Abstract

In technology alliances, complementarity of partners' knowledge assets is widely accepted as a source of synergies, enhanced learning and innovation. Conventionally, some of studies suggest that partners' knowledge diversity enables firm to access to the knowledge domains that span beyond its own capabilities and therefore complete firm's knowledge base. However, in this paper we argue that merely assuming non-overlapping knowledge bases does not necessarily reveal potential combination opportunities. Using a sample of semiconductor firms, this research adds a new dimension to characterize partners' resource profiles that identifies directly the level of complementarity of the knowledge-based resources, according to the usefulness of their joint use. The purpose of the study is to analyze the effect of knowledge complementarity on innovative performance and discern its effect from the diversity of knowledge bases of allying firm. While the study confirms a moderate level of knowledge diversity to ensure both mutual understanding and access to new knowledge, it suggests that given the level of knowledge diversity, complementarity of knowledge assets provide partners with innovative advantage. The findings contribute to the knowledge-based view by enhancing our understanding on how allying firms' resource profiles should look like to contribute most to knowledge creation.
Discerning the Role of Partner Technological Complementarity and Diversity in Innovative Performance

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