Organizational learning, technological diversification and corporate coherence: Complementarities and substitution effects

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Abstract
This paper explores the notion of corporate coherence (e.g. Dosi et al, 1992; Teece et al, 1994) by relating it to models of experiential learning. Literature has suggested that corporate coherence is a determinant of strategic direction and competitive advantages of firms. The paper reviews the literature on corporate coherence and technological and finds that most studies identifies corporate coherence with dynamics of learning pertaining to similarity/relatedness, commonality and complementarity. This view is here complemented by a framework that also takes into account substitution effects in organizational learning (Levinthal and March 1993). The paper identifies two search dimensions in organizational learning: vertical and horizontal search. Based on this distinction we discuss implications for substitution trade-offs. Inspired by Teece et al (1994), the paper suggests a typology of five coherence categories, ranging from incoherence to strong coherence. Drawing upon observations from the history of the heavy electrical engineering industry, the paper provides examples of substitution trade-offs which implies multi-level learning, where horizontal and vertical learning substitution takes place both within learning activities, as well as between activities.