Sustaining Organizational Innovativeness: Advancing Knowledge Sharing During the Scenario Process

Hannu Kivijärvi, Aalto University School of Economics, Finland
Kalle Piirainen, Lappeenranta University of Technology, Finland
Markku Tuominen, Lappeenranta University of Technology, Finland

ABSTRACT

This paper aims to provide a conceptual basis for creating semi-virtual communities that facilitate knowledge creation and sharing that seeks to promote organizational innovativeness. In addition, based on the theoretical discussion, the paper proposes a concrete context that supports and stimulates the conversion of personal knowledge into new innovations and organizational decisions. As a methodological means, scenario driven innovation process is employed as a way to enhance creativity and knowledge convergence within an organization. The authors discuss that in its deepest sense knowledge is the capability to make decisions. Scenarios aim to increase that capability, and are thus a piece of organizational knowledge. The practical implementations of the contexts and the experiences with these implementations are evaluated by two real case studies in real life contexts.

Keywords: Communities of Practice, Virtual Communities, Organizational Innovation, Knowledge Sharing, Organizational Knowledge, Personal Knowledge, Scenario Planning

1. INTRODUCTION

Innovativeness, an organization’s ability to initiate and implement innovations, is a critical resource for prosperity in the long term. The notion that innovation and the utilization of knowledge assets provide a source of competitive advantage has gained attention in recent discussions (Wiggins & Ruefl, 2005). Every innovation requires exploration of new knowledge, in addition to the exploitation of existing knowledge, personal as well as organizational. This has led to a search to find means to enhance creativity and knowledge convergence from personal to organizational use in the innovation process.

Knowledge and knowledge sharing are important facets of any innovative activity. The quality of innovations depends on creation, transformation and integration of knowledge

DOI: 10.4018/jkm.2010040102
across individuals and organizational groupings. As organizations have become larger and more diversified, and as individual roles and tasks have become more specialized, there is a growing need to convert personal knowledge to common usage. In addition, there is a need to turn and align personal or local inventions into broader systems of organizational innovations.

The question is: ‘What kinds of organizational arrangements are capable of increasing organizational innovativeness?’ or in other words ‘How to support organizations as they strive towards integrated innovations?’

Information and communication technology (ICT) offers many instruments for knowledge management and thus for the stimulation of the innovation process (Sher & Lee, 2004; Cody, Kreulen, Krishna, & Spangler, 2002). Although the means for sharing information, communicating and expressing ideas have broadened considerably during the last decades, much of the relevant knowledge in an organizational context remains unmined, unshared, and underutilized.

The focus and contribution of this paper is first to provide a theoretical basis for a support context and, second, to propose a concrete system that supports and stimulates the conversion of personal knowledge into innovations and organizational decisions. This system forms a set of artificial conditions that quasi-exercise organizational skills and capabilities, by employing Group Support Systems (GSS), different mapping techniques, and cluster analyses in order to increase the communication between individuals, and increase the trust in the outcomes of the process.

Concepts such as community of practice (Lave & Wengler, 1991), ba (Nonaka & Konno, 1998), and networks of practice (Brown & Duguid, 2001a) are used to explain the organizational conditions favoring knowledge creation and sharing, and innovation. The most favorable contents of these arrangements depend on factors such as the organizational context, the experiences and other capabilities of the members, the management style applied.

The initial validity of the developed system is evaluated empirically by two real-life cases. The cases have been built relying on Yin (2003) as a frame of reference. Based on the conceptual discussion, an actual environment is demonstrated where the creation of new knowledge can be stimulated and managed, and personal knowledge can be converted into organizational decisions. It is shown how even hidden, tacit aspects of individual knowledge can be externalized into an explicit form and generalized for organizational use. The large amount of new and innovative knowledge created is potential evidence of the value of the proposed approach. The developed system forms a set of artificial conditions to exercise organizational skills and capabilities.

The remainder of the paper is organized around the key concepts described in Figure 1. The contents of each concept and the relationships between them are discussed in the second section. The third section proposes a support context for scenario-driven innovation processes. The fourth section describes the practical implementations of the context and the experiences with these implementations. The fifth section presents the evaluation of the semi-virtual community, based on the presented cases. The final section discusses the results and presents conclusions at theoretical and practical levels.

2. CONCEPTUALIZING THE KEY ELEMENTS OF SCENARIO DRIVEN INNOVATIONS

2.1 Knowledge and Knowing

Knowledge is traditionally interpreted as a singular, independent object. Another, prosessual interpretation of knowledge is to consider it as a path consisting of related steps (Carlile & Rebentisch, 2003). A wider interpretation is viewing knowledge as a network or a system where each element is related directly or indirectly to each other. This latter definition leads to the conclusion that totally new knowledge
The English Science Cities: A New Phase in Science-based Urban Strategy
www.igi-global.com/article/the-english-science-cities/124855?camid=4v1a