

With C. C. Lee. (2000). "Exploring Mediation Between Environmental and Structural Attributes: The Penetration of Communication Technologies in Manufacturing Organizations," *Journal of Management Information Systems*, Vol.16(3), 187-217.

The relationship between organizational structures and information technology (IT) has been the subject of much discussion in IS research. While studies have not yielded conclusive results, the importance of examining the relationship between structure and technology is increasing in an environment where organizations are using contemporary IT to redesign themselves in order to compete more effectively. This paper presents a study that examines the relationship between the use of an important class of IT, communications technologies, and organizational structural attributes within a broad contingency context. Hypotheses are proposed, based on theory from the information-processing paradigm examining the mediating role of communications technologies (CT) in the relationship between environmental characteristics and organizational structural characteristics. Data from 153 manufacturing firms are collected and analyzed. The results show that CT seems to play a direct role in reinforcing structures that emerge from environmental dictates. The expanded set of variables considered in this study and the results provide potentially strong implications for future work in this important area.