

## Chapter 2.29

# KAFRA: A Context-Aware Framework of Knowledge Management in Global Diversity

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### ABSTRACT

*Multiple case studies in India, The Gambia, and Nigeria are the background for an empirically grounded framework of knowledge management (KM). Cultural diversity and gaps in the provision of infrastructure make managing knowledge challenging but necessary in developing countries. These cultural and infrastructural issues are also related to governmental, educational, political, social, and economic factors. These environmental factors interact with organizational variables and information technology to enable or constrain knowledge management processes in the creation and protection of knowledge resources. The framework can help organizations to prepare their KM projects, to reveal problems during the project, and to assess its outcomes.*

### INTRODUCTION

KM frameworks assist us in establishing a focus for KM efforts (Earl, 2001). These frameworks can also help organizations to approach KM methodically and consciously. They can help to identify a specific approach to KM, to define goals and strategies, to understand the various knowledge management initiatives, and then to choose the best ones for the particular circumstances (Earl, 2001; Maier & Remus, 2001). There have been several proposed frameworks to guide KM efforts in organizations. However, these frameworks do not address KM across the full spectrum of organizational needs (Calabrese, 2000) but instead address certain KM elements. There is, therefore, a need for a comprehensive KM framework that considers the full range of organizational dimensions.

Three reviews (Holsapple & Joshi, 1999; Lai & Chu, 2000; Rubenstein-Montano, Liebowitz, Buchwalter, McCaw, Newman, & Rebeck, 2001) have discussed the components and assumptions of the frameworks proposed to date. There appears to be a consensus on the need for a more generalized framework, and, consequently, these authors also outline recommendations regarding such a framework. All agree that the basic components should be knowledge resources, KM processes, and influences. Even though the existing and the suggested frameworks recognize varying organizational contexts, they have not considered differences in the operating environmental contexts. This is similar to the information systems (IS) literature, where very few studies address global diversity (Avgerou, 2002; Walsham, 2001).

The importance of the local operating environmental context has already received some attention in e-commerce (Simon, 2001), ERP (Wassenar, Gregor, & Swagerman, 2002), and IS development methodology research (INDEHELA Project, 1999). Also, King, Gurbaxani, Kraemer, McFarlan, Raman, and Yap (1994) comprehensively discuss institutional factors in information technology innovation. In knowledge management, however, there is a basic need for consideration of the diverse environmental context and how it could influence other issues involved. The framework described here is designed to address that need, by focusing on the local cultural and infrastructural factors that could interact with organizational factors and information technology and the resultant effect on knowledge processes and resources.

## **GLOBAL DIVERSITY AND SIGNIFICANCE OF A NEW FRAMEWORK**

Our view on global diversity recognizes the existence of different organizational contexts

and that assumptions cannot be simply made about the pattern of organizational performance and innovations (Avgerou, 2002). For example, the wide gap in the availability and use of ICT across the world, and the influences ICT exerts on globalization, raise questions about the feasibility and desirability of efforts to implement the development of ICT through the transfer of best practices from Western industrialized countries to developing countries, and whether organizations can utilize such ICT in accordance with the socio-cultural requirements of the contexts (Avgerou, 1998; Morales-Gomez & Melesse, 1998; Walsham, 2001). Previous research (Avgerou, 2002; Bada, 2000; Walsham, 2001) concludes that diversity and local context does matter, and that the global techniques employed in western industrialized countries should not be implemented mechanically in developing countries without consideration for the local context (Bada, 2000).

The concept of description proposed by Akrich (2000) also expresses our understanding of global diversity and the significance of a context-aware framework. Akrich argues that when technologists define the characteristics of their object, they necessarily make hypotheses about the entities that make up the world into which the object is to be inserted. They also assume that the designers define actors with specific tastes, competences, motives, aspirations, political prejudices, and the rest. They assume that morality, technology, society, and the economy will evolve in particular ways. In a nutshell, they inscribe their vision, or prediction about the world, into the technical content of the new object. Karsten (2000, p. 21) also suggests that “the functions of these (technical) systems are not predetermined, but only evolve within specific, socio-political contexts.” Focusing on specific contexts will help to move away from unfruitful general claims and all-encompassing pictures, enabling us to see a technical change as embedded in a larger system of activity, having consequences that depend on peoples’ actual

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