

HOW RELATIONAL CAPITAL AND KNOWLEDGE COMBINATION CAPABILITY ENHANCE THE PERFORMANCE OF WORK UNITS IN A HIGH TECHNOLOGY INDUSTRY

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The defense industry in Israel has long been considered a critical platform for the development of the high-technology sector. This study examines the importance of knowledge combination capability work units build through social relationships to enhance their performance. Specifically, we probe how both intraunit relational capital (within a unit) and interunit relational capital (across units) enable units to build knowledge combination capabilities and how such capabilities affect their performance. Data collected from senior managers in 122 knowledge units indicate that: (1) both intra- and interunit relational capital are positively related to knowledge combination capability; (2) knowledge combination capability is positively associated with enhanced unit performance; (3) knowledge combination capability fully mediates the relationship between interunit relational capital and unit performance; and (4) intraunit relational capital impacts both directly and indirectly (through knowledge combination capability) on unit performance. The findings suggest that interunit relational capital entails greater variation in knowledge stocks and thus may lead to more radical innovation than intra-relational capital that entails more similar knowledge bases and, thus, produces more incremental innovations. Copyright © 2009 Strategic Management Society.

INTRODUCTION

Knowledge is a strategically important intangible asset that can enable and enhance a firm's competitiveness (Grant, 1996b). With the advent of the knowledge era, intangible knowledge assets have become increasingly crucial. Both the resource-based view (Barney, 1991; Peteraf, 1993; Wernerfelt, 1984) and its derivative, the knowledge-

based view (Grant, 1996b; Kogut and Zander, 1992; Nonaka and Takeuchi, 1995; Spender, 1996), underscore the primacy of intangible assets as a source of value creation and appropriation. Unlike tangible assets, intangible assets are less flexible (Chatterjee and Wernerfelt, 1991), hard to accumulate, and not easily transferred. They serve multiple uses simultaneously, act simultaneously as inputs and outputs of corporate activities (Itami and Roehl, 1987), and are not consumed when in use (Collis and Montgomery, 1998). As Hitt *et al.*, (2001: 14) put it, 'intangible resources are more likely than tangible resources to produce a competitive advantage.'

Given the strategic role of knowledge assets, researchers have directed efforts to better understand the ways organizations manage existing knowledge, both implicit and explicit. Knowledge management

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