### Chapter 6.3

## Building and Maintaining Human Capital with Learning Management Systems

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#### **ABSTRACT**

In this chapter, the authors examine how building, integrating and maintaining human capital with Learning Management Systems acts as an enabler for the management if intellectual capital within multinational organizations. They draw upon learning theory and training practices to demonstrate that human capital is best viewed through a competence lens; that is, accounting for human capital should focus on matters of individual and organizational competence, and that the development of human capital is, in essence, an exercise in competence development, which involves training and learning. This, then, is this chapter's point of departure in understanding how IT-based systems can enable training and foster learning, thereby building an organization's human capital.

#### INTRODUCTION

In an intensely competitive, rapidly evolving, and increasingly knowledge-based high-tech sector, the ability to learn is critical to the success of multinational organizations. It is now clear that building and maintaining a firm's human capital

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through organizational learning represents the only sustainable source of competitive advantage. Barney (1991), for example, illustrates that the strategic resources which underpin the success of business enterprises include an organization's physical, human, and organizational capital. Physical capital includes plant and equipment, geographic location, and access to raw materials. Human capital includes the training, experience,

judgment, intelligence, relationships, and insights of managers and workers. Organizational capital includes firm structure and processes, internal and external relations, both formal and informal. It is clear, however, that human capital lies at the foundation of both physical and organizational capital (Nordhaug, 1994). This chapter argues that human capital can be enhanced through the application of IT (as physical capital) and organizational learning processes (organizational capital).

Human capital is manifested in the individual and the collective competences of social actors in an organization (Nordhaug, 1994). Over the last number of years, a strategic, human capitaloriented approach to competence development through the management of learning has been adopted by many organizations. This has, in turn, led to the appearance of a new breed of Information Systems (IS) known as Learning Management Systems (LMS) (Dunne & Butler, 2004). Learning Management Systems are now replacing isolated and fragmented learning solutions with a systematic means of assessing and raising competency and performance levels across organizations. Practitioners and IT vendors have led the promotion and adoption of IT-based learning management solutions. Accordingly, there is a dearth of empirical academic research in this area. Therefore, an important challenge for the management and information system disciplines is to better understand LMS, and to examine the roles and limitations of such systems in building human capital in order to better inform practice. This chapter informs both research and practice through its presentation of the findings of an in-depth case study of LMS implementation and use by a large US multinational high-tech firm (CEM Corp.). As such, it provides insights into the roles that LMS can play in the continued commercial success of such organizations. The findings of this case study illustrate that LMS offer a strategic IS solution for planning, delivering and managing all learning events, including both online and classroombased learning. Practitioners recognize the need

for such systems; for example, many world-class organizations are employing learning management to foster and manage learning within their organizations—such organizations include Amazon. com, Cisco Systems, Continental Airlines, Deloitte Consulting, EDS, Ford Motor Company, General Electric, and Procter & Gamble. CEM adopted the KnowledgeLink Learning Management System for the same reasons. Of significance is that this chapter presents an inventory of roles that Learning Management Systems plays in this organization. Also described are the practical experiences and issues encountered by CEM in their approach to building human capital using their LMS. The findings of this study indicate that, to some extent, the KnowledgeLink LMS fulfilled all of the roles suggested in the proposed conceptual framework; however, because the system was still at an early stage of use, some of the functions were found to be more highly developed than others. Furthermore, the case study identified a number of additional roles for LMS in enhancing human capital that were not suggested in the framework, but were operationalized by the KnowledgeLink technology. The chapter then closes by offering some suggestions for future research directions and outlining the implications for practice.

## HUMAN CAPITAL AND LEARNING MANAGEMENT SYSTEMS

The importance of facilitating and managing learning within organizations is well accepted. Zuboff (1988), for example, argues that learning, integration and communication are critical to leveraging employee knowledge; accordingly, she maintains that managers must switch from being drivers of people to being drivers of learning. Harvey and Denton (1999) identify several antecedents which help to explain the rise to prominence of organizational learning, viz.

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