

**RESEARCH NOTE**

The Influence of National and Organizational Cultures on Technology Use: An Exploratory Study within a Multinational Organizational Setting

Zixiu Guo, University of New South Wales, Australia

John D'Ambra, University of New South Wales, Australia

ABSTRACT

This article presents the results of an exploratory study examining the influence of national and organizational cultures on technology use in a multinational organizational (MNO) context. Data were collected from 121 respondents of a multinational organization in the Asia Pacific with headquarters in Australia and three subsidiaries in Asia: Korea, Malaysia, and Thailand. Even though significant differences were found between respondents from headquarters and subsidiaries in terms of perceived media richness and preference for telephone and written documents, very similar media preference patterns for face-to-face and e-mail between the headquarters and subsidiaries were identified. Furthermore, face-to-face and e-mail were two primary media used for most communication activities in this MNO. Follow-up interviews revealed that the universal organizational culture of this MNO may explain media use consistency between the headquarters and subsidiaries. Implications of the findings are discussed and future research considered.

Keywords: *Globalization, Information and Communication Technology (ICT), Media Choice, Multinational Organization (MNO), National Culture (NC), Organizational Culture (OC)*

INTRODUCTION

Multinational organizations (MNOs) are characterized by their engagement in global markets (Umanath & Campbell, 1994). In order to remain competitive in today's global marketplace, MNOs have adopted advanced information and communication technologies

(ICTs) as part of their global communication networks to facilitate the coordination of far-flung subsidiaries, suppliers, and customers (Kogut, 2003; Sambharya, Kumaraswamy, & Banerjee, 2005). ICTs facilitate the ability of the individual or the organization to communicate easily and inexpensively across time and geographic locations, rapidly and with greater precision to targeted groups, and to selectively

DOI: 10.4018/jgim.2009070904

control access and participation in communication networks (Huber, 1990).

In spite of the enabling and facilitation of globalization (Ford, Connelly, & Meister, 2003), ICTs have also presented challenges to MNOs in their implementation and use in subsidiaries due to technical issues and social contexts (Robey & Rodriguez-Diaz, 1989). There is accumulating evidence that people of different national origins have different perceptions of, and preferences for, communication technologies (see Leidner & Kayworth, 2006, for a recent review of cultural impact on information systems (IS) research). Scholars who study cross-cultural factors in ICT use agree that understanding national culture (NC) is critical (Gallivan & Srite, 2005). IS literature focused on national cultural influence on the adoption of IS has grown substantially over the past decade (Niederman, 2005). However, little research has been conducted into the effect of culture on ICT use within MNOs, and its implications for individuals as well as organizational performance (Gallivan & Srite, 2005). An MNO is composed of a set of subsidiaries that operate in distinct national contexts. Due to potential tension between employees' host cultural values of communication and the values of the MNO home culture, national cultural influence on employees' communication behavior will become an issue when a subsidiary's host culture differs from the MNO's home culture (Naisbitt, 1994). To understand why such a tension exists and how managers of MNOs face this challenge, we must learn more about the role that culture plays in our theories of work behavior (Karahanna, Evaristo, & Srite, 2005). A better understanding of how employees working for MNOs perceive and prefer communication technology for communication can mean the difference between success and failure in implementing new IT within MNOs (Ford et al., 2003; Straub, 1994), as well as strengthening the opportunity of improving organizational communication performance.

Understanding the relationship between ICT and organizational culture (OC) has challenged IS researchers for nearly three decades

(Gallivan & Srite, 2005). In their recent comprehensive review of culture and IS research, both Gallivan and Srite (2005) and Leidner and Kayworth (2006) highlighted the key issues in the relationship between ICT and culture in order to lend insights into our understanding of the linkage between ICT and OC. However, as Gallivan and Srite (2005) indicate, studies examining issues related to ICT/NC fit and ICT/OC fit are separated into distinct "stovepipes." Based on social identity theory (SIT), Straub, Loch, Karahanna, Evaristo, and Srite (2002) proposed that NC and OC interact. Similarly, Robey and Rodriguez-Diaz (1989) identified that the social context of implementation of information systems, which is important for a successful implementation process, included both organizational and national cultural contexts. They further noted that: "in the case of MNOs, both of these contexts may become influential" (Robey & Rodriguez-Diaz, 1989, p. 230). Given the increasing dominance of MNOs and globalization of world markets, where cultural fit is critical to achieving the benefits of ICT (Gallivan & Srite, 2005), studying the interaction between NC and OC in terms of technology use within MNO contexts is a timely pursuit.

Furthermore, most cultural-related IS studies usually focus on a selection of one communication medium, primarily e-mail, or on comparisons between two media, often face-to-face vs. some electronic medium (Watson-Manheim & Belanger, 2007), with one exception (Rice, D'Ambra, & More, 1998). As O'Sullivan (2000) noted, use of any one technology should be considered in light of the repertoire of other media available to fully understand when, why, and how any single medium is used. Communication technology is often used in conjunction with other media, and this unusual relationship with other media is certainly deserving of further investigation (Hung, Kong, Chua, & Hull, 2006).

This study was designed to explore cultural effects on one of the core precepts of IS research—communication media choice—examining how employees from different sub-

19 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/article/influence-national-organizational-cultures-technology/37216

Related Content

Geographic Information Systems in Developing Countries: Issues in Data Collection, Implementation and Management

Brian E. Mennekeand Lawrence A. West Jr. (2001). *Journal of Global Information Management* (pp. 44-54).

www.irma-international.org/article/geographic-information-systems-developing-countries/3561

A Review of Spectrum Sensing Techniques Based on Machine Learning

Andres Rojasand Gordana Jovanovic Dolecek (2025). *Encyclopedia of Information Science and Technology, Sixth Edition* (pp. 1-21).

www.irma-international.org/chapter/a-review-of-spectrum-sensing-techniques-based-on-machine-learning/322771

Can Government Direct Bailout Intervention Relieve the Crisis Sentiment in the Context of the COVID-19 Pandemic

Linlin Guoand De-Shui Ma (2022). *Journal of Global Information Management* (pp. 1-15).

www.irma-international.org/article/can-government-direct-bailout-intervention-relieve-the-crisis-sentiment-in-the-context-of-the-covid-19-pandemic/297907

Influence Mechanisms That Leverage Participation Quality in a Professional Virtual Community: The Social-Relationship Perspective

Hung-Pin Shihand Echo Huang (2015). *Journal of Global Information Management* (pp. 77-100).

www.irma-international.org/article/influence-mechanisms-that-leverage-participation-quality-in-a-professional-virtual-community/141565

ICT and Business in the New Economy: Globalization and Attitudes Towards eCommerce

John Sagi, Elias Carayannis, Subhashish Dasguptaand Gary Thomas (2008). *Global Information Technologies: Concepts, Methodologies, Tools, and Applications* (pp. 332-350).

www.irma-international.org/chapter/ict-business-new-economy/18972