

## Chapter XIII

# Organizational Impacts of New Communication Technology: A Comparison of Cellular Phone Adoption in France and the United States

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### ABSTRACT

*This study tests the multicultural applicability of Huber's technological imperative framework by comparing the effects of the adoption of a new telecommunication technology, cellular phones, on the behavior of the sales force in several industry sectors in France and the U.S. The study investigates three areas of interest. First, the study finds that, though the sales strategies are the same in both countries, the actual behavior of the sales force to attain these strategic goals differs. Second, a comparison of these differences with the variables in Huber's theory shows that the differences in the variables are consistent with the sales representative behavior*

*in the two countries. Third, the study asks what effect the use of cell phones has had on sales force behavior. Analysis on all the data combined shows the predicted results of new technology adoption—a shortening of decision-making time occurs in both countries. When the data is stratified by country, however, changes in variables in the U.S. support Huber's theory, those from France do not. These results indicate a cultural bias in the generation of theory that has important implications for cross-cultural research.*

## INTRODUCTION

Organizations in recent years have been inundated with new information technologies that change the nature of communication and affect such important organizational variables as organizational structure, standardization, and formalization (Hirscheim, 1985; Huber, 1990; Markus & Robey, 1988; Orlikowski & Robey, 1991). This study investigates the effects of the adoption of one type of telecommunication technology, cellular phones, in two different cultures (France and the United States).

As the world becomes more accessible through telecommunication and other technology, our concern about the universal application of theories to diverse cultural groups intensifies. Each researcher who develops theories may be influenced by his or her own cultural biases. It is important to know if this occurs. It is also important to validate theories in multicultural situations. When theories are validated in diverse cultural settings, they lend themselves to the establishment of universal traits that can then be used to predict behavior with added certainty in other settings. This study sheds light on the important area of cross-cultural research through the study of multi-cultural adoption of technology.

The study also tests another question of interest to researchers with a cross-cultural orientation. This question concerns the validity of theories across cultures. Theories specifically developed to apply to multiple cultures are assumed to be valid in many cultural settings. In this way, researchers have investigated the adoption and use of technology assuming adoption across cultures to be the same (Rogers, 1995). It is also usually assumed that theories developed within one culture are applicable in that culture. Thus, organizational researchers have investigated the ways technology affects organizations within one culture (Damanpour & Evan, 1984; Huber, 1990; Yates & Orlikowski, 1992). What about the applicability of theories developed in one culture to other cultures? Do these theories remain valid? Huber (1990) has developed a theory that states that technology affects organizational variables in a specific manner. Testing Huber's theory in two cultures gives us the

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