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ABSTRACT
Many teams and groups use brainstorming to improve their creativity. Brainstorming can be supported with Group Support Systems (GSS). However, GSS are most successful when offered in combination with facilitation or at least training. Unfortunately, facilitation or training will impose a barrier to use such systems. In this chapter the use of a GSS for a multi-step creative problem solving task was evaluated. The groups using this GSS got no training, had no GSS experience and got no support, other than a 1 page log-in instruction. With this limited instruction and no training all participating groups handed in a report with the results of their brainstorm, using the tool. This chapter will report the process, the way it is embedded in the tool, and the results of our exploratory questionnaire among the participants.

INTRODUCTION
Creativity is a critical competence in organizations. Organizations need to improve their services and products continuously in order to remain competitive. To foster creativity, it is important that people in organizations collaborate, as creative solutions often are the result of multiple perspectives and interdisciplinary problem solving. Frost and Sullivan surveyed 946 decision makers globally, using a collaboration index, and found that collabora-
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Collaboration support can in some circumstances enable groups to accomplish their goals more efficient and effective (Fjermestad & Hiltz, 2001; Vreede, Vogel, Kolfshoten, & Wien, 2003b). Collaboration support technology offers mostly tools to collect and combine input from participants in activities such as brainstorming and voting (Nunamaker, et al., 1997). However, collaboration support is often used in combination with training or facilitation, which poses an additional barrier to its use and implementation.

While collaboration support such as GSS has proven to increase efficiency and effectiveness of groups, it is challenging to implement such collaboration support in organizations (Vreede & Briggs, 2005; Vreede & Bruijn, 1999; Vreede, Davison, & Briggs, 2003a; Vreede, et al., 2003b). Lab and field studies in collaboration support show conflicting results (Fjermestad & Hiltz, 1999, 2001; Santanen, 2005) with respect to the effectiveness and efficiency of GSS. Research has indicated that collaboration support often depends on a single champion, and when this person leaves the facilities are abandoned (Munkvold & Anson, 2001). Further the training of a facilitator