

Networking Dynamic Capability and Product Innovation: the Case of “Networking Attitude” Project at EDAN

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In times of increasing concentration, size appears to be a critical condition for survival of firms. Smaller Multi National Companies (MNCs) live with a constant threat of being absorbed. In order to preserve their autonomy they have to innovate faster than their more powerful competitors. In this context, dynamic capabilities leading to decreasing time-to-market appear particularly important. Indeed, it is no secret that *“winners in the global marketplace have been firms that can demonstrate timely responsiveness and rapid and flexible product innovation, coupled with the management capability to effectively coordinate and deploy internal and external competences”* (Teece et al. 1997).

On the basis of a longitudinal case study of a “Networking Attitude” project at EDAN, this paper takes up the challenge of analyzing the conditions and organizational principles leading to enhanced product or process innovation. It proceeds in two stages. First, from a theoretical perspective, we propose to analyze the relationship between innovation as a source of competitive advantage and the concept of dynamic capabilities. One of the goals is to understand the link between the emergence of new decentralized designs and the firm’s capacity to efficiently sustain knowledge networks across the organization. From a managerial perspective, the difficulty resides in understanding the relationship between autonomy, connectivity, receptivity and variety absorption. This is why; the second more empirical section illustrates the creation of inter-unit networks and their influence on innovation on the example of a specific firm.

1. INNOVATE QUICKLY OR DIE?

Acquiring and sustaining competitive advantage has been the central issue in strategic management for a long time now (Schumpeter, 1934; Penrose, 1959; etc.). Many authors have come to agree that the winners are those who are capable of exploiting their existing competences and developing new ones (Penrose, 1959; Teece, 1982, Wernerfelt, 1984, etc.). However, only since the introduction of the concept of dynamic capabilities (DCs), have researchers begun to analyze the internal mechanics of how the different firms develop and renew their capabilities to face the more recent forms of competition.

1.1 Dynamic Capabilities

According to Teece et al. (1997) the term “dynamic” refers to the firm’s capacity to renew its competences and “capabilities” are the managerial capacities to adapt, integrate and reconfigure internal and external organizational skills, resources, and functional competences to match existing market conditions and even create market change. DCs are therefore the firm's specific capabilities which allow for the renewal of organizational competencies in increasingly competitive environments (Teece et al. 1997; Eisenhardt and Martin 2000). They are important because they determine the uses of scarce resources and assets (Penrose 1959; Sanchez and Heene, 1996).

According to Eisenhardt and Martin (2000), DCs are four specific and identifiable processes. First, strategic decision making processes are DCs in which managers use their expertise to make choices that guide the future of their firms. Chiesa and Manzini (1997) introduce the concept of the “system view” capability of a firm which designates the managerial ability to identify and understand a firm’s competitive context and the frame of reference of its actions. The “system view” establishes the learning space of a firm allowing it to adapt to shifts in the external environment. Second, resource recombination processes involve coordination mechanisms by which managers combine and reconfigure the available resources among various parts of the firm to generate new and synergistic resource combinations among businesses. Third, new resource acquisition processes include routines that bring new external resources into the firm. Alliances, for example, allow firms to capture outside knowledge, so as to improve their overall performance (Powell et al. 1996; Capron et al. 1998). However, one important drawback of acquiring external resources is that it necessitates important financial investments. Also, it is significant to note that almost half of mergers do not create value.

Finally, knowledge management processes, which play a central role in strengthening other dynamic capabilities. Indeed, the evolution of dynamic capabilities depends on two principal factors: the firm’s learning mechanisms (knowledge creating and sharing) and the degree of market dynamism. On the one hand, in moderately dynamic markets, effective dynamic capabilities rely on cumulative existing knowledge and are based on efficient predictable and relatively stable processes. On the other hand, in high-velocity markets, dynamic capabilities rely on rapidly created situation-specific new knowledge.

Dynamic capabilities are embedded in social complexity which generates causal ambiguity (Nahapiet and Ghoshal 1998). For example, creating and sharing knowledge depends on a

number of factors including the way organizations create and transfer tacit knowledge as well as the organizing principles by which individual and functional expertise are structured, coordinated, and communicated.

1.2 Organizational Design, Knowledge Coordination and Innovation

According to Prusak (1996) “*producing new knowledge fast*” is critical in the 21st century knowledge era. This is so because firms experience a multitude of contradictory pressures (cost, quality, time-to-market) and have to continually and very rapidly adapt their offers to rapidly changing and diversified customer needs on a global scale. Ashby’s (1956) Law of Requisite Variety helps to understand why the evolution of organizational designs tends towards increasing decentralization and autonomy. It holds that successful adaptation requires a system to have an internal variety matching environmental variety. Paradoxically, Thompson (1967) interpreted this to mean that firms cope best in uncertain environments if higher-level managers systematically eliminate as much environmental variety as possible. According to the author, this reduces uncertainty for the lower-level managers, making it easier for them to run their mechanistic subunits efficiently. Contrary to Thompson, Simon (1999: 237) observed that “...*dynamic events at each level will be one or more orders of magnitude slower than the events at the level below.*” Thus, the lowest level absorbs the highest rate of variety, the next level less so, leaving fewer but more troublesome environmental variations to be resolved by upper management. Mèlèse (1991) also observes that variety increases as one goes down the levels. But, reversing Thompson’s logic, Mèlèse argues that part of the variety of each sub-system must be absorbed locally so that variety is not transferred to the superior level, which is unable to grasp it. In practical terms this means that autonomy at lower levels helps to absorb environmental variety in a more efficient way thus leading to quicker innovation rates. Hence, firms capable of rapid innovation are designed according to the entirely new organizing principles. Here, complexity is managed by autonomy, cooperation becomes efficient and the focus is on knowledge sharing and creating.

1.3 Increasing Connectivity through Knowledge Networks

To improve their performance, companies are more and more often engaged in knowledge management strategies in which the transfer of business practices becomes an important source of competitive advantage (Ghoshal et al., 1994). Knowledge transfer in organizations can be defined as the process through which one unit is affected by the experience of another (Argote and Ingram, 2000). For example, one country marketing team may learn from another how to better answer to a “Request for Proposal”. Although the benefits of knowledge transfer have been documented in many settings (eg. transmission of local know-how, scale economies, etc.), the effectiveness of knowledge transfer varies considerably among organizations (Argote, 2000; Szulanski, 1996). This challenge is particularly critical for multi-unit and multinational corporations (MNCs). Indeed, one of the main advantages of being a large rather than a small company is being able to capture on a large scale the gains that come with applying smart processes or routines (Szulanski and Winter, 2002).

Knowledge transfer is a prerequisite to learning but requires effective networks and appears difficult to implement across different units of an organization if pre-existing relationships are absent (Szulanski, 1996).

The ability to transfer knowledge from one unit to another has been found to contribute to the organizational performance of firms (Baum and Ingram, 1998; Darr, Argote and Epple, 1995). More specifically, it is found to be correlated with the firm's capacity to sustain development innovations. Research on "stickiness" by Szulanski (1996) and on transnational contexts by Kostova (1999) has shown that the transfer of knowledge within organizations does not happen easily. There are many barriers to knowledge-sharing both between peer subsidiaries and between subsidiaries and headquarters, substantial cost being on top of the list (Foss and Pedersen, 2002).

The major difficulty is to find efficient inter-unit coordination based on true cooperation of actors. From this perspective, coordination depends on both connectivity and receptivity. Connectivity relates to the creation of links among heterogeneous agents. Following Ghoshal et al. (1994), MNCs pay more and more attention to sustaining inter-unit communication in order to reduce uncertainty and complexity. Receptivity refers to link activation and this is based on the one hand on the agent's capacity to understand and therefore assimilate transferred knowledge and on the other hand on the motivation to activate the specific link (Weick, 1995; Boisot and Canals, 2002). This corroborates Hansen's (2000) findings that relatedness in knowledge content among business units and a system of lateral connections enabling actors to access knowledge, are conditions of effective knowledge sharing in multiunit firms.

Creating knowledge networks facilitates the sharing of good practices and of good failures among geographically dispersed units and therefore enhances organizational learning. Knowledge networks improve actors' receptivity or the common understanding of an organization as a whole or its specific process. This can enhance the firm's dynamic capabilities to face the competition by improving its innovation processes.

2. EMPIRICAL STUDY

After describing our method of analysis and the context, this case analysis of EDAN's "Networking Attitude" project teases out the complexity of developing new dynamic capabilities which aim to enhance inter-unit knowledge sharing to increase innovation rates.

2.1 Data gathering and analysis

Our data came from a case study analysis, facilitating discovery of complex phenomena. Our approach is inductive, longitudinal, narrative, and process oriented. It is rooted in the grounded theory (Glaser and Strauss, 1967) based on constant iteration between theory and empirical findings. The choice of this particular approach is also motivated by the three criteria proposed by Yin (1989): research questions defined in terms of "how" and "why", the novelty of the investigated field, and the exploratory nature of the research which makes control of actors' behavior unnecessary. Our study was conducted between 2001 and 2006 during which the

“Networking Attitude” project has been implemented at EDAN. The three sources of evidence are direct observation, interviews and internal documents. Data analysis was conducted according to the methodology proposed by Huberman and Miles (1991). It involved data condensation, its presentation in figures and conclusion formulation.

- Since we were actively involved in the project implementation the direct observations were established on product and process innovations as well as on business performances linked with the project.

- Interviews were firstly conducted with members of the executive committee in order to understand their business issues and the strategic intent of the company. Secondly we interviewed the director of the project. Thirdly we interviewed the facilitator of the 85 knowledge networks identified.

2.2 “Networking Attitude” Project at EDAN

EDAN is a food company with 90 000 employees present in five world regions. According to the CEO, EDAN “is the world leader in each of its three businesses: Fresh Dairy Products, Beverages and Biscuits. Meanwhile, it is a third or a quarter the size of less focused competitors operating across a wider range”. The corporate culture in EDAN means quick responses, flexibility, distrust of unwieldy structures and no doubt even a bit of anti-conformism. EDAN looks for a type of competitive advantage rooted in its culture. It is speed which concerns the pace of growth in its business and the way EDAN implements its strategy and operate on a day-to-day basis. Its objective is to become a “fast moving food company”. In recent years, EDAN has adopted structures and procedures to strengthen links inside the company and between the company and its direct environment. In order to support the strategic intent, the top management decided to implement the “Networking Attitude” project. The latter was based on organizing forums with front line managers from distant geographical locations with similar interests. The most important issue was to create an opportunity for the participants to get to know one another on the basis of specific knowledge held and to help them engage in networking activities after each forum. In total 8000 frontline managers (40 sessions of 200 employees) participated in forums on specific themes. The “Networking Attitude” project was a bottom up process which allowed managers from different divisions all over the world to exchange experience and good practices. The forum is a “marketplace” for exchanging best practices. As in a traditional open-air market, vendors set out their wares on stands and stalls—in this case, displays featuring best practices. When a good practice has been exchanged and is successful used by many managers it becomes a “nice story”. The collection of “nice stories” results from knowledge integration as individuals learn from one other and implement collectively developed solutions: as a result, organizational practices evolve and this is synonymous with organizational learning.

The “Networking Attitude” is informal but very effective: since September 2003, EDAN’s marketplaces have enabled line managers to share expertise and insights on issues affecting all business lines, with 2,700 good practices aired and shared. However, these ‘good technique markets’ only work if the following conditions are met: problems must be identified and noted down, the presentation must be defined from the outset, and the exchange of experiences followed up at the end of the meeting. Additionally, another type of initiative has

appeared, this time working in the reverse direction. Faced with a challenge, managers launch an appeal or “message in a bottle” in the hope that someone else will have already encountered the problem and come up with a solution.

This leads to the creation of working groups and professional communities for managers within the same business line—venues, virtual or real, for the exchange of ideas. Today one manager in five participates in theme-based groups addressing issues ranging from R&D and quality to purchasing, production and more. A facilitator mediates, coordinating exchanges so that a common approach to shared problems becomes part of day-to-day business. Once the right reflexes are in place, teams can move on to design and implement technologies that facilitate exchanges—specialized portals, web conferences and chat rooms, for example. This approach is illustrated by a new Group-wide directory that makes it easier to get in touch with co-workers, even as it allows each individual to showcase his or her fields of expertise—and willingness to pitch in to find solutions.

3. Results in Short

The direct results of the process are very interesting and give us the opportunity to conclude that sustaining knowledge networks helps to support innovation. Since the implementation of project, the company reduced the global time to market up to 56 months (all products). EDAN saved more than 100 €millions and improved at least 32 processes.

Like all social phenomena, Knowledge Management is a complex process with multiple causalities. The inherent complexity of knowledge related phenomena has generally been recognized by for quite some time now (Nonaka, 1994; Boisot, 1995; etc.). Knowledge is fundamentally dynamic (Nonaka, 1994) and its creation and sharing in social interactions among individuals, groups of people and organizations is governed by the firm’s dynamic capabilities.

The “Networking Attitude” project illustrates that in geographically dispersed organizations inter-unit networking enhances knowledge sharing and is therefore an essential element of dynamic capabilities. Indeed, increasing connectivity through lateral, non-hierarchical inter-unit knowledge sharing enables the firm to create sufficient variety of knowledge to rapidly absorb environmental variety.

However, increased connectivity and receptivity may also lead to the appearance of a new organizational arrangement in which actors get together to search together for solutions to encountered problems. Paradoxically, this collectively created new knowledge reduces variety in the knowledge base. Smaller diversity of knowledge decreases the firm’s capability to adapt its products to fast-changing customer needs thus limiting its capacity to sustain its competitive advantage.

On the contrary, when knowledge sharing process is not successful it tends to favor intra-unit knowledge creation and thus increase variety in the knowledge base. Within a decentralized organization, this heterogeneity of knowledge decreases the MNC efficiency due to the lack of knowledge coordinated at the global level

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