



Chapter XIV

A Comparative Case Study of Knowledge Resource Utilization to Model Organizational Learning

Colin White, Deloitte Consulting, USA

David Croasdell, University of Nevada, Reno, USA

EXECUTIVE SUMMARY

The ability to store and manage data has not kept pace with the rapid evolution and growth of information resources. According to TechWeb.com, companies are doubling their storage capacities every year. This action is driven primarily by data warehousing and the necessity to provide instant access to data and supply-chain management. The trend does not look to be slowing. Isolated and undermanaged data resources have become a common practice in the industry despite the fact that the capacities of these systems keep improving while their prices continue to fall. This chapter draws four related cases to assess methods for organizing data and data resources in organizations. Further, the chapter provides examples for organizations to become learning organizations based on their ability to actively collect and distribute knowledge and their ability to become highly coupled socially and technically.

INTRODUCTION

Between 1937 and 1942, John Atanasoff and Clifford Berry designed and built the world's first electronic digital computer. This simple "ABC" computer introduced the ideas of binary arithmetic, regenerative memory, and logic circuits. In the years that have

followed the construction of that first computer, business organizations have come to rely on computing technologies along with the data and information generated by those technologies. From early transaction processing to more contemporary “intelligent” systems, organizations have come to depend upon the technologies, systems, and tools that facilitate managing information within organizations. Tools such as the Internet, World Wide Web, and Web-enabled applications have enhanced the ability to collect and disseminate information. However, these tools can also create an overload of information. The ability to filter relevant information and apply that information to decision processes can be a significant challenge for organizations and organizational decision makers.

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This chapter draws on four related cases to assess methods for organizing data and data resources in organizations. In particular, the chapter explores the practice of consolidating data and information to establish knowledge repositories necessary for organizational learning. The cases are used to build a case for prescribing steps organizations can take to develop capabilities consistent with learning organizations. A brief introduction to organizational learning includes a discussion on knowledge capture and knowledge representation. In addition, the discussion argues the importance of existing knowledge resources in relation to the organization’s ability to be competitive. The practice of enterprise resource planning (ERP) is presented as a tool for consolidating knowledge resources within organizations. Four organizations are examined to highlight organizational opportunities that were addressed by knowledge solutions. Common practices for collecting and sharing knowledge are described. Each case highlights problems incurred by specific business units, the actions taken to address the problems, and outcomes of the actions. Measurements, such as return on investment (ROI), are included for each firm to aid in the illustration of results. Old processes are compared to recently modified processes. The changes to organizational processes and practices are presented as lessons learned. Finally, a review of all four cases is used to offer insight into the value of consolidating and centralizing knowledge resources. A comparison of the organizations provides evidence to suggest that knowledge consolidation and centralization are important for enabling effective knowledge capabilities.

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