

8-25-1995

# A Longitudinal Evaluation of a Group Support System's Impact on Information Sharing

Melissa Sue Glynn  
*University of Arizona*

Follow this and additional works at: <http://aisel.aisnet.org/amcis1995>

---

## Recommended Citation

Glynn, Melissa Sue, "A Longitudinal Evaluation of a Group Support System's Impact on Information Sharing" (1995). *AMCIS 1995 Proceedings*. 7.  
<http://aisel.aisnet.org/amcis1995/7>

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 1995 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

# **A Longitudinal Evaluation of a Group Support System's Impact on Information Sharing**

**Melissa Sue Glynn  
School of Library Science/ Information Resources  
The Center for the Management of Information  
University of Arizona  
Tucson, AZ 85721**

## **Introduction**

Group Support Systems (GSS) have been utilized by a variety of organizations to accomplish a wide range of goals. Case studies involving GSS applications describe advances in business process re-engineering, design, communication, idea generation, and vision identification (2, 4, 7, 9). GroupSystems, a GSS tool originally developed at the University of Arizona, incorporates a set of tools aimed at increasing meeting productivity. GroupSystems, like other electronic meeting systems and GSS tools, derives theoretical support for augmenting productivity through permitting anonymous, simultaneous communication by all meeting participants (6).

GroupSystems tools have consistently proved to raise productivity. Studies on idea generation have demonstrated that within an anonymous electronic environment, meeting groups produce higher numbers of ideas and higher quality ideas than face-to-face groups (1). Previous theories on limits of group size in terms of productivity were questioned by the success of GroupSystems (5). Parallel, simultaneous communication so significantly altered the process structure of meetings that large groups communicated effectively. Face-to-face communication does not support the input of large groups due to the scarcity of air time (8). Organizational memory is also supported in an electronic environment as all comments are automatically recorded and readily accessible (6).

## **Present Research**

A case study is currently being conducted involving the organizational planning committee of a major college bowl game. The organization is extremely nontraditional. It primarily focuses on a goal of conducting a single event, a football game, rather than having a set of ongoing or consistent goals. All preparations for the staging of the game and complimentary events including a parade, a kick-off rally, and a ball require months of planning. Yet, all preparation is motivated by the January 2nd bowl game and activities are extremely time sensitive. No amount of planning appears to completely prepare the staff for the hectic nature of the activities surrounding game week.

Due in part to their nonstandard organizational goals, the staff has been lax in developing standard communication practices. The lack of documentation of procedures, minutes of meetings, and written agenda is now the subject of great concern. This year, the twenty-fifth anniversary, the bowl is undergoing dramatic change. Slated to hold the national

championship game and currently without a title sponsor, the bowl planning committee is in a state of relative upheaval. In the past, the corporate sponsor has provided financial and institutional security for the planning staff. Such security is especially missed when they are now anticipating the largest interest in the bowl to date. This change has sparked an interest in the bowl to date. This change has sparked an interest in re-evaluating their organizational practices by the executive director and the associate executive director. Their goals are to focus on developing staff communication to aid in greater coordination between organizational divisions, documenting decisions and meeting to create a basic level of organizational memory, and anticipating the changes that will potentially impact this year's game.

The research interest of this case study is to promote and maintain organizational communication through the use of GroupSystems tools. Previous case studies devoted to organizational use of GroupSystems support that the software is responsible for high user satisfaction rates, increases in productivity, and supporting communication between organizational members (2, 4, 7, 9). These studies have focused on supporting immediate satisfaction with GroupSystems. Participants report their reactions to the tool after a single meeting or after a specified series of meetings productivity has increased.

The purpose of this research is to monitor satisfaction and productivity through multiphasal examinations of information sharing in the organization. Phasal structure is defined as face-to-face pre-GSS sessions, GSS sessions, and face-to-face sessions. Identification of communication patterns in each phase will be examined for satisfaction with process. The general aim is to chart the long term impact of the technology on communication. This can only be achieved if the existing communication structure is understood.

This study intends to build on previous GSS case study research by extending knowledge into a longitudinal focus. The staying power of such changes are yet unknown as temporal effects of the technology have not investigated beyond four months (3). Overall information sharing effects and information flow have not yet been examined in a longitudinal scope. It is hypothesized that the GroupSystems tools will induce changes in existing communication patterns. The primary goal of such a case study is to provide support for the for the organization to achieve their communication goals. The study of other effects is secondary and comes only with the belief that GroupSystems can aid the organization.

## **Endnotes**

1. Connolly, T. Jessup, L. M., and Valacich, J.S. Idea generation using a GDSS: Effects of anonymity and evaluative tone. *Management Science*, 36, 6 (1990), 689-703.
2. Dennis, A.R., Heminger, A.R., Nunamaker Jr., J.F, and Vogel, D.R. Bringing automated support to large groups: The Burr-Brown experience. *Information and Management*, 18, 3 (1990), 111-121.

3. Dennis, A.R., Tryan, C. K. , Vogel, D.R. , and Nunamaker, Jr., J.F. An evaluation of electronic meeting systems to support strategic management. Paper presented at the International Conference of Information Systems, Copenhagen, Denmark (1990).
4. Grohowski, R. B., McGoff, C., Vogel, D.R., Martz, W. B., and Nunamaker, Jr, J.F. Implementation of electronic meeting systems at IBM. *MIS Quarterly*, 14, 4 (1990), 369-383.
5. Jablin, F.M., and Seibold, D.R. Implications for problem solving groups of individual and group problem solving. *Southern Speech Communication Journal*, 43, (1978), 327-256.
6. Nunamaker, Jr, J.F., Vogel, D, Heminger, A., Martz, B, Grohowski, R., and McGoff, C. Experiences at IBM with group support system: A field study. *Decision Support Systems*, 5, 2 (1989), 183-196.
8. Steiner, I.D. *Group process and productivity*. New York: Academic Press (1972).
9. Vogel, D.R., Martz, W.B., Nunamaker, Jr, J.F., Grohowski, R. B., and McGoff, C. Electronic meeting system experience at IBM. *Journal of MIS*, 6, 3 (1990), 25-43.