ABSTRACT

Knowledge-intensive firms are composed of various communities, each characterized by specialized knowledge. These communities operate as critical agents in the organizational action because the relevant processes and the variety/variability of environment and technology are too complex for a single individual to understand in their entirety. They generate new models for interpreting reality and responding to customer needs thanks to the integration of knowledge taking place within and between them. The objective of this chapter is to provide some criteria for evaluating the comparative effectiveness and efficiency of combinations of control mechanisms in the regulation of these knowledge integration processes. On the basis of the characteristics of knowledge (level of complexity and diversity), a different set of control mechanisms is proposed, with a variation in their specific features to guarantee that the resulting modes of communication and cognition can guarantee the required level innovation, without however preventing a certain level of stability.


INTRODUCTION

Over the last twenty years, management scholars have focused their attention on how knowledge-intensive firms, as a distinct category of organizations characterized by specific features, are managed (Nurmi, 1998; Alvesson, 2000; 2004; Ditillo, 2004; 2005; Barber and Strack, 2005).

A substantial amount of the literature on these firms assumes that a knowledge base exists in their organization – either as individual specialized skills and competencies (e.g., Tsoukas, 1996) or as capabilities embedded in organizational practices and in systems and structures – and that the continuous combination and recombination of this knowledge is the basis of continuous renewal and innovation (Kusunoki et al., 1998). The effective integration of this internal knowledge is seen as an essential base for providing innovative solutions for customers and for enhancing the survival chances and the prosperity of the organization (Grant, 1996a). This recognition has spawned substantial interest in the factors that influence the potential (or feasible) integration of knowledge of different kinds within the organization (Grant, 1996a; 1996b; Szulanski et al., 2004).

However, very little is known about whether management control mechanisms play a role in fostering knowledge integration, their different degrees of relevance to various situations and the ways in which they can be combined in practice.

The objective of this chapter is, therefore, first to provide a useful framework for understanding the existence and organization of knowledge-intensive firms, and, second, to suggest some criteria for evaluating the comparative effectiveness and efficiency of combinations of management mechanisms in pursuing control and knowledge integration as ways to achieve stability and innovation at the same time.

EXISTENCE AND ORGANIZATION OF KNOWLEDGE-INTENSIVE FIRMS

A recent approach that helps to shed some light on the reasons for the existence and organization of knowledge-intensive firms, and to some extent for all firms in general, is represented by the knowledge-based theory of the firm (Zander and Kogut, 1995; Kogut and Zander, 1996; Conner and Prahalad, 1996; Grant, 1996a; 1996b; 1997). Even if this approach has been criticized (Foss, 1996a; 1996b), and refers to any kind of firm, it may help explain the emergence of knowledge-intensive firms and the way in which they are organized.

Central to the knowledge-based theory of the firm is the argument that increasing turbulence in the external business environment has focused attention on resources and organizational capabilities as the principal sources of sustainable competitive advantage and the foundation for strategy formulation (Peteraf, 1993; Teece and Pisano, 1994; Kim and Mauborgne, 1999; Morris et al., 2006). As the markets for resources have become subject to the same dynamically competitive conditions that have afflicted product markets, so knowledge has emerged as the most strategically significant resource of the firm (Vicari, 1992; Drucker, 1993).

This perspective suggests the idea that the primary role of firms, and the essence of organizational capability, is the integration of knowledge (Nonaka, 1994; Grant, 1996a; 1996b; Kogut and Zander, 1996; Nonaka et al., 2000). Firms structure, coordinate and communicate individual and functional expertise by defining organizing principles that underlie what firms can do. Being flexible requires rules by which work is coordinated and by which information on the market is gathered and communicated. Just-in-time operations, designing for flexibility and decreasing time to the market are capabilities which presuppose a certain social knowledge regarding who is competent, how work is coordinated and what information is shared. In this respect, firms
Related Content

**Strategies to Implement Edge Computing in a P2P Pervasive Grid**
[www.igi-global.com/article/strategies-to-implement-edge-computing-in-a-p2p-pervasive-grid/193590?camid=4v1a](www.igi-global.com/article/strategies-to-implement-edge-computing-in-a-p2p-pervasive-grid/193590?camid=4v1a)

**A Survey of Epistemology and its Implications on an Organisational Information and Knowledge Management Model**
Ah-Lian Kor and Graham Orange (2011). *Innovative Knowledge Management: Concepts for Organizational Creativity and Collaborative Design* (pp. 95-124).
[www.igi-global.com/chapter/survey-epistemology-its-implications-organisational/47223?camid=4v1a](www.igi-global.com/chapter/survey-epistemology-its-implications-organisational/47223?camid=4v1a)

**Knowledge Structure and Data Mining Techniques**
[www.igi-global.com/chapter/knowledge-structure-data-mining-techniques/25143?camid=4v1a](www.igi-global.com/chapter/knowledge-structure-data-mining-techniques/25143?camid=4v1a)

**Introducing Knowledge Management as Both Desirable and Undesirable Processes**
[www.igi-global.com/chapter/introducing-knowledge-management-both-desirable/48996?camid=4v1a](www.igi-global.com/chapter/introducing-knowledge-management-both-desirable/48996?camid=4v1a)