



---

## **Chapter XVIII**

# **Relationship of Some Organizational Factors to Information Systems Effectiveness: A Contingency Analysis of Egyptian Data**

Ahmed A. M. Seliem, Alexandria University, Egypt

Ahmed S. Ashour, Alexandria University, Egypt

Omar E. M. Khalil, University of Massachusetts, USA

Stephen J. Millar, Oklahoma State University, USA

### **ABSTRACT**

*Most of the empirical evidence on the effectiveness of information systems and their determinants is confined to the use of data from Western countries. Evidence from other environments, where the social, economic, and cultural characteristics vary, is needed before generalizations can be made. This chapter reports on an investigation designed to explore the relationship of three organizational factors—top management support, user involvement, and the maturity of the IS function—to systems effectiveness in an Egyptian setting. Data was collected from 214 managers, and the results indicate that the three organizational variables positively associate with systems effectiveness, measured by user information satisfaction and system use in improving decision*

This chapter appears in the book, *Advanced Topics in Global Information Management*, Volume 3, edited by Gordon Hunter and Felix B. Tan. Copyright © 2004, Idea Group Inc. Copying or distributing in print or electronic forms without written permission of Idea Group Inc. is prohibited.

*making. Also, user's tenure in the organization and ownership type were found to affect the relationships between the system's effectiveness measures and the three organizational variables. These findings are discussed and implications are offered. The findings of this study suggest that the positive relationships of top management support, user involvement, and IS maturity to systems effectiveness may transcend cultural differences. This empirical evidence contributes to the external and international validity of the similar Western-based findings, which, in turn, add to the efforts toward building a general theory of trans-national global information systems (GISs).*

## INTRODUCTION

Evaluation of information systems effectiveness continues to be a major concern for both IS researchers and practitioners. Over the last 30 years, many factor and process studies have attempted to predict and explain the adoption and use of information technology (IT). Guided by a number of proposed models and frameworks, relevant research has focused on defining and measuring systems effectiveness and their major determinants, including individual, psychological, organizational, sociological, environmental, information-structural, managerial, and technical (e.g., Mason & Mitroff, 1973; Lucas, 1978; Ein-Dor & Segev, 1978; Mawhinney & Lederer, 1990; Raymond, 1990; Li, 1997; Khalil & Elkordy, 1999, 1997). Also, research findings show the primacy of the managerial and organizational issues, compared to the technological issues as major barriers to the effective implementation and use of systems (e.g., Lucas, 1975; Robey & Zeller, 1978; Cervený & Clark, 1981; Markus & Robey 1983; Leifer, 1988; Mawhinney & Lederer, 1990).

However, consistent relationships between these managerial and organizational variables and systems effectiveness have yet to emerge. Further, most of IS effectiveness research has centered on data gathered in the Western culture. Yet, research findings obtained from organizations operating in a Western environment cannot be necessarily generalizable to other environments without further verification of their external validity (e.g., Dasgupta et al., 1999; Khalil & Elkordy, 1999, 1997; Aharoni & Burton, 1994). IS related problems are perhaps country-specific and are related to the country's unique political, legal, economic, cultural, and technological environments (e.g., Aharoni & Burton, 1994; Rosenzweig, 1994; Deans et al., 1991; Ein-Dor et al., 1993).

The investigation of IS issues in particular areas of the world emphasizes the possible impact of cultural differences on such issues (e.g., Straub et al., 2002; Dasgupta et al., 1999; Watson et al., 1997; Al-Khaldi & Wallace, 1999; Hassan, 1994; Wetherbe, Vitalari, & Milner, 1994). There is a need for IS research to broaden the focus beyond ethnocentric and regional studies in order to build a general theory of trans-national global information systems (GIS) (Palvia, 1993). More specifically, both country specific and cross-cultural research is imperative in order to strengthen the generalizability of the Western based evidence on the organizational determinants of systems effectiveness. In addition, effective management of systems in a particular culture requires identifying the issues that might be unique to that culture (e.g., Jain, 1997; Deans & Ricks, 1991; Palvia & Saraswat, 1992).

30 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/chapter/relationship-some-organizational-factors-information/4540](http://www.igi-global.com/chapter/relationship-some-organizational-factors-information/4540)

## Related Content

---

### Which Kinds of Legitimacy is Important?: A Case Study on the Corporate Life Cycle in an IT Company

Xueling Li, Qiang Ma, Chong Wang and Yong Chen (2019). *Journal of Global Information Management* (pp. 161-175).

[www.irma-international.org/article/which-kinds-of-legitimacy-is-important/235373](http://www.irma-international.org/article/which-kinds-of-legitimacy-is-important/235373)

### Adaptation to Pandemic Through Universal Access to Innovative Technologies: ICT Access for Future Pandemics

Abiodun Alao and Roelien Brink (2022). *Using Information Technology Advancements to Adapt to Global Pandemics* (pp. 47-65).

[www.irma-international.org/chapter/adaptation-to-pandemic-through-universal-access-to-innovative-technologies/308856](http://www.irma-international.org/chapter/adaptation-to-pandemic-through-universal-access-to-innovative-technologies/308856)

### Evaluation of Economic Security of Water Resources and Analysis of Influencing Factors

Licheng Peng, Xiaowei Ma, Wanwan Ma and Yuanxiang Zhou (2022). *Journal of Global Information Management* (pp. 1-19).

[www.irma-international.org/article/evaluation-of-economic-security-of-water-resources-and-analysis-of-influencing-factors/285007](http://www.irma-international.org/article/evaluation-of-economic-security-of-water-resources-and-analysis-of-influencing-factors/285007)

### The Ethics of Web Design: Ensuring Access for Everyone

Jack S. Cook and Laura Cook (2008). *Global Information Technologies: Concepts, Methodologies, Tools, and Applications* (pp. 3410-3429).

[www.irma-international.org/chapter/ethics-web-design/19188](http://www.irma-international.org/chapter/ethics-web-design/19188)

### A Methodology for Web Accessibility Development and Maintenance

Julio Abascal, Myriam Arrue and Markel Vigo (2008). *Global Information Technologies: Concepts, Methodologies, Tools, and Applications* (pp. 538-559).

[www.irma-international.org/chapter/methodology-web-accessibility-development-maintenance/18989](http://www.irma-international.org/chapter/methodology-web-accessibility-development-maintenance/18989)