Cross–Cultural Teamwork in End User Computing: A Theoretical Model

Regina F. Bento
University of Baltimore

This paper proposes a theoretical model for understanding cross–cultural influences in international end user computing teams. After a brief review of three of the most widely used taxonomies of cultural differences, the paper discusses how the various parts of the model are affected by cross–cultural differences. The paper concludes by examining the main implications of the model for managing cross–cultural end user computing teams.

The increasing globalization of the world economy has fostered the continued growth of transnational organizations (Bartlett & Goshal, 1989). Information technology is the “glue” that holds transnational organizations together (Lucas, 1994), allowing them to combine local responsiveness and flexibility with global integration and efficiency.

There is a growing recognition in the literature that managing IS in an international environment poses unique and difficult challenges (see, for example, Cash, McFarlan, McKenney & Applegate, 1992; Deans & Kane, 1992; Lucas, 1994; Zwass, 1992). An empirical study of top IS executives in U.S.–based multinational corporations (Deans et al., 1991) has identified five key issues as the most significant international IS concerns: educating senior corporate management to understand the role of MIS and its potential contribution to international business; balancing data security and data availability in an international environment; integrating IS technologies on an international scale; managing international end user computing through better policy guidelines, communication and support; and the price and quality of telecommunications.

Given these findings, and the uncontested recognition of the importance of end user computing in the domestic environment, it is critical that we develop a better understanding of the problems that emerge when end user computing is managed on a global scale. Transnational organizations have growing numbers of end users scattered throughout the world, interacting with different socio–cultural, technological, political, legal and economic environments, who are developing, controlling and directly using information systems. This scenario increases the complexity of problems traditionally faced in managing end user computing: a) avoiding threats to data integrity, security and privacy, while allowing users to access and share information worldwide, in order to reap the competitive advantages of globalization; b) reducing the ineffective use of resources by controlling duplication and redundancy in application development, while granting users the flexibility to respond to their different environments and meet their own information needs; c) providing quality assurance in systems development (testing, data validation, audit trails, documentation), without violating users’ cultural assumptions and sense of autonomy; d) managing the acquisition and deployment of end user computing hardware and software, in order to assure transborder integration, compatibility and economies of scale, while recognizing local differences such as vendor viability and support, cognitive and communication styles that may...
make certain user interfaces more or less acceptable and effective, etc.

In order to address these problems, transnational organizations often find that the key challenge is not to choose between centralization and decentralization, but to find a balance that enables them to draw from the best of centralization, and the best of decentralization (Mead, 1990). The search for such balance often involves the creation of international task forces, combining end users and IS specialists and managers from different cultures, charged with addressing particular aspects of international end user computing.

This paper examines the opportunities and problems that the cross-cultural nature of these teams raises for their ability to achieve results. The majority of studies on group functioning have been done in the context of a single culture (typically the United States, but also other countries). When one becomes interested in understanding cross-cultural interactions within task groups, the number of available studies is vastly reduced (Adler, 1991). When the task faced by the cross-cultural team relates to end-user computing, this number dwindles even more dramatically.

The scarcity of knowledge about cross-cultural teams is particularly troublesome because they have been found to be either more, or less effective than culturally homogeneous groups, but seldom equally effective (Adler, 1991). When cultural diversity is ignored, the problems it poses to the process of teamwork tend to override its advantages, and the result is a remarkable loss of productivity. When, however, cultural diversity is properly managed, the reverse happens: problems are avoided or minimized, advantages are harvested to their fullest potential, and diversity becomes a critical resource to the team, enabling it to reach the highest levels of effectiveness. Unfortunately, the former situation is more common than the latter.

As one cannot manage what one does not understand, it is therefore critical to advance the knowledge of how cross-cultural issues can affect team performance in the context of international end user computing. This paper is an effort in that direction. It presents a theoretical model that draws from the literature in anthropology, sociology and organizational behavior to explain how cultural influences may affect the open, dynamic system of a cross-cultural end user computing team. It discusses how cross-cultural factors may relate to various parts of the model: the input variables, the system itself, and its outputs. The paper concludes by discussing the model’s implications for managing cross-cultural end user computing teams.

A Theoretical Model of Cross-Cultural End User Computing Teams

Figure 1 presents a theoretical model where a cross-cultural end user computing team is seen as an open learning system that matures and develops over time.

The input factors of the system include its members, task and resources. As will be discussed later on, all these variables are subject to cultural influences. For example, the cultural background of team members affects their beliefs, attitudes, behaviors, perceptions and motivation. The degree of cultural homogeneity or heterogeneity in the team affects the dynamics of the team and its ability to achieve results. Cultural issues affect the perceived relevance of the task facing the team, as well as the level of task interdependence and uncertainty the team can handle effectively. Cultural factors also influence...