Knowledge Management, Competitive Advantage, and Value Creation:
A Case Study of Icelandic SMEs

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ABSTRACT

The purpose of this paper is to analyse the effect of knowledge management on value creation in Icelandic firms. The aim is to examine the ways KM contributes to value creation, and measure the ways in which KM affects customer capital, innovation, and human capital. Given the limited number of firms in the survey with KM programmes, the findings should be seen more as a case study of Icelandic SMEs. The main conclusions are that firms which have adopted KM programmes and strategies have increased employee skills more than other firms; are better at attracting staff; and manifest improved decision making. The same goes for customer handling, innovation, and competitive standing. In general, this means that KM contributes to value creation by enhancing employee skills and innovation which, in turn, strengthen customer handling skills and the firm's competitive advantage. A conception model based on these findings is also presented in the paper.

Keywords: *Competitive Advantage, Customer Capital, Human Capital, Innovation, Intellectual Capital, Knowledge Management (KM), Value Creation*

INTRODUCTION

Nonaka, Toyama and Konno (2002, p. 41) argue that although knowledge is considered the most important source of a firm´s competitive advantage, there is "very little understanding of how organizations actually create and manage knowledge". Hence, they present the SECI-model and show how organizations should arrange their Ba's in order to transform tacit and explicit knowledge. Denning (2010) even stresses the need for radical management changes in modern organizations, manifested, among other things, in the steadily falling assets of US firms in past decades, as well as fewer happy workers and more disgruntled customers. There seems, therefore, to be a pressing need for a coherent theory on value creation in firms, and in particular on knowledge management's role in that process.

DOI: 10.4018/jissc.2013040104

Within the research literature there are two distinct paradigms that deal with value creation in firms: knowledge management (KM), and intellectual capital (IC). The KM literature has focused on internal processes, such as knowledge transfer from tacit to explicit, culture, organizational learning, ICT etc., in order to enhance productivity and sales, lower cost, or increase innovation and quality (Edvardsson, 2009; Edler, 2003; Kluge, Stein, & Licht, 2001; O'Dell et al., 2003). The IC debate has been more concerned with classifying, managing and valuating intangible assets (Schindler & Jaitner, 2003; Jashapara, 2011). To date, the link between KM and value creation has not been fully explored. How are KM and IC related, and how does KM affect value creation in firms? Very few empirical studies are available on the role of KM in firms' value creation. In order to fill that void, the purpose of this paper is to analyse the effect of knowledge management on value creation in Icelandic firms, by presenting results from a survey conducted in 2007. First, the paper attempts to synthesise different theories on the role of KM in value creations; second, it presents empirical findings on the value of KM; and third, it reveals a conceptual model on KM's role in value creation. The paper presents findings which indicate that KM programmes can enhance customer and human capital, as well as innovation. This increases the competitive standing of organizations.

The next section deals with the theoretical framework, followed by a section on research methods. The findings are then presented and the paper ends with discussion and conclusions.

THEORETICAL FRAMEWORK

KM is about developing, sharing and applying knowledge within the organization to gain and sustain a competitive advantage (Davenport & Prusak, 1998; Edvardsson, 2009; Lichtenthaler & Lichtenthaler, 2009). As already noted, the KM literature has focused on internal processes, such as knowledge transfer, knowledge sharing culture, organizational learning, ICT etc., in order to enhance productivity and sales, lower cost, or increase innovation and quality. Scarbrough and Swan (2001) argue that the rise and growth of KM is one of the managerial responses to empirical trends associated with globalisation and post-industrialism. These trends include the growth of knowledge worker occupations, and technological advances created by ICT. In organisational terms, they argue, this new era is characterised by flatter structures, de-bureaucratisation and 'virtual' or networked organisational forms. McKinlay (2006) argues that KM is an attempt to come to terms with new competitive pressures within capitalism. As a consequence of such pressures, corporations attempt to introduce innovation in products, services and organisation, and in order to do so they make use of the tacit knowledge of their employees. Kluge et al. (2001) argue that the value of knowledge tends to perish quickly over time and that companies need to speed up innovation and enhance creativity and learning. Finally, Daft (2007) stresses the shift in the environment and markets of organisations. Ever more companies have been transformed recently due to the shift from stable to unstable environments. Accordingly, business uncertainty has escalated, with more external elements to consider and frequent, unpredictable changes. A growing number of organisations have adopted team working, organic structures and knowledge-centric cultures as a consequence.

Vorakulpipat and Rezgui (2008) indicate that the first generation of KM tends to focus on knowledge sharing through information technology, whereas the second generation focuses on knowledge creation via organizational, social and collaborative processes. The future generation of KM will, according to Vorakulpipat and Rezgui (2008), be devoted to value creation grounded in a proper combination of human networking, social and intellectual capital, and technology assets facilitated by a culture of change.

Intellectual capital is usually defined to include the whole of immaterial assets, such as patents and copy-rights, employees' knowhow,