HOW ELEPHANTS LEARN NEW TRICKS: INTERNAL AND EXTERNAL CAPABILITY SOURCING IN THE EUROPEAN TELECOMMUNICATIONS INDUSTRY

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ABSTRACT

This paper reports a qualitative study of telecommunications firms between 1999 and 2002 to assess how they obtain new capabilities in the face of constraints to change. Our fieldwork, based on interviews with twenty-six executives, expands our preliminary model and identifies incentives to choose among different forms of internal and external modes for sourcing new capabilities. The emergent model intersects with several theories of business change, while providing implications concerning firms’ sequential evaluation of sourcing options.

INTRODUCTION

Where do firms obtain new capabilities when they need to change? During the past quarter century, research in strategy and organizational theory has developed thoughtful arguments concerning barriers to organizational change. The theories emphasize inertia and the risks of attempting to make major changes (Nelson and Winter, 1982; Hannan and Freeman, 1984; Levitt and March, 1988; Cohen and Levinthal, 1990). At the same time, though, firms do undertake fundamental changes in their structure, systems, and business mixes (Helfat and Raubitschek, 2000; Karim and Mitchell, 2000). Recently, scholars have focused attention on the organizational processes, sometimes using the term “dynamic capabilities”, by which firms obtain, integrate, and reconfigure resources in order to change their businesses (Teece, Pisano, and Shuen, 1997; Eisenhardt and Martin, 2000; Zollo and Winter, 2002; Mitchell and Shaver, 2003). This work argues that companies sometimes search internally and at other times look outside the firm for new capabilities (Rosenkopf and Nerkar, 2001). However, the literature does not yet offer a clear distinction concerning when firms choose among different types of internal and external mechanisms for obtaining new capabilities (Eisenhardt and Santos, 2002; Capron and Mitchell, 2003). This paper develops a model of internal and external capability sourcing choices.

BACKGROUND: ORIENTING MODEL

Figure 1 depicts an orienting model that outlines incentives to choose between internal and external sourcing modes to obtain targeted capabilities. The model begins with the idea that a firm operates in a competitive environment (S1), possessing a set of
capabilities (S2). At any point in time, the firm may assess whether there is a gap between the capabilities that it possesses and those that it would like to possess in order to compete effectively. Capability gaps (A) arise because of changes in the competitive environment and changes in a firm’s perceptions of future competitive needs. The core point is that a firm may perceive a gap between the capabilities that it possesses and those that it would like to possess. We assume that firms assess potential modes for obtaining new capabilities before deciding whether to abandon the attempt to change, a point to which we will return later in the paper.

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Figure 1 about here
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EMPIRICAL SETTING & DATA COLLECTION

The European telecom industry provides a rich setting for a detailed analysis of the mechanisms by which firms attempt to obtain new capabilities in rapidly changing competitive environments. The industry has faced intensive deregulation, price competition, telecom and information technology convergence, and cross-border competition during the past decade. Telecom firms have used multiple modes of change in the face of a wide variety of pressures.

The research site is particularly useful owing to European telecom firms’ traditional inclination toward internal development. This bias arises from historical national protection, insulation from competition, the firms’ privileged status, and their endowments of engineering and financial skills. In spite of the heritage that emphasized internal activities, by the late 1990s these firms were using a mix of internal and external sourcing in their efforts to change their businesses. This expansion of modes provides grist to identify factors that help determine whether firms use internal or external modes of obtaining capabilities.

The research developed over three stages. In the first stage, we relied on open-ended interviews to gather information on the industry, the type of capabilities firms were looking for and the way they filled their capability gap. In the second stage, we conducted a series of on-site semi-directive interviews with telecom executives to refine the framework. In the third stage, we conducted a workshop with executives from several industries and interviews with telecom experts in order to confirm the emergent model.

AN EMERGENT MODEL OF CAPABILITY SOURCING

The text contains examples and quotations from the interviews that illustrate the argument as it develops. This approach – of organizing interview information on a concept-by-concept basis – suits a situation in which qualitative research illustrates a moderate number of concepts (Hargadon and Sutton, 1997). The concept-by-concept approach contrasts with organizing information about each concept on a case-by-case basis, which suits cases in which qualitative research illustrates a small number of concepts (Brown and Eisenhardt, 1997; Galunic and Eisenhardt, 2001).
Figure 2 depicts the emergent model, which clarifies and extends the initial orienting propositions. The discussion below describes how we gained a deeper understanding of each key element of capability sourcing modes and processes. The labels in the following sub-headings refer to elements of the emergent model.

Our fieldwork provided strong support for our initial model. We found that firms turned to internal, rather than external, sourcing when their existing capabilities were closely related to the targeted capabilities and when they could leverage internal strengths in the targeted capability area. When targeted capabilities were far away from their core knowledge, firms resorted to external sourcing. When choosing among external modes of sourcing, firms paid minute attention to the extent to which targeted capabilities could be easily tradable or not. As firms faced issues of appropriation and coordination, they abandoned market exchange to pursue more integrative modes such as alliances or acquisitions.

The fieldwork helped us refine the initial model by stressing complementary influences. One key complementary influence arises from the extent to which the targeted capabilities could conflict with a firm’s organization and/or products. Conflict with targeted capabilities could lead firms to turn to external sourcing, even if they could have drawn on internally available capabilities to develop the needed capabilities, or lead them to innovative organizational solutions within the firm, such as creating independent units outside the core structures. Further research could explore the issues of how to manage antagonistic capabilities within the firm.

This study also expands the work on dynamic capabilities of firms by stressing how such capabilities influence sourcing choices. The study supports the notion that a firm’s dynamic capabilities to search for new capabilities, such as internal reconfiguration skills and external governance skills, influence the choice of sourcing modes. The greater the dynamic capabilities of the firm, the more firms can align its sourcing modes with the requirements associated with resource exchange, and avoid selecting a sourcing mode as a default option merely because it lacks the skills of governing a particular mode of sourcing choice.

**IMPLICATIONS FOR MANAGERS**

A better understanding of how to obtain new capabilities has important implications for managers. Mastering and being able to combine internal and external searches can provide a source of competitive advantage, particularly in industries that face rapid and major shifts, and where firms need to rapidly realign their set of capabilities. Three aspects of this study make it especially useful in this context. First, we observed that many firms were likely to develop an inertial tendency toward internal
development, and would turn to external sourcing only once they had failed internally. The implications of this study lead us to recommend that managers consider, from the outset, the various modes of sourcing modes. If managers make a determined effort to evaluate the attributes and organizational requirements associated with the resource exchange, as well as their firm’s governance skills, they could recognize that internal development is doomed to fail in some cases, and could save time and effort by turning directly to external modes. Our results draw managers’ attention to the notion that the most effective approach lies in a combination of these different sourcing modes.

Second, most managers were aware of the challenges associated with the organizational stretch brought about by conflicting resources. The high degree of managers’ awareness on this issue seems to suggest that firms that are able to achieve a balance between existing capabilities and targeted conflicting capabilities are rewarded for it.

Third, many managers were aware of their lack of skills of governing exchange within the firm and outside (or across) the firm’s boundaries. However, we noticed that firms deployed a determined effort to enhance their “internal reconfiguration skills” through various knowledge management initiatives, while they placed less emphasis on enhancing their capabilities to govern market exchange, alliances and acquisitions.

Clearly, substantial work needs to investigate how organizational elephants can learn new tricks. Much of the emphasis in recent strategy research has focused on the issue of how firms change in the face of constraints to change. We believe that the emergent model of capability sourcing in the European telecommunications industry can help advance this work.

REFERENCES


Figure 1: An orienting model of capability sourcing

S1. Competitive environment → A. Capability gap → S2. Firm’s existing capabilities

Q1. Relevant capabilities?
   Yes → M1. Internal sourcing
   No → Q2. Degree of market failure?

Low → M2. Market exchange
Moderate → M3. Alliance
High → M4. Acquisition

Figure 2: An emergent model of capability sourcing

A1. Capability gap identification → A2. Internal bias?

Yes → Q1a. Firm has relevant capability base?
No → M0. Abandon search

Q1b. Strong internal reconfiguration skill?

Yes → External search: Which external mode?
No → Q1c. High capability conflict?

Yes → M1. Internal search
No → M0. Abandon search

Q2. Market failures?
   • Opportunism & Coordination, amplified by Importance & Scope & Legitimacy

Low → M2. Market exchange
Moderate → M3. Alliance
High → M4. Acquisition

Mediating factors: Governance skills

Q3a. Strong exchange governance skills?
Yes → M2. Market exchange
No → M3. Alliance

Q3b. Strong alliance governance skills?
Yes → M3. Alliance
No → M4. Acquisition

M4. Acquisition

Abandon

Internal experimentation

Core Periphery