From Research to Innovation, How to Create Value for an IT Consulting and Engineering Service Firm through its Internal Research Activities

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ABSTRACT

IT consulting and engineering firms generally develop strategic knowledge for their clients based on their own competences in various business methods and processes. Knowledge and competences can be improved through collaborative research projects and further leveraged for their own strategic development. The aim of this paper is to build and experiment an organizational management tool within a consulting firm. The tool allows the creation of value and differentiation levers on the competitive market of research and innovation consultancy and illustrates how to benefit from internal research activities that can be viewed as intangible resources. In light of competence-based theory this work shows how strategic knowledge developed on an emerging field such as e-health can be rearranged into strategic processes in order to inspire a proactive strategic vision within a consulting firm.

KEYWORDS


INTRODUCTION

Advanced Engineering Consulting Firms (AECF) generally develop strategic knowledge for their clients based on competences in various business methods and processes. But through collaborative projects carried on internally or for their clients, they also develop knowledge and competences that can be leveraged for their own strategic development. Using dynamic capabilities framework (DCF) here we seek how Altran develops new combinatorial capabilities through learning techniques to gain a sustainable competitive advantage. Teece’s model of sensing (identification and assessment of an opportunity), seizing (mobilization of resources to address an opportunity and to capture value from doing so) and transforming (continuous alignment of tangible and intangible assets) is employed as a diagnosis tool and map of the company’s case competences (Teece, 2007). Moreover, the practical relevance advantage of DCF stands out for the exploration of organizational processes for our study case Altran, a multinational corporation operating in fast-moving business environments.

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Against this framework, the aim of this empirical research at firm level is to build and experiment an organizational and coordinating process for leveraging knowledge and competences resulting from research activities to develop a proactive strategy of innovation. AEFC faces a great challenge trying to benefit from internal research activities (viewed as intangible resources) to create value and differentiation levers on the competitive market of research and innovation consultancy.

The paper is organized as follows: in the next section, we first review the theoretical background of our study. Then, we introduce the methodology framework: description of the case study of Altran; research design and data collection. We then propose a new organizational and coordination process for our case study, and finally, we conclude.

LITERATURE REVIEW

Drawing on both existent literature and firms’ common practices of competence management, we identify Competence based Management (CBM) and Dynamic Capabilities Framework (DCF) as essential conceptual views of the firm’s competence and related management practices (Hong & Stable, 2003). Competence based management fosters and adopts a dynamic, systemic, cognitive, holistic view of management mechanisms in today’s changing environment (Foss & Ishikawa, 2007; Freiling, Gersch & Goekte, 2008). CBM defines competence as the ability to sustain the coordinated deployment of resources in ways that help an organization achieve its goals (Sanchez & Henee, 1996). This theory focuses on designing and implementing techniques for leveraging individual skills and competences, as well as team capabilities and organizational competences.

Over the last two decades, the dynamic capabilities framework has moved to the front position of strategic management research (Di Stefano, Peteraf & Verona, 2010). To survive in fast-moving business environments, a firm needs more than difficult-to-replicate assets, but also dynamic capabilities: distinct skills, processes, procedures, organizational structures, decision rules (Teece & Pisano, 1994; Winter, 2003; Teece, 2007). DCF was originally conceptualized by Teece, Pisano & Shuen (1997); Teece & Pisano (1994) as the firm’s ability to integrate and build and reconfigure internal and external competences to address rapidly changing environments. They reflect the ability of an organization to achieve new and innovative forms of competitive advantage given path-dependencies and market positions. DCF seeks to provide a coherent framework which can both integrate existing conceptual and empirical knowledge, and facilitate prescription (Teece, Pisano & Shuen, 1997). Dynamic capabilities maintain competitive advantage once corporate performance is improved faster than its competitors (Winter, 2003) and may explain firm’s business model evolution (Brink & Holmén, 2006).

The main advantage of using DCF is the practical relevance in case applications where processes are analyzed and learning mechanisms are explored. Indeed, dynamic capabilities in firm level processes help a firm’s managers recognize how marketplace is changing (Barney, 2001). Many studies have suggested that a firm’s ability to learn or develop processes that promote continuous learning and new flows of knowledge may be the only real source of sustainable competitive advantage (Teece, Pisano & Shuen, 1997; Crossan, Henry & Roderick, 1999; Crossan & Berdrow, 2003). DCF provides a valuable aid to managers outlining relevant strategic considerations and priorities firms must adopt to enhance performance.

The possession of DC is particularly relevant to multinational company performance operating in business environments with certain features (Teece, 2007): open to international commerce environment and exposed to the opportunities and threats associated with rapid technological change; systemic technical change (combined multiple inventions to create products/services in response to customer needs); well-developed global market for the exchange of goods and services; poorly developed markets in which to exchange technological and managerial know-how. Such characteristics can be found in many sectors, and especially in high technology sectors.
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