Chapter II

Inquiry Systems: Understanding How People Gain Knowledge

Abstract

This chapter investigates the inquiry systems of knowledge workers based on Churchman’s interpretation of the philosophies of Leibniz, Locke, Kant, Hegel, and Singer. It reports results of a survey of university students from Australia and Europe as representatives of knowledge workers with a great potential to influence future. Data on their approaches to knowledge acquisition, change, relationships to others, and problem solving were gathered by administering a survey questionnaire. The results demonstrate recognizable inquiry archetypes for individuals, and a contingent nature of group approaches upon the cultural context. This leads to important implications for the design of knowledge management support for different individual and collective styles.
Introduction

Knowledge has been widely recognised as a key factor of organisational survival and success in a dynamic and competitive economy (Garvin, 1998; Holsapple & Singh, 2000; Nonaka, 1998; Drucker, 1998). In order for companies to stay competitive in today’s uncertain world, they constantly need to pursue new strategies to differentiate themselves from their competition, such as the introduction of new products or the offering of new services (Satzinger, Garfield, & Nagasundaram, 1999). This requires a major shift in their business focus from tangible to intangible (knowledge) assets (Davenport, DeLong, & Breers, 1998; Davenport & Prusak, 1998; Drucker, 1993; Grayson & O’Dell, 1998; Stewart, 1997). In other words, knowledge must evolve and be assimilated at an even faster rate.

To deal with changes, improve services, products, and quality, and also to cut costs and compete in the global market, organizations will need to depend upon the creative and innovative ideas produced by their workforce (Covey, 1989). It is therefore not surprising that organisations place increasing demands for new skills and capabilities for new-age workers. New professionals are expected to be skilled at creating, acquiring, and transferring knowledge (Garvin, 1998; Nonaka, 1998). They need to be capable of continually expanding their capacity to create desired results, nurture new thinking patterns, set free collective aspirations, and learn how to learn together (Senge, 1990).

This chapter suggests that in order for organizations to become productive and efficient learning organisations and to maintain a competitive edge, they can use the ideas developed by Churchman (1971). He developed five archetypical models of inquiring systems based on the theories of knowledge of philosophers Leibniz, Locke, Kant, Hegel, and Singer. These models can be used to make inferences about the design of knowledge spaces in order to support learning in organizations and to discuss how various sociotechnological initiatives/interventions mentioned in Chapter I can be useful in building such spaces.

Given the crucial importance of learning for organizational success in the knowledge economy, the main goal of this chapter is to provide guidance to designing the appropriate knowledge spaces based on our insight into student-knowledge workers’ inquiry styles gained in the context of higher IS education. First, the chapter reviews Churchman’s descriptions of archetypal inquiry systems. Then, it presents an empirical study into the students’ inquiry systems though interrelatedness of their knowledge acquisition, approach to change, relationship to others, and problem-solving behaviour. Next, it discusses implications of these findings for the design of knowledge spaces in order to support different learning styles. Finally, the chapter concludes with a summary of main findings and directions for future research.