

Acquiring IT Competencies through Focused Technology Acquisitions

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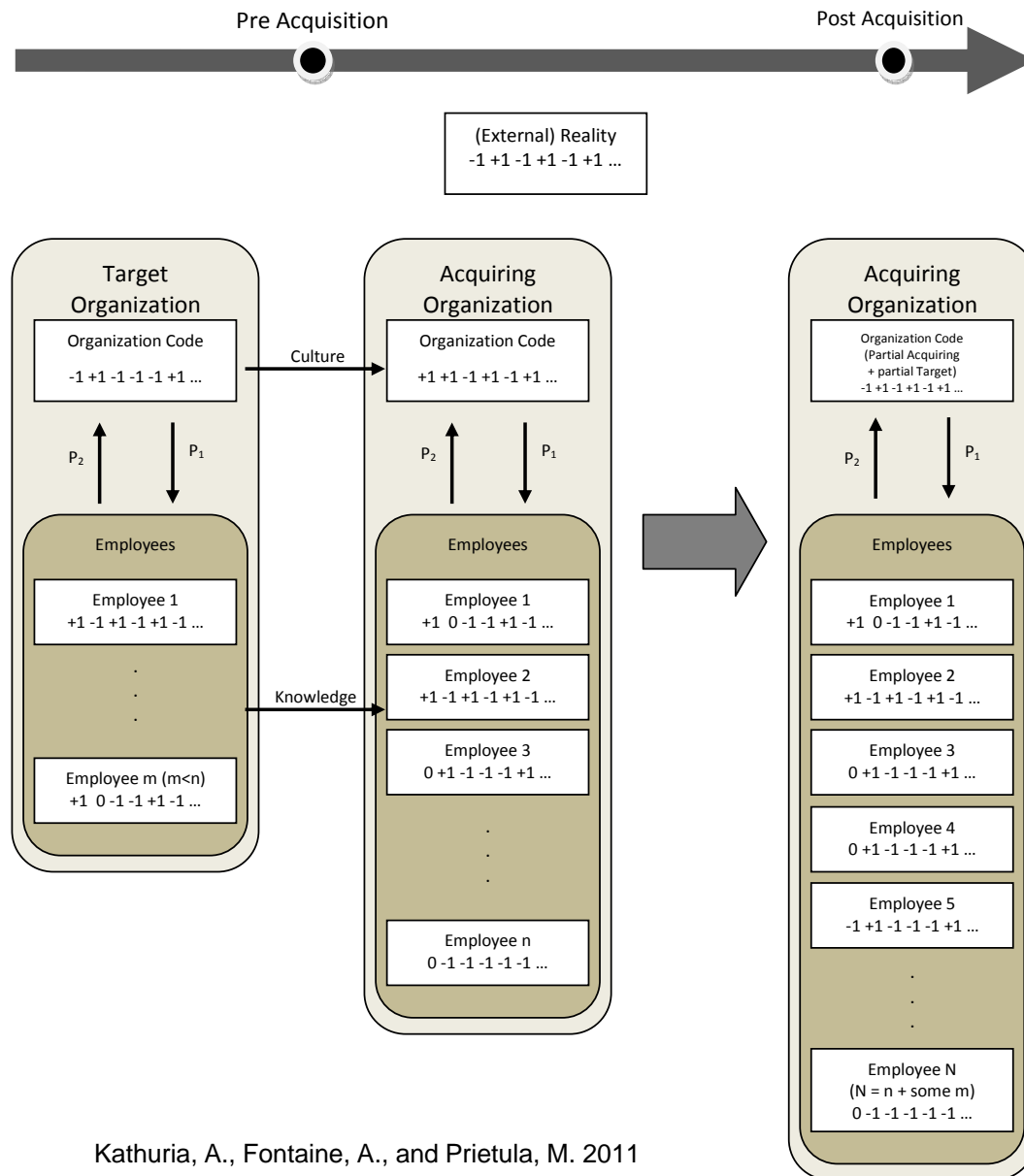


- Fast-paced nature of technology change in IT industry leads to high knowledge depreciation
- Need to rapidly develop new competencies & associated knowledge to maintain competitiveness
- IT product & services firms use acquisitions as innovation strategy
- Acquisition is a necessary, but not sufficient, condition for providing new competencies and knowledge
- Risk and failures surrounding acquisitions relate to integration of acquired competencies

Focused Technology Acquisitions

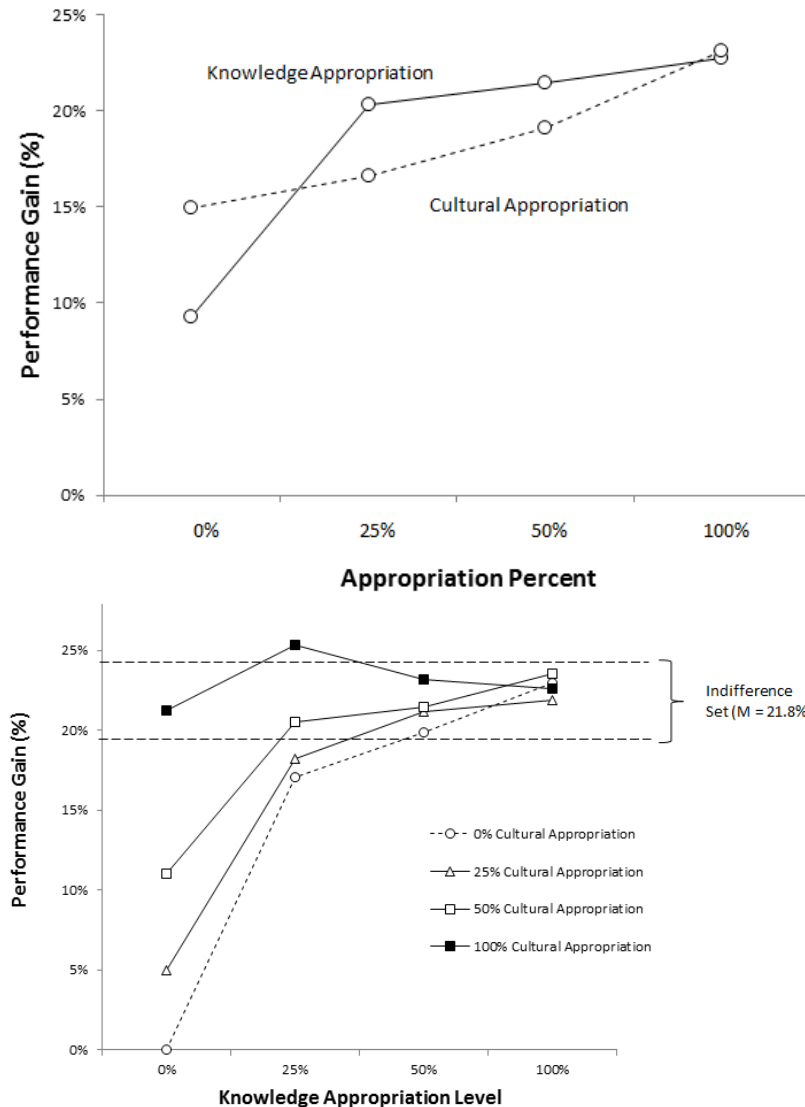
- Acquisition of relatively smaller, coherently-defined technology-based firm to add technological resources to strategic capabilities
- Individuals not only bring knowledge they gained, but also historical-situational context of pattern of work within which knowledge was developed and applied
- Success dependent upon integrating acquired knowledge held by individuals and organizational culture reflected in practices of the target firm
 - Knowledge: Cognitive process of individuals, defining what they know and their routines and interactions
 - Culture: Situated in a particular context and in time, somehow reflecting perspectives of the collective and enforced through forms of institutionalization

EEA Model



- Extend March's computational model of exploration-exploitation
- Manipulate two strategic variables across three computational experiments
 - Appropriation of knowledge
 - Appropriation of culture
- Examine relative knowledge gain

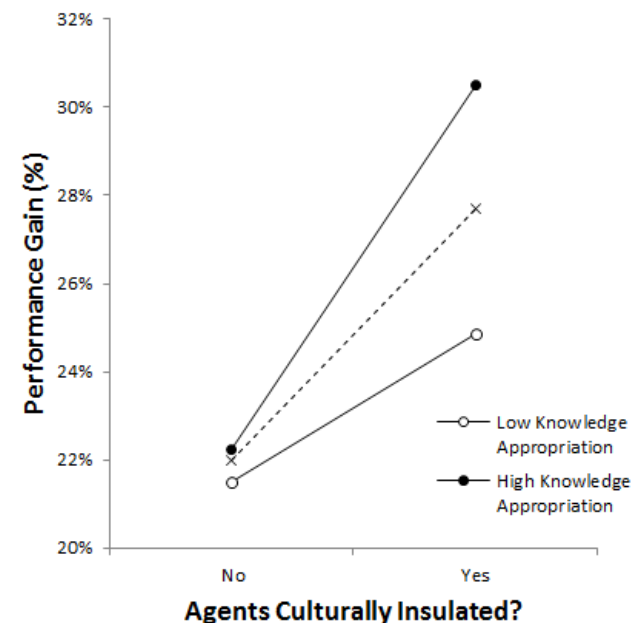
Results



- Experiment 1: Impacts of Knowledge and Culture
- Main effects:
 - Knowledge appropriation helps quickly
 - Cultural appropriation helps consistently
- Interaction effects:
 - Knowledge and culture are fungible
 - Indifferences sets of strategic options

- Experiment 2: When new employees retain their culture
 - Retained agents insulated against conformity influence of acquiring firm
 - Maintaining cultural autonomy improves performance
 - Effects of cultural autonomy magnified by higher knowledge appropriation levels

- Experiment 3: Parameter Landscape
 - Failed acquisitions suffer when a firm acquires wrong culture: Culture is a dual-edged sword
 - Successful acquisitions rely on gaining right knowledge, right culture, and imposing less conformity



Conclusions

- Appropriation of knowledge exhibits decreasing returns: selective retention of employees with specialized IT technical knowledge
- Knowledge and culture appropriation provide complementary strategies and strategic options
- Strategic choices of resource-constraint driven appropriation of low levels of knowledge and returns-maximization driven appropriation of high levels of culture
- Gains substantiated when target firm is insulated from socializing dynamics of acquiring firm through one-way structural forms