A Critical Review of the Theories underpinning Strategic Absorptive Capacity

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Abstract

This paper seeks to highlight the various theories that support absorptive capacity and also act as critical foundations for this concept. The article divulges the relationship between the notion of absorptive abilities and these theories in strategic management and brings out their importance and overlaps. These theories are also interlinked and influence each other. The linkage between absorptive capacity and organizational learning process is emphasized. Under the innovation theory, new product development, research, and development as well as innovation tend to increase with a firm’s ability to adapt to external knowledge. Absorptive capacity is also influenced by managerial cognition; that is management’s perception of information will impact the absorptive capability of the firm. The knowledge-based view theory states that a combination of knowledge embedded in a firm as well as a firm’s combinative capabilities influences its absorptive capacity. The relationship between absorptive capacity and a firm’s exploratory adaptations are also accentuated. Recent studies have also portrayed absorptive capacity as a dynamic capability.

Keywords: Absorptive Capacity, Research and Development.

Introduction

The absorptive capacity concept was first introduced in macroeconomics where it referred to the ability of an economy to utilize and absorb external information (Adler, 1965). Kedia and Bhagat (1988) first coined the term “absorptive capacity” in their study on international technology transfer. However, Cohen and Levinthal (1990) contribution is accepted as the founding paper. They adjusted this macroeconomic concept to organizations and defined absorptive capacity as a firm’s ability to recognize the value of recent, external information, adopt it, and use it to commercial ends. Their definition represents a single-loop learning process. The above pair of scholars put development and research at the heart of the innovative processes of the firm by it to innovation and learning. In so doing, the two scholars laid the foundation for the development of theories over the years to follow and placed absorptive capacity as an important concept in literature.

Absorptive capacity is studied by individuals, groups, companies and governments. It is generally explained as the capacity of an enterprise to use available information and knowledge that comes as a result of interaction with other firms, consumers and information providers (Cohen & Levinthal, 1990; Giuliani & Bell 2005). An organization should develop absorptive capacity order to be innovative. Absorptive capacity is perceived as a firm level construct, which conveys the cumulative effect of a firm’s continuous learning.

Mowery and Oxley (1995) also defined absorptive capacity as a set of needed skills to transform this knowledge by dealing with the tacit part of transferred knowledge. Kim (1997) further describes absorptive capacity as the function for a firm to learn from another. Van den Bosch et al. (1999) explained absorptive capacity as the assessment, acquisition, assimilation and commercial use of new external information. Finally, Sun and Anderson (2010) defined absorptive capacity as a firm’s ability to learn and act on technological activities and scientific findings outside its limits. However, the concept of absorptive capacity overlays with other fields and themes such as cognition, information, and dynamic capabilities. The development of the theory of absorptive capacity ranges from the economic perspective on innovation and competition in the emphasis of psychological learning and cognition to the orientation of sociological co-evolution. This paper seeks to discuss how different theories in the organization field relate to absorptive capacity and how these theories can partially anticipate it in some cases.

The concept of absorptive capacity examines the extent to which an organization can recognize the importance of new external knowledge, adopt it, and apply it towards obtaining the firms goals (Cohen & Levinthal, 1990). The theory assumes that absorbing new information can help a firm become more innovative, flexible and positioned to achieve performance at higher levels compared to what it would achieve without absorbing new knowledge. An assumption of the theory is that firms that have greater capacities for absorbing new information enjoy a competitive advantage over others with lower capacities. There are four sources that tend to direct an organization’s technical knowledge. These are: research and development initiatives, current manufacturing innovations, information borrowing from other companies, research and institution of learning, and purchasing new information such as through procuring new equipment, employing new people with fresh skills, or hiring consultants to train its labour force in the use of new techniques.

The theory assumes that organizations require an information base to be able to take in and apply new knowledge. Companies that have no database may not be able to take in new knowledge, no matter how much is obtained or spent to get it. Firms that have never developed an information base are said to be sealed off for subsequent information and technological innovations, a situation that can cause an organization creative destruction (Schumpeter, 1942). The ownership of prior knowledge is helpful for firms in two ways. First, formation of an absorptive capacity for new information in one duration will help the absorption of new data in the next period. Second, the prosperous use of new
knowledge can be self-bolster and can motivate an organization to continue to absorb new information indefinitely. Groups with higher absorptive abilities are more aggressive in the search for and absorption of new knowledge disregarding the current performance. However, firms with lower rung absorptive capacities have an inclination to be reactive and hunt for new information in response to some deterioration in performance.

Theories Supporting Absorptive Capacity
Organizational Learning

The origin of absorptive capacity is erected in the learning literature of companies in the 1980s. Over the years, the notion of absorptive capacity has developed in the literature as associated with a firm’s learning processes. Absorptive capacity was first used in the demonstration of technology transmitted across nations (Kedia & Bhagat, 1988) or within industries (Hakam & Chang, 1988). For this reason, it became more fashionable through Cohen and Levinthal’s work (1989, 1990, 1994). Other academics like Levitt and March (1988) and Fiol and Lyles (1985) also discussed organizational learning and performance in relation to the role of research and development.

In accordance with Cohen and Levinthal (1990), there exist a link between absorptive capacity and learning, innovation and outputs of firms. Cohen and Levinthal (1990) also demonstrated that the level of absorptive capacity can influence specific organizational mechanisms, such as the transfer of information across and inside units, the communication structure between the external environment and the organisation, an extensive network of internal and external affiliations, and cross-function integration (Volberda, 1999). However, the major argument is that previous knowledge, research and development contribution determine the learning potential for absorptive capacity. Many empirical studies support this (recursive) notion of absorptive capacity (Ahuja, 2000; Cockburn & Henderson, 1998; Lane and Lubatkin, 1998). In addition, Reagans and McEvily (2003) support the concept of information accumulation by demonstrating that when people already have some background in terms of skill and training absorb information more readily.

Salk and Lyles, (2001) however studied absorptive capacity in an inter-organizational perspective. When knowledge is transmitted between companies, research and development is less relevant than the firms similarity. Relative absorptive capacity, as coined by Lane and Lubatkin (1998), described the phenomena that there exist different levels of absorptive capacity in a company. Lane et al. (2001) developed mensuration for absorptive capacity processes of recognition, adoption, and utilization. Empirical evidence indicated that the knowledge acquired is impacted by recognition and approval, and firm performance is affected by utilization. Cohen and Levinthal’s (1989) virtuous cycle shows the relationship between absorptive capacity and organizational learning, in which absorptive capacity results in better learning, widened knowledge base, and consequently, potential of education is heightened, as demonstrated by Autio et al. (2000)).

Schilling (2002) study present implicit hypothesis about absorptive capacity, as can be seen in which relates shortage of particular technological innovation with little input in learning. Rugman and Verbeke (2001) focused their finding on learning as a mechanism to develop absorptive capacity in a unique theme. Lane et al. (2006) highlighted surprise in regards to previous reviews about tests on the relationship between absorptive capacity construct and organizational learning and states that only Szulanski (1996) addressed the issue.

The following studies examined the association between exploitative learning and absorptive capacity (Barba, & Vermeulen, 1998; Autio et al, 2000), exploratory learning (Simonin, 1999), and a firm’s learning factors that highlight the absorptive capacity development in particular knowledge spheres (Barba, & Vermeulen, 1998; Rosenkopf & Nerkar, 2001. The assumption of the papers on this theme is that absorptive capacity and learning co-evolve with each and affect the other.

To understand the absorptive capability of an organisation, the theory of organizational learning is vital; in that organizations that are inclined towards learning should develop the ability to acquire and adopt external knowledge, and transfer the acquired knowledge to satisfying the customer. Fabrizio (2009) implied that organizations that practiced new invention search behavior invested in in-house research and these organizations were superior to companies that did not invest in research. Further, new inventions had a higher degree of relationship to university-based scientists. Empirical evidence showed that there were a strong connection between firms that invest in fundamental research and their collaborations with researchers in academic institutions. Organizational learning is an important element of a sustainable competitive advantage that a company can possess (Geus, 1988); as well as an important corporate performance driver (Stata, 1989). Given the volatility in the business environments, there is a need to learn continuously in order to maintain the ability to remain relevant – that is to compete efficiently and survive (Burke et al., 2006). Empirical evidence has shown that it affects: innovation (Llorens Montes, Ruiz Moreno, & Garcia Morales, 2005), competitive advantage (Jashapara, 2003), monetary and non-monetary performance (Bontis, Crossan, & Hulland, 2002; Dimovski & Skerlavaj, 2005), and the unit cost of production (Darr, Argote, & Epple, 1995).

Overall, absorptive capacity is about learning of the organizational and individual and application of what has been learned. Sun & Anderson (2010) argue that absorptive capacity is a specific type of organizational learning, concerned primarily with the firm’s contact with external knowledge. This definition, however, inhibits the concept of organizational learning, and does not factor the use of new consolidation of knowledge already existent in the organization (Kogut & Zander 1992; Van den Bosch,Volberda & de Boer 1999). A absorptive capacity as discussed here involves outcomes as well, though Huber’s (1991) defines organizational learning as obtaining knowledge, distribution of information, interpretation of information, and a firm’s memory that would concede to the absorptive capacity of preparatory and conversion learning parts. It is easier for organizations with well-developed absorptive capacity levels to acquire new knowledge easier compared to those that do not. Similarly, the same is for the relative absorptive capacity that a firm has with respect to the source of knowledge. This also applies to the knowledge already existing similarity to the knowledge to be acquired that will influence its ease of obtaining, adoption and application (Friesen, 2013).

The concept of absorptive capacity since its inception has been closely linked to organizational learning, even though distinguishing the relationship between the two notions has not been yet managed by scholarly works. The
closeness of the idea of organizational learning and absorptive capacity stem from their conceptual affinity and definitions. Cohen and Levinthal (1989) show that absorptive capacity is comprised of three essential components: (1) recognition the value of new knowledge; (2) adopting that information; and (3) applying that knowledge to commercial ends. Furthermore, Cohen and Levinthal stressed that the concept of external knowledge importance is emphasized, rather than internally created knowledge. In recognizing, adopting and using new external knowledge, a great obligation is placed on the organization’s learning capability.

The fact that the two concepts share a conceptual affinity makes it understandable to substitute the use of the two concepts. This affinity can be explained by examining various definitions of organizational learning as follows. Fiol and Lyles (1983) defined organizational learning as the process where better knowledge and understanding is used to improve actions. Garvin (1993, p. 80) explained a learning organization as “a group skilled in creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights”. These definitions highlight the significance of obtaining and using new knowledge for improved behavior of the firm. This overlap between the two concepts show that the principal elements of absorptive capacity need to be more clearly differentiated from organizational learning (Sun & Anderson, 2010).

The close association between organizational learning and absorptive capacity is also seen in the preliminary. A common antecedents is shared which include: job rotation, the external environment, social relationship, cross-functional integration, inclusive decision-making, strategic focus, the formation of the organization, and efforts of research and development (Sun & Anderson, 2010).

Innovation

The outside-in practice in the open innovation pattern means the integration of ideas and external information and the branding the firm’s core competence as innovation. To achieve this, the firm has to cooperate with consumers, scholars, and suppliers to use innovation in the industries, buy intellectual property and invest in the creation of global knowledge. In addition, the valuable external information is combined with research projects to create new solutions, products, and processes. Integration of the external environment of suppliers, consumers or other market players and the internal innovation processes, enables the organizations to extend new product development activities across company boundaries that enables them to create and apply better quality innovations within a small period of time. A firm ability to ability to internalize the knowledge gained from its partners determines the performance of the company in regards to an outside-in learning process. Lichtenthaler and Lichtenthaler (2009) proposed a capability-based framework for open innovation, namely absorptive capacity of the company, which defined the importance of exploring external information and recognizing the valuable knowledge for the enterprise.

A firm’s absorptive capacity is the ability to develop new product that is substantially influenced by its ability to assimilate externally technological. Cohen and Levinthal (1990) not only include recognition of knowledge, but also linked innovation, learning, research & development, to absorptive capacity.

Absorptive Capacity and Innovation

There is a strong link between absorptive capacity and innovation- that is an outcome of organizational learning. Empirical evidence on this theme show that absorptive capacity assists the frequency, speed, and magnitude of innovation, and that innovation results in knowledge that contributes to an organisation’s absorptive capacity (Kim & Kogut, 1996; Helfat, 1997; Bosch et al., 1999). While exploratory innovation may not consume prior knowledge, it can use novel combinations of current technologies and discoveries (Bosch et al., 1999; Kogut & Zander, 1992).

Managerial Cognition

The theory of managerial cognition advances that comprehensive of information by managers is through their cognitive lenses. This theory advances that managers are be considered as cognizers because they perceive information through their individual cognitive lenses (Calori, Johnson, & Sarnin, 1994). Mental maps were developed to reduce the complexity managers face (Prahalad & Bettis, 1986; Bettis & Prahalad, 1995). Managers through their cognitive lenses are said to be knowledge workers whose role is to assimilate, process and communicate information about emergent opportunities and problems to their followers. The dominance of managers on the organizations directly influences the organizational structure and learning processes (Volberda, 1999) and indirectly the absorptive capacity level (Bosch et al., 1999).

For instance, organization leaders with a classical orientation will favor more traditional functional forms in a company and discourage external sources of information that are valuable (Bosch et al., 1999). Therefore, such managers, do not grasp opportunities in the external environment. Consequently, organizational learning and absorptive capacity are significantly inhibited and eventually has a negative effect on innovation capacity of a firm. Alternatively, managers can encourage the absorptive capability of a firm by providing knowledge to the labor force within the organization. Therefore, it can be concluded that managerial cognition has an impact on an organization’s absorptive capacity.

Minbaeva et al. (2003) highlighted the importance of a person’s skills and education as well their motivation to adopt external knowledge. The manager’s role is continuously to develop theories about the business environment around them and impose these theories in their dominant logic (Sanchez, 2001). An organization's performance will be strongly influenced by cognitive processes of the managers. This is consistent with Bosch and Wijk’s (2001) suggestion that managers have a strong effect on knowledge-related processes in organizations.

Knowledge-based View of the Firm

This theory suggests that the most strategically important resource of the firm is knowledge. In the knowledge-based view theory, the main goal of the business to apply current knowledge to the production of services and goods (Grant, 1996). Application of knowledge and skills enables a firm to have competitive advantage, because availability of
knowledge and skills enables a firm to innovate new products and processes, and improve existing products and processes (Nonaka & Takeuchi, 1995). According to Kogut and Zander (1992), the knowledge-based view considers knowledge to be the most valuable resource of the firm and the primary determinant its competitive advantage. This view strongly influences the relevance of the absorptive capacity construct, as it is essential to developing and increasing a firm’s knowledge base. In the particular case of knowledge-intensive companies, learning at the organizational and individual level is of prime importance (Starbuck, 1992). Thus, absorptive capacity involves personal, groups, and organizational levels. Personal staffs are concerned with knowledge sharing and recognition at the grass roots, but at the firms level, there is need to create routine and document success stories to improve and share knowledge of the firm (Foss, 2006).

The process of transferring knowledge to the receiver is known as knowledge flows. Scholars suggest that the most important factors that influence the success of knowledge transfer is the absorptive capacity of the sender and receiver, the past experiences, and the degree of related knowledge. Local knowledge can be “more easily recognized and managed by the organization’s existing routines and members” (Rosenkopf & Almeida, 2003, p. 753). The duo further proposes that connections between firms in dissimilar contexts may present the non-redundant and more novel knowledge. Lane and Lubatkin (1998) suggest that those companies with basic scientific knowledge similarities with their partners report more knowledge stocks. Cohen and Levinthal (1990) suggest that the degree of knowledge overlapping between two parties influences learning. Bosch, Volberda, and Boer (1999) highlight that the firm’s absorptive capacity characteristics relate to the nature of the knowledge in its environment.

Some researchers suggest that the view of knowledge – base is a product of resource-based concept where the definition of resources includes intangible assets and specifically, knowledge-based resources (Grant, 1996; Decarolis & Deeds, 1999). However, then, the question is whether knowledge-based view is just a re-branding of resource-based school of thought that contributes little to our current understanding of the sources of superior performance. Another school of thought see it as a significant extension of organizational learning process, an input that informs research and provides new insights into organizational functioning (Kogut & Zander, 1992; Kogut & Zander, 1996). Another arguments advanced is that knowledge should be treated as a process of ongoing social phenomena and not as a resource (Spender, 1996). Other scholars suggest that a theory should contain a theory of the firm for it to qualify to be a theory of strategy at all (Conner and Prahalad, 1996).

The importance of the knowledge-based view approach in a business is that for a company to be successful, it must assimilate mechanisms to protect it in the dynamic and turbulent environments. In order to achieve this, managers must devise strategies towards the obtaining and applying the knowledge within and beyond the confines of the companies traditions. (Teece,1998). An organization must not operate in isolation but must work with a network of partners who will contribute to increasing its knowledge base.

Organizational Learning as a pillar of the Knowledge-based View

An essential component of knowledge-based thinking is organizational learning. Organizational learning is defined as the incorporation of new information into the behavior of individuals, influencing behavioral patterns and, as a result, better outcomes. The authors define absorptive capacity as the ability to recognize the value of external knowledge, adopt it and use it to commercial ends. According to Conner and Prahalad (1996), absorptive capacity is largely a function of the level of the firms’ history and its prior knowledge. Significant determinants of absorptive capacity are the channels for dissemination of knowledge in the environment, internal channels of communication, and the pattern of research and development in investment decisions.

Dynamic Capabilities

The dynamic capabilities theory states that a company can attain a sustained competitive advantage by efficiently assimilating, combining and assigning resources within the company (Teece, Pisano & Schuen, 1997). Dynamic capabilities represent the firm’s latent abilities to renew, augment and adapt its core competence over time (Teece, Pisano, & Shuen, 1997).

Teece et al. (1997 p. 515) defined capabilities as “the key role of strategic management in appropriately adapting, integrating, and reconfiguring internal and external organizational skills, resources, and functional competencies to match the requirements of a changing environment”. The scholars suggest that because the significance of a resource can change with time, competitive advantage, therefore, will be a combination of organizational resources, its ability to continuously develop new resources. Cohen and Levinthal (1990) advanced that the absorptive capacity of an organization not resident in any single person but depends on the link between an all parties in an organization. In their 1994 article, Cohen and Levinthal argued that sustaining this ability over time requires inputs but is a result of exploiting new and valuable innovations. Indeed, recent scholars have advanced that absorptive capacity is a dynamic capability (Zahra & George, 2002) in an extension of the original concept. The established pillars of absorptive capacity creation are as obtaining knowledge, adoption, and transformation (Zahra & George, 2002). This is supported in recognizing how the transformation of new information through absorptive capacity facilitates the flexibility needed to compete in volatile business environments (Ambrosini & Bowman, 2009).

Extending this dynamic nature further, Zahra and George (2002) introduce a dynamic capabilities aspect of absorptive capacity and difference among four pillars of absorptive capacity that compound absorptive capacity. This distinction focuses on the separate, but integral roles of both subdivisions of absorptive capacity. Firms focusing on acquisition and adoption of new external knowledge can continually renew their knowledge stock, but they may incur significant costs of acquisition without enjoying its advantages. However, organizations focusing on realized absorptive capacity achieve brief benefits before they lose out. Todorova and Durisin (2007) reviewed the works of Zahra and George’s (2002) on the concept of absorptive capacity concluded that Cohen and Levinthal’s 1990 model provided valuable implications that were excluded in Zahra and George’s model. The two scholars highlighted significant antecedents such as appropriability regimes, social integration, power relationships, and feedback loops. In addition, the
scholars emphasized the need to review the component capabilities of adoption, recognition, and acquisition that depend on the current cognitive frame of reference instead of the subsets of potential and realized absorptive capacity. Jensen, Bosch, and Volberda (2005) provided empirical evidence of the unique effects of organizational antecedents on the components of absorptive capacity. They demonstrate in an empirical study within a firm with multiple units that coordination capabilities, such as “cross-functional interfaces, participation in decision-making, and job rotation” (2005 p. 999) improve potential absorptive capacity, while systems capabilities such as “formalization” and socialization skills, such as “connectedness and socialization tactics” (2005 p.999) strengthen realized absorptive capacity at the business unit level.

Dynamic capabilities emphasize on the ability of a firm to survive in an unstable business environment (Teece et al., 1997). Organisations operating in active markets or technologies have to develop new sets of capacities to cushion against core rigidities (Barton, 1992). Eisenhardt and Martin (2000) advanced that although the strategy literature is not clear on the nature of dynamic capabilities, there exists examples from other areas. These include routines of product development, strategic decision-making, allocation of resources and the acquisition and support release (Eisenhardt &Martin, 2000). According to Zollo and Winter (2002, p. 342) Dynamic capabilities are created as firms draw on the experience from acquisitions or joint ventures to manage such projects in systematic and relatively predictable fashion. Therefore, the creation of dynamic capabilities is founded on three learning mechanisms: experience accumulation, knowledge articulation and knowledge codification.

Other authors who have have founded their studies on the theory of dynamic capabilities include: Zahra & George, 2002, who advanced that absorptive capacity is a dynamic capability that build upon the composition of potential and realised absorptive capacity. The concept’s effectiveness depends on the firm’s ability to strike a balance between the two. Jansen et al.(2005) advances that combination of capabilities results in the antecedors for absorptive capacity. Coordination skills mainly enhance acquisition and assimilation while socialization capabilities influence transformation and application. According to Lane et al. (2006), the concept consists of three sequential learning mechanisms of exploratory, transformative, and exploitative learning. Moreover, finally, Lichtentahler (2009) also explains that the similarity between the three learning pillars makes absorptive capacity a changing capability. A moderating effect of absorptive capacity on innovation is environmental velocity.

Although some scholars have adopted this approach, there has been little explanation to show why and how such a formation of absorptive capacity can be dynamic capability. In actual application, there is little dynamism involved throughout acquisition, adoption, exploitation transformation, and how they follow in a sequence and it is not clear how these dimensions of absorptive capacity can initiate change in operational routines as they only encourage knowledge into organisations in a linear fashion. In this format, as Argyris and Schon (1978) would put it, at its best, absorptive capacity is a mechanismthat favors single-loop learning. If absorptive capacity is a dynamic capability, it should offer ways through which organizations change their status quo and renew themselves in order to gain competitive advantage. Gaining and applying new knowledge (that is usually viewed as pieces of information) does not guarantee dynamic capability on its own.

Co-Evolution

Organizations and their environments interact, change and influence each other. Co-evolution suggests that all interactions between groups in an environment result from direct and indirect feedback. This theory addresses the issue of how firms coevolve with their environment and how knowledge environments co-evolve with the emergence of organization forms and combinative capabilities to affect a firm’s absorptive capacity. Lewin et al. (1999) on the theory of co-evolution assumes that organizations, industries and environments co-evolve and that their rate, pace, and patterns of change are distinct and interdependent.

Co-evolutionary theory states that firm change is the joint effect of the managerial intentionality, institutional and environmental impacts (Lewin & Volberda, 1999; Volberda & Lewin,2003). A firm’s strategic and organizational adaptations coevolve with changes in the environment, and these changes can be of a competitive, dynamic, technological or institutional nature. Many co-evolutionary studies suggest that absorptive capacity enables or restricts the level and range of exploration adaptations (Cohen & Levinthal, 1997; Lewin et al., 1999). For instance, Cohen and Levinthal suggested that firms can benefit from investing in absorptive capacity to pre-empt changes in the environment (1994). Furthermore, Lewin et al. (1999) take absorptive capacity to mediate the relationships between managerial action, competitive dynamics and the institutional environment, as well as the relationship between exploration, exploitation, firm-specific history, and wealth creation (1999). Moreover, Bosch et al. (1999) studied the co-evolution of a firm’s path-dependent absorptive capacity and the knowledge environment. The scholars showed various co-evolutionary effects, such as the higher absorptive capacity, the more likely a company’s unique formation will be defined based on the opportunities present in its environment, independent of current performance criteria. Overall, co-evolutionary theories implicitly or explicitly build on Cohen and Levinthal’s (1990) concept of absorptive capacity, if only because they consider the theoretical streams advanced by (Volberda et al., 2001). Their main argument is that a firm’s level of absorptive capacity is the joint outcome of managerial actions and developments in the knowledge environment.

Organizations need to coevolve with their environments in order to sustain competitive advantage; this is achieved through absorptive capacity through assimilation of new knowledge. An organization with higher levels of absorptive capacity tends to assimilate new knowledge from the external environment. Such firms can define opportunities present in their environments. Exploiting such opportunities may create the first mover advantage for these companies.

Discussions and Conclusion

The theories aforementioned are interlinked and compliment each other in the concept of absorptive capacity. According to Helfat et al., “A dynamic capability is the ability of an organization to create purposefully, extend, or modify its resource base”(2007, p.4). The benefits of dynamic capabilities depend on underlying learning processes, and
it is hard to observe a dynamic capability unless it is put into use. Learning processes are the mechanisms that make that happen (Eisenhardt & Martin, 2000; Helfat et al., 2007). Therefore, recent work has developed a process-based view of absorptive capacity in which a firm’s stock of prior knowledge constitutes the basis for knowledge flows within the three learning processes (Lane et al., 2006). This view of learning processes as contributing to dynamic capabilities is consistent with prior research on organizational learning, search behavior, and problem solving (Argote et al., 2003; Huber, 1991; Katila & Ahuja, 2002).

Another example is how organizational learning and innovation are influenced: whereas organizational innovation is dependent on the knowledge base possessed by the firm and generated through organizational learning (Cohen & Levinthal, 1990; Nonaka & Takeuchi, 1995). Organizational learning is a strategic pillar for companies that want to introduce new products or create new markets they have to innovate continuously in order sustain competitive advantage (Cefis & Marsili, 2005). For this reason, it’s necessary to imitate the development of factors that advance innovation and allow application of new ideas, products, services, and systems ahead of other competitors in the industry (Lloréns, Ruiz & García, 2005).

“Organizational learning supports creativity, inspires new knowledge and ideas and increases the potential to understand and apply them, favours organizational intelligence and (with the culture) forms a background for orientation to organizational innovation” (García, Ruiz & Llorens, 2007, p. 535). High levels of commitment to learning is as a result of greater innovative orientation and activity (Usahawanitchakit, 2008). The reconceptualization of absorptive capacity as a dynamic capability by Zahra and George (2002) and its subsequent modification by Todorova and Durisin (2007) represents a departure from the capability view of absorptive capacity. In their study (Sun and Anderson, 2010) argue that the dynamic capability view of absorptive capacity should be considered as a particular type of organizational learning that concerns an organization’s relationship with external knowledge.

These theories are not only connected but also influence absorptive capacity in an organization. First is that prior knowledge in an organization enlarges or influences absorptive capacity and also defines managerial cognition. Managerial cognition in turn influences is learning within an organization hence impacting on absorptive capacity. Learning also enhances innovation that in turn broadens knowledge within an organization by acquiring external knowledge in the process.

The review of these theories clearly shows that the concept of absorptive capacity has been applied in various organization theories. While most of the underlying studies are still firmly supported in the definitions of organizational learning and innovation developed by Cohen and Levinthal (1994), absorptive capacity research has advanced managerial cognition, knowledge characteristics, organizational structure and scope, capability development, as well as inter-organizational learning. The heterogeneity of absorptive capacity research is for sure an indication of the richness of the construct.

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