Experience Spillovers across Corporate Development Activities

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Abstract

This study develops a theoretical explanation for the existence of positive, as well as negative, experience spillovers across corporate development activities. We suggest that the similarity in two activities influences both the sign and magnitude of experience spillovers. The argument is used to understand how alliance experience influences the performance of acquisitions in the US commercial banking industry. The empirical evidence indicates that the spillover effect of alliance experience on acquisition performance is a function of the decisions made in the post-acquisition phase regarding the level of integration and the replacement of top management. We also find a U-shaped relationship between alliance experience and acquisition performance, suggesting the presence of negative spillovers across corporate development activities at low experience levels.
Other important elements that are beyond the scope of the paper include the type of knowledge being transferred (e.g., motor or cognitive skills, declarative or procedural memory, etc.); the existence and strength of rules identifying the task (Holland, Holyoak, Nisbett, & Thagard, 1986); the existence, number, order, and type of cues or examples to refer to in the learning (Gick & Holyoak, 1983; Cheng et al., 1986) and transfer processes (Reed, Erst, & Banerji, 1974; Hayes & Simon, 1977); and the learner’s background knowledge (Bransford & Franks, 1976; Larkin, McDermott, Simon, & Simon, 1980).

In a related vein, Holyoak (1985) theorized about the distinction between structural elements, or elements of the two activities causally or functionally tied to outcomes or goal attainment, and surface elements, or elements only loosely tied to outcomes or goal attainment. Erroneous generalizations, and therefore negative transfer effects, occur when knowledge is transferred between two activities with similar surface elements but different structural ones.

It is to be noted that the opposite type of error, where perceived applicability is lower than actual applicability, is also possible. In this case, opportunities to apply relevant knowledge from related experiences are foregone because of a “pessimistic” representational error. In this paper, we concentrate on the “optimistic” bias because it has been studied more extensively (Cohen and Bacdayan, 1994; Gick and Hollyhock, 1985) and is a more serious type of error leading to actual disutilities as opposed to opportunity costs for the foregone opportunities. In any case, Figure 2 would not differ even in the case of a pessimistic bias, as the representation error should reach a maximum at intermediate levels of similarity where ambiguities are the greatest.

The use of the opposite notion of “dissimilarity” is due simply to ease of representation. Dissimilarity has a natural starting point at 0 (i.e. the two tasks are identical) and proceeds towards infinity, which facilitates its drawing in a pair of Cartesian axes.

Recent practitioner guidelines for developing capabilities for managing acquisitions and alliances are consistent with this focus. For instance, GE Capital’s approach to the management of acquisition processes relies on the creation of stable, specialized functions for the coordination of integration processes (Ashkenas, DeMonaco, & Francis, 1998). Similarly, Booz-Allen Hamilton’s study of alliance management recommends that firms adopt centralized alliance functions (Harbison & Pekar, 1997).

In order to test the robustness of the results to the time window chosen, additional models were estimated using two- and four-year time windows (results available from the authors). The interpretations for the direct effects did not change. Regarding experience spillovers, the interaction between alliance experience and replacement is negative in both models (p<0.05 for the two-year model and p<0.001 for the four-year model), and the parameter estimate for the interaction between alliance experience and integration is negative, though it does not reach statistical significance.

This implicit shortening of the time window is consistent with Benkard’s (2000) notion of organizational forgetting, which suggests that the most recent alliances will be more relevant. Future studies in industries with more frequent alliance usage could investigate alternative time windows or weighting schemes to examine experiential learning and experience spillovers in the corporate development setting.

Since the sample of acquisitions occur over several years, we also re-specified the model by incorporating year effects. However, the results provided no indication that year effects explain variance in firms’ accounting and financial performance (F=1.8, n.s. for the accounting performance model; and F=1.9, n.s. for the financial performance model).