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1983

# The Dimensions of Accessibility to Online Information Systems: Implications for MIS Implementation

Mary J. Culnan  
*University of California, Berkeley*

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## Recommended Citation

Culnan, Mary J., "The Dimensions of Accessibility to Online Information Systems: Implications for MIS Implementation" (1983).  
*ICIS 1983 Proceedings*. 4.  
<http://aisel.aisnet.org/icis1983/4>

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**The Dimensions of Accessibility to Online  
Information Systems:  
Implications for MIS Implementation\***

**Mary J. Culnan  
School of Library and Information Studies;  
University of California, Berkeley**

**ABSTRACT**

Prior research has found a strong link between the perceived accessibility of an information source and subsequent use. In the organizational communication literature, research has largely focused on the use of interpersonal and traditional formal, documentary sources. In the MIS literature, accessibility has been found to be positively related to user satisfaction but attitudes toward alternative information sources were not investigated nor has there been an effort to measure both the accessibility of the hardware component of an online system and the accessibility of the actual information once the user has gained access to a computer terminal.

The purpose of this study is to investigate the dimensions of perceived accessibility to online information systems as a means of facilitating their implementation and acceptance by end users. It is expected that here, accessibility is a more complex concept than prior research has suggested, due in part to the kinds of information sources that were investigated previously. Generally, gaining access to a human or documentary source of information is the same as gaining access to the information itself because people have substantial prior experience with these sources. In the case of an online system, the command language or system protocols may still impede use after physical access is achieved.

The field study addressed two research questions: 1) what are the dimensions of accessibility for an online information system and 2) are physical access to the system and access to the actual information separate dimensions. Three dimensions of information accessibility were measured (reliability, convenience, and ease of use). Terminal accessibility was measured separately. The subjects were 41 graduate students enrolled in a program in information studies who use three commercial bibliographic information systems. Physical access was provided to the systems through the school's computer laboratory. Because of incon-

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\*This article is forthcoming in ACM Transactions on Office Information Systems.

sistent results from these data, additional qualitative data were collected from a second set of 43 graduate students concerning their perceptions of "accessibility" and "ease of use" of online systems.

The results suggest that 1) physical access to a terminal and access to the actual information are independent dimensions, 2) accessibility is a multi-dimensional concept encompassing physical access to a terminal and the system, the command language, and the ability to successfully retrieve the desired information, and 3) perceptions of accessibility are a function of prior user experience with online systems. In order to facilitate acceptance of an online system by end users, organizations need to adopt a two-pronged strategy for implementation. First, a great deal of support and training is likely to be important initially until the users master the system's command language. Second, the results suggest that once a user has mastered the command language, unimpeded access to a terminal and continuous availability of the system are essential if the system is to be perceived as accessibility and subsequently used.