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Chapter II

Information Technology Assessment for Knowledge Management

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ABSTRACT

New technologies, increasingly demanding customers, new aggressive competitors, and innovations in products and value now characterize our current competitive environment. Organizations of the 21st century have no choice but to invest in new technologies, especially knowledge management tools to enhance their services and products in order to meet the demands of today's information-driven, globally competitive marketplace. Knowledge embedded in systems, brains and technology has always been the key to economic development. However, knowledge management is increasingly being viewed as a strategy to leverage a firm's knowledge and best

practices to serve customers and to be competitive. Several organizations have already started experimenting with knowledge management initiatives to capture and capitalize on knowledge assets and thereby claim the enormous benefits afforded by such endeavors, including improved profitability and transformation of their businesses into new generation businesses. This chapter develops a technology assessment model for knowledge management indicating what kinds of computing and communication systems any organization needs in order for it to have a sound knowledge management approach.

INTRODUCTION

Any 21st century organization faces a dynamic, new competitive environment consisting of numerous opportunities, possibilities and challenges. As economies are becoming more knowledge-based, consumers' expectations are rising day by day. While new technologies threaten to make present systems and networks obsolete, new competitors threaten to upset existing markets and infrastructures. Global deregulation, allowing new competitors to enter previously guarded national monopolies, and hyper-competition are forcing organizations to offer services and products as a one-stop solution to meet customers' increasingly demanding expectations (Housel & Bell, 2001). To tackle such a global competitive environment, organizations have to invest in new technologies such as knowledge management tools that can contribute to enhance services and products that are offered in information technology-driven marketplaces.

The rules of business are undergoing radical change and these impact the competitive strategies of many businesses. The old laws of production, distribution, and consumption are evolving into new theories of e-businesses. Many organizations have an abundance of data and information but they starve for knowledge (Dean, 2001). Global markets are expanding rapidly, thus capturing new customers and retaining existing ones are becoming daunting tasks for organizations. Organizations are becoming more knowledge intensive in order to learn from past experiences and from others to reshape themselves and to change in order to survive and prosper (Brown & Duguid, 2000). New Web-based technologies have the capabilities to prepare organizations for knowledge management. The recently published report *Knowledge Management Software Market Forecast and Analysis 2000/2004* estimated that the total KM software market would reach $5.4 billion by 2004 (Duffy, 2000). While extensive literature exists to describe the developments in the knowledge management area, little work has been done on the assessment of IT for knowledge management. This chapter endeavors to address this void by developing an IT assessment model for knowledge management. Concisely