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## 29 Interdependent innovation

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Interdependent innovation is the joint development and implementation of a new product or service by two or more product divisions of a multibusiness firm and is a valuable, but under-leveraged, source of corporate entrepreneurship (Kleinbaum and Tushman, 2007). The ability to actively create interdependence across divisional boundaries offers large firms the opportunity to reconfigure their assets, deploying resources into new product markets or combining resources in novel ways (Adner and Helfat, 2003; Burgelman and Doz, 2001; Peteraf, 1993) and, in doing so, allows them to purposefully explore new businesses and develop new strategies, improving their long-term profitability and adaptability. And yet, few organizations seize this opportunity successfully.

The reason for the persistent difficulty of interdependent innovation is an artifact of organization design: managers choose organizational structure to minimize the costs of coordinating across interdependent units (Thompson, 1967). As they do so, grouping decisions are based on a logic of maximizing the interdependencies within units and minimizing the interdependence between units, placing the most highly interdependent units, who have the greatest need to coordinate, into common divisions (Nadler and Tushman, 1997). As a consequence, divisions are explicitly designed to minimize interdependence between them, even when interdependent innovation offers substantial potential growth opportunity.

Historically, the literature focused almost exclusively on the roles played by formal structure and incentives in managing interdependent innovation. On the formal structure side, scholars have suggested that matrix designs or other formal structural overlays might enable interdependent innovation (for example, Clark and Wheelwright, 1992; Galbraith, 1973; 1994; Nadler and Tushman, 1997). Other scholars suggest incentive-based approaches (for example, Kaplan and Henderson, 2005; Prendergast, 1999), but even when incentives to collaborate can be well-specified, overall incentive programs are ineffective at promoting multiple, inconsistent goals at multiple levels of the organization, as is necessary to enable both exploitation of core, divisional resources and exploration of cross-divisional architectures (Ledford and Heneman, 2000; Simons, 2005).

More recently, scholars have viewed interdependent innovation through the lens of social structure (Kleinbaum and Tushman, 2007). Intraorganizational social networks provide an alternative way for individuals from disparate parts of the organization to collaborate across divisional boundaries and to facilitate the interdivisional coordination necessary to take these ideas and bring them into reality. Another benefit of network-based approaches to interdependent innovation is they require little or no changes to the formal structure – thus reducing the likelihood that focus on interdependent innovation will undermine the stand-alone performance of the core product lines.

To the extent that organizations can systematically promote individual network-based search for collaborative opportunities and can implement the resulting interdependent innovations, large, multibusiness firms can remain entrepreneurial. They can avoid

losing valuable ideas to ‘spinoffs’ (for example, Klepper and Sleeper, 2005) and can avoid the stagnation and inertia that often follows success (Hannan and Freeman, 1984; Leonard-Barton, 1992).

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