**Chapter XII**

# Intentions to Use Groupware: The Influence of Users' Perceptions

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## ABSTRACT

*Information technologies that support groups of individuals have become increasingly visible. While some of these, such as electronic mail, have become almost ubiquitous in many organizations, other groupware applications have not enjoyed similar acceptance. This study uses diffusion of innovation theory to investigate factors that may influence intentions to use a specific groupware application, Lotus Domino discussion databases. Findings indicate that intentions to use Domino discussion databases are impacted by perceptions of relative advantage, complexity, compatibility and result demonstrability. There was not a significant relationship between intentions to use and perceived trialability, visibility or voluntariness. Suggestions for positively*

*impacting important perceptions are also offered. Those interested in increasing the use of groupware technologies may find these suggestions helpful in guiding their efforts.*

# INTRODUCTION

Although a number of groupware applications such as e-mail have become an almost ubiquitous part of many organizations, other groupware applications have not been as universally adopted (Orlikowski, 1993). This phenomenon is not only exhibited in business organizations, but also extends to educational institutions. Anecdotal evidence indicates that many professors and students now interact via e-mail on a regular basis, while groupware systems have not been as widely adopted (Orlikowski, 1993). Research aimed at increasing our understanding of the diffusion and adoption of various groupware technologies represents an important direction for groupware research (Nunamaker, 1997).

The research reported in this chapter represents an attempt to use a diffusion of innovation perspective (Rogers, 1995) to understand factors that may impact intentions to use a groupware technology in an educational environment. Specifically, this chapter investigates the following research question:

> *Are adopters' perceptions of the characteristics of groupware technology related to their intentions to use the technology?*

The answer to this question holds implications for practitioners as well as researchers. Research has been called for to investigate the applicability of diffusion of innovation theories to interactive communication technologies such as groupware (Rogers, 1991). Practitioners who wish to use groupware in an educational setting might use the findings of this research to increase participants' use of groupware technologies.

# DOMINO GROUP SUPPORT SYSTEM

Groupware is technology designed to facilitate the work of groups. This technology may be used to communicate, cooperate, coordinate, solve problems, compete or negotiate. While traditional technologies such as the telephone qualify as groupware, the term is ordinarily used to refer to a specific class of technologies relying on modern computer networks, such as e-mail, newsgroups, videophones or chat.

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