

December 1997

# Leveraging the Web Business Potential: The Influence of Organizational and Web Management Characteristics

Debabroto Chatterjee  
*Washington State University*

V. Sambamurthy  
*Florida State University*

Follow this and additional works at: <http://aisel.aisnet.org/icis1997>

---

## Recommended Citation

Chatterjee, Debabroto and Sambamurthy, V., "Leveraging the Web Business Potential: The Influence of Organizational and Web Management Characteristics" (1997). *ICIS 1997 Proceedings*. 53.  
<http://aisel.aisnet.org/icis1997/53>

This material is brought to you by the International Conference on Information Systems (ICIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in ICIS 1997 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

# **LEVERAGING THE WEB BUSINESS POTENTIAL: THE INFLUENCE OF ORGANIZATIONAL AND WEB MANAGEMENT CHARACTERISTICS**

**Debabroto Chatterjee**  
Washington State University

**V. Sambamurthy**  
Florida State University

The Web technology with its various capabilities (e.g., information dissemination, interactive communication, multi-media support, and seamless information sharing) presents significant business opportunities (Cronin 1996; December and Randall 1995; Kalakota and Whinston 1996). It has led to the emergence of the World Wide Web (WWW), a global electronic platform, that can be used by companies to support various business activities (e.g., marketing, ordering, product delivery, customer support, recruitment, market research, and product testing) and business strategies (e.g., enhancing company image, attracting new customers and offering value-added customer services). However, empirical and anecdotal evidence suggests that not all companies are taking full advantage of the WWW capabilities (Haley et al. 1996; Pardue and Chatterjee 1997).

The purpose of this study was to identify those factors that are likely to influence an organization's ability to effectively assimilate the Web technology in their business activities and strategies. Since this complex technological innovation presents both interpretive and conversion challenges, it was theorized that those factors that enhanced an organization's ability to successfully cope with the various Web implementation challenges were likely to have a positive effect on the extent to which an organization used the World Wide Web (WWW) to support its various business activities and strategies (Cronin 1996; Hoffman et al. 1995; Quelch and Klein 1996). Thus, the research question was: What organizational factors are likely to influence an organization's ability to make extensive use of the WWW?

Drawing upon past research on management of innovations and IT implementation (Cooper and Zmud 1990; Van De Ven 1986), the Web implementation challenges were conceptualized in terms of (1) creating awareness, (2) mobilizing support, and (3) institutionalizing use. These Web implementation challenges led to the identification of the following organizational factors that were likely to have a positive impact on an organization's ability to make extensive use of the Web: (1) external knowledge links, (2) extent of top management advocacy, (3) strategic value associated with Web investments, (4) planning comprehensiveness, (5) extent of use of coordination mechanisms, and (6) extent of cross-functional participation.

To examine the hypothesized relationships between the above stated independent variables and the dependent variable "extent of WWW use," a cross-sectional research design was adopted. The questionnaire survey method was used to collect data. The sampling frame comprised of both public and private companies that have Web sites on the Internet. Both manufacturing and service oriented firms were included in the sample. Two questionnaires were designed, one to be completed by a senior business executive and the other by an IS person. While most of the data was gathered through these questionnaires, a coding scheme was developed in an attempt to objectively measure one of the dimensions of the dependent variable.

Senior management support was found to be of critical importance for Web implementation success. The results also suggested that those companies which assign strategic value to Web investments are likely to make extensive use

of this technological innovation. The use of coordination mechanisms to manage the Web initiative was also found to have a significant positive impact on extent of Web use.

## **REFERENCES**

Cooper, R. B., and Zmud, R. W. "Information Technology Implementation Research: A Technological Diffusion Approach," *Management Science* (36:2), February 1990, pp. 123-139.

Cronin, M. J. *Global Advantage on the Internet: From Corporate Connectivity to International Competitiveness*, Van Nostrand Reinhold, New York, 1996, pp. 171-198.

December, J., and Randall, N. *The World Wide Web Unleashed*, Sams Publishing, Indianapolis, IN, 1995.

Haley, B. J.; Carte, T. A.; and Watson, R. T. "Commerce On The Web: How Is It Growing?" *Proceedings of the Americas Conference on Information Systems*, Tucson, AZ, August 1996, pp. 1-12.

Hoffman, D.L.; Novak, T. P.; and Chatterjee., P. "Commercial Scenarios for the Web: Opportunities and Challenges," *Journal of Computer-Mediated Communication* (1:3), December 1995.

Kalakota, R., and Whinston, A. B. *Frontiers of Electronic Commerce*, Addison Wesley Publishing Company, Reading, MA, 1996, pp. 215-251.

Pardue, J. H., and Chatterjee, D. "An Approach To Measuring Extent of Organizational Use of Web Functionalities: Content Analysis Of HTML Codes," *Proceedings of the Americas Conference on Information Systems*, Indianapolis, IN, August 1997.

Quelch, J. A., and Klein, L. R. "The Internet and International Marketing," *Sloan Management Review*, Spring 1996, pp. 61-75.

Van De Ven, A. H. "Central Problems In The Management Of Innovation," *Management Science* (32:5), May 1986, pp. 590-607.