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# THE STRATEGIC ROLE OF INFORMATION TECHNOLOGY SOURCING: A DYNAMIC CAPABILITIES PERSPECTIVE

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# THE STRATEGIC ROLE OF INFORMATION TECHNOLOGY SOURCING: A DYNAMIC CAPABILITIES PERSPECTIVE

*Research-in-Progress*

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## **Abstract**

*Grounded in the theory of dynamic capabilities, our study offers a conceptualization of IS strategy that comprises two sets of dynamic capabilities: enterprise IT architecture dynamic capability and IT sourcing dynamic capability. We borrow from extant IS literature and define enterprise IT architecture dynamic capability as the capacity of an organization to purposefully extend, create or modify its IT competencies for tight alignment with the firm's business strategy; and we offer the concept of IT sourcing dynamic capability that we define as the capacity of an organization to purposefully extend, create or modify its IT resource base to support the creation or modification of IT competencies for tight alignment with the firm's business strategy. We theorize on how these two sets of capabilities combine to form the firm IS strategy, which either helps a firm respond to rapid changes in the environment or bring about changes in the business strategy, which may in turn provoke changes in the environment and thus provide a competitive advantage. Our theorizing will be informed by a case study of two business units facing rapid environmental change.*

**Keywords:** IS strategy, Theory of dynamic capabilities, IT sourcing dynamic capability, Enterprise IT architecture dynamic capability.

## Introduction

Information technology (IT) sourcing is defined as “the entire set of processes ranging from initiating and preparing the decision to provide an organization’s IS function(s) in house or externally by a legally independent service provider (or some combination of the two)” (Hirschheim et al. 2008, p.125). Among this set of processes, the decision itself and its antecedents – whether in terms of transaction characteristics or institutional, political or strategic pressures – have been the main focus of research (Ang and Cummings 1997; Aubert et al. 2004; Lacity and Willcocks 1995).

Some researchers, however, have taken a more systemic approach to conceptualizing IT sourcing, portraying it as an intrinsic part of an organization’s IS strategy. For example, Henderson and Venkatraman (1993) define IT governance as “the selection and use of mechanisms (for example, joint ventures with vendors, strategic alliances, joint research and development for new IT capabilities) for obtaining the required IT competencies” (p. 6) (i.e. sourcing) and present it as a component of IS strategy, along with technology scope and systemic competencies. They also propose that these three components will determine the positioning of the firm in the IT marketplace (“where [managers] obtain critical technological functionality that supports and shapes their business strategy”) (p.6). Adopting this perspective, Hirschheim and Sabherwal (2001) consider IS sourcing arrangements as one of the three dimensions of IS strategy, along with IS role and IS structure. They conceptualize IT sourcing as a single decision about sourcing mode (in-sourcing, selective outsourcing, or outsourcing) that ideally should be aligned with the firm’s type of business strategy (prospector, analyzer, or defender).

Our literature review yielded only two other studies that focused on the role played by IT sourcing in the IS strategic set. One of these studies conceptualized IT sourcing as a decision about the structure of the organization – meaning a decision about the firm’s boundary – and suggested that IT sourcing should be aligned with business strategy (Aubert et al. 2008). Another study proposed the concept of IT outsourcing strategy, defined as the “logic visible in a firm’s portfolio of IT outsourcing decisions”(Lee et al. 2004, p.112). IT outsourcing strategy has been operationalized as scope (minimal, selective, or comprehensive), contract type (detailed, buy-in, or unspecified) and contract duration (short-term, medium-term, or long-term).

Espousing the view of IT sourcing as a component of IS strategy and grounded in the dynamic capabilities theory (DCT) (Helfat et al. 2007; Teece et al. 1997), our study offers a conceptualization of IS strategy that comprises two sets of dynamic capabilities. The first set is enterprise IT architecture dynamic capability, which we adapt from Ross’s (2003) notion of enterprise IT architecture competency, defined as “the ability of a firm to create a mutually reinforcing pattern of evolving, tightly aligned business strategy and IT capabilities” (p.32). The second set is that of IT sourcing dynamic capability, which we conceptualize as *the capacity of an organization to purposefully extend, create or modify its IT resource base to support the creation/modification of IT competencies for tight alignment with business strategy, and thereby support/initiate current/future changes in the business or enable the firm to capitalize on a current/future opportunity*. We theorize on how these two sets of capabilities either help a firm respond to rapid changes in the environment or make changes to its business strategy, which may in turn provoke changes in the environment and thus give the firm a competitive advantage.

This paper seeks to make the following contributions. First, we propose a conceptualization of IS strategy based on DCT, which has been influential in the business strategy literature (Eisenhardt and Martin 2000; Helfat et al. 2007) but has never been used in the context of IS strategy. Second, we enrich previous conceptualizations of IT sourcing as a component of IS strategy. Finally, we expand the concept of enterprise IT architecture competency by reinterpreting it according to DCT and combining it with IT sourcing dynamic capability, which we consider essential to achieve the benefits of IT architecture competency.

Conceptualizing IS strategy from a dynamic capabilities perspective has two main benefits. First, although extant literature supports the idea that IS strategy has to be closely aligned with business strategy in order to contribute to firm performance, dynamic capabilities theory proposes explanations on *how* this goal is achieved. Second, it

highlights the importance of investing in building capabilities by senior IT executives (Ranganathan and Balaji 2007) in order to achieve such alignment and consequently performance.

In addition, as review of the IT sourcing research shows a gap between means and ends (Lacity et al. 2009) in carrying strategic IT sourcing (i.e. *how* IT sourcing should be carried out in order to contribute to firm performance), conceptualizing IT sourcing from dynamic capabilities perspective contributes to the unity of the strategic means (i.e. dynamic capabilities as we propose) with the strategic ends (i.e. IS and business alignment and consequently performance) of IT sourcing.

In this paper, we begin by reviewing the main tenets of DCT. Then we reinterpret Ross's (2003) concept of enterprise IT architecture competency from the dynamic capabilities perspective, propose our concept of IT sourcing dynamic capabilities, and theorize on how the two sets of capabilities combine to form IS strategy. This is followed by a presentation of our case-based research method and some concluding remarks.

## Dynamic Capabilities Theory

Dynamic capabilities have been conceptualized as a complement to the resource-based view of the firm (RBV), which focuses on firms' resources that are valuable, rare, inimitable and non substitutable (Barney 1991). Under this approach, a firm can gain sustained competitive advantage when it has resources with the aforementioned characteristics. These resources may be physical (e.g. capital), human (e.g. employees' skills) or organizational (e.g. formal and informal planning). This theoretical view links a firm's resources directly to its performance (competitive advantage). Therefore, under RBV the very existence of such resources is enough to gain a competitive advantage. While this direct link could be established in a relatively stable environment, it has been argued that in a turbulent environment, the sustainability of such a competitive advantage can be quickly eroded (Wade and Hulland 2004), since RBV does not consider other factors surrounding the resources. For example, how the firm develops and uses such resources is not a concern under RBV (Wade and Hulland 2004). It is, however, the main focus of the dynamic capabilities theory, which are defined as those capabilities that enable a firm to adjust its resources, thereby maintaining the sustainability of its competitive advantage in a rapidly changing environment (Eisenhardt and Martin 2000). DCT also seeks to understand why firms in the same industry perform differently (Zott 2003).

Dynamic capabilities initially appeared in the work of Teece, Pisano and Shuen (1997) as "the firm's ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments" (Teece et al. 1997, p.516). Although several definitions of dynamic capabilities exist, they all focus on the ability of a firm to reconfigure its resources. For example, dynamic capabilities have been defined as a firm's ability to reconfigure in order to address environment changes (Teece et al. 1997) or the processes by which it reconfigures its resources to respond/create market change (Eisenhardt and Martin 2000). We adopt the definition provided by Helfat et al. (2007), since it encompasses elements common to most of the definitions provided in the literature and, at the same time, focuses on the heart of dynamic capabilities: resource reconfiguration. A dynamic capability is defined as "the capacity of an organization to purposefully extend, create, or modify its resource base" (Helfat et al. 2007, p.1).

Relational capabilities are one instance of dynamic capabilities, and were defined and conceptualized by Helfat et al. (2007) to illustrate the role played by joint ventures, alliances and mergers/acquisitions in the development of new products or services. Relational capabilities are defined as the "capacity to purposefully create, extend or modify the firm's resource base, augmented to include the resources of its partners" (Helfat et al. 2007, p.66). Acquisition-based capability and alliance-based capability are two types of relational capabilities. When a firm does not possess the required resources to perform an activity or implement a strategy, it may achieve this either with the help of its alliance partners (using alliance-based capability) or by acquiring another firm (using acquisition-based capability). The notion of dynamic capabilities has also been applied to new product development (NPD) (Pavlou and El Sawy 2006). This capability enables firms to select the right product concept and then reconfigure its resources to produce it. NPD capability should result in a product that has a reasonable cost/quality ratio and also

respond to the requirements of the market in order for the firm to be able to survive in its competitive environment. Other capabilities have also been the subject of research, including manufacturing capabilities (Banker et al. 2006), learning capabilities (Bhatt and Grover 2005), and marketing-related capabilities (Song et al. 2005).

### ***Dynamic Capabilities as Managerial and Organizational Processes***

Dynamic capabilities are made of processes that use resources (Eisenhardt and Martin 2000). “[W]hen we observe a dynamic capability in use, we are observing its underlying processes” (Helfat et al. 2007, p.31). While dynamic capabilities can involve many types of processes, it has been suggested that all dynamic capabilities have two key processes in common: search and selection, and configuration, which are considered the building blocks of any dynamic capability (Helfat et al. 2007, p.4)

Search and selection includes “all processes and activities concerned with searching for and identifying alternative solutions to a problem and sharing them among the members of an organization” (Zott 2003, P.104). “Selection” is also defined as “the organizational activities involved in identifying a preferred alternative for organizational change such as evaluation of alternatives” (Zott 2003, p.104). For example, an acquisition-based or alliance-based relational capability involves search and selection of firms as candidates for an acquisition or alliance. A new product development capability involves searching for and selecting potential new products (Helfat et al. 2007).

Configuration involves envisioning how to implement a change (Helfat et al. 2007; Zott 2003), including how to alter the resource base of the firm. For example, in the context of acquisition-based capability, configuration refers to the ability to reshape the resources of the firm (the acquiring firm) and of the partner (the acquired firm) (Helfat et al. 2007, p.82). In the context of new product development, the configuration process involves changing and reshaping existing resources in order to produce the selected new product(s) (Helfat et al. 2007; Pavlou and El Sawy 2006). Although search/selection and configuration together form a dynamic capability, firms may show different levels of abilities in each (e.g. finding a right product concept but not able to reconfigure resources to produce it).

These two processes – search and selection and configuration – are not necessarily the only ones used. Others may be added, depending on the context. For example, because in the context of an alliance-based capability, “a firm’s ability to absorb knowledge from a partner” is vital, knowledge management processes represent a dimension that supports the effective execution of an alliance-based capability (Helfat et al. 2007). Since “managing dependencies among resources and tasks” is vitally important in the context of new product development, coordination processes represent another dimension of NPD dynamic capability (Pavlou and El Sawy 2006).

### ***Performance***

Fitness was introduced into dynamic capabilities theory in order to conceptualize performance. Helfat et al. (2007) suggest two types of fitness: technical fitness and evolutionary fitness. The former describes “how effectively a capability performs its intended function (its quality) when normalized (divided) by its cost” (Helfat et al. 2007, p.7). The latter explains “how well a dynamic capability enables an organization to make a living by creating, extending or modifying its resource base” (Helfat et al. 2007, p.7). For example, in the context of new product development, technical fitness would be the cost and the quality of the introduced product, and evolutionary fitness would be the existence of market demand for that product, as well as its ability to compete with other products in the market (Helfat et al. 2007).

Another important part of dynamic capabilities theory in terms of performance is the link between the components of performance. Helfat et al. (2007) suggest that in order for a capability to have evolutionary fitness, it needs to be technically fit as well. For example, in order for a new product to generate market demand and survive in a competitive environment (i.e. demonstrate evolutionary fitness), it should first attain a certain level of quality and be competitively priced. Evolutionary fitness may entail not only a firm’s response to changes in the environment but

also its initiation of change. Previous research emphasized the role that dynamic capabilities can play in shaping the market, competition and the environment (Augier and Teece 2009; Eisenhardt and Martin 2000; Teece 2007).

In sum, the dynamic capabilities theory entails the following: (1) dynamic capabilities, which consist of organizational and managerial processes; (2) the two basic processes, which are to search and select (e.g. a new product) and to reconfigure (create, extend, modify) the resource base of a firm; (3) the goal of this reconfiguration, which is to adapt to and or influence the competitive environment; (4) the outcomes of dynamic capabilities, which should be effective and efficient internally (technical fitness) and successful in the market (external fitness); and (5) the ultimate goal of dynamic capabilities, which is to gain a competitive advantage and sustain it through evolutionary fit (Eisenhardt and Martin 2000; Helfat et al. 2007; Teece 2007; Winter 2003).

## **IT Sourcing and Enterprise IT Architecture Dynamic Capabilities as IS Strategy**

Based on Henderson and Venkatraman's (1993) conceptualization of IS strategy – comprising IT governance, technology scope and systemic competencies – and on the dynamic capabilities theory, we suggest that IS strategy is a combination of enterprise IT architecture dynamic capabilities and IT sourcing capability. Enterprise IT architecture dynamic capability creates or modifies IT competencies to support the firm's business strategy, and IT sourcing dynamic capability helps the firm acquire IT resources in order to create those IT competencies. IT competencies consist of specific information technologies that, along with their attributes, support current business strategy or shape new business strategy. The IT competencies to be created or modified require IT resources in the form of all the processes pertaining to IT operations (e.g. system development), skills (e.g. the knowledge of IT personnel) and IT infrastructure (e.g. the portfolio of applications, data and platforms).

### ***Enterprise IT Architecture Dynamic Capability***

Ross (2003) defines a competency in the enterprise IT architecture as “the ability of a firm to a create mutually reinforcing pattern of evolving, tightly aligned business strategy and IT capabilities” (Ross 2003, p. 32). This definition corresponds to the definition of a dynamic capability. Therefore, we refer to it as a *dynamic capability* and, using the language of dynamic capabilities theory, we define *enterprise IT architecture dynamic capability* as *the capacity of an organization to purposefully extend, create or modify its IT competencies for tight alignment with the firm's business strategy to support/initiate current/future changes in the business or enable a firm to capitalize on a current/future opportunity*. The decisions in enterprise IT architecture dynamic capability involve creating/modifying the IT competencies that enable a firm's business strategy. The search and selection process of an enterprise IT architecture dynamic capability requires the ability to identify and define IT competencies. Its configuration dimension refers to the firm's ability to define the policies and technical choices needed to create or modify the desired IT competencies.

It should be noted that our definition of IT architecture is as per Ross (2003), which is above and beyond the list of technology standards. In this view, IT architecture should be analyzed at the enterprise level with the connection to business requirements. Therefore, enterprise IT architecture is defined as “the organizing logic for applications, data, and infrastructure technologies, as captured in a set of policies and technical choices, intended to enable the firm's business strategy” (Ross 2003, p. 32). This view toward IT architecture highlights the importance of an existence of a competency or dynamic capability in IT architecture as we defined above.

### ***IT Sourcing Dynamic Capability***

Enterprise IT architecture dynamic capability is needed in order to create IT competencies, so the firm will need to be able to provide the needed IT resources. By enabling the firm to provide IT resources, we propose that IT sourcing dynamic capability complements enterprise IT architecture dynamic capability by creating or modifying IT competencies to align them with business strategy. We therefore define IT sourcing dynamic capability as *the capacity of an organization to purposefully extend, create or modify its IT resource base to support the*

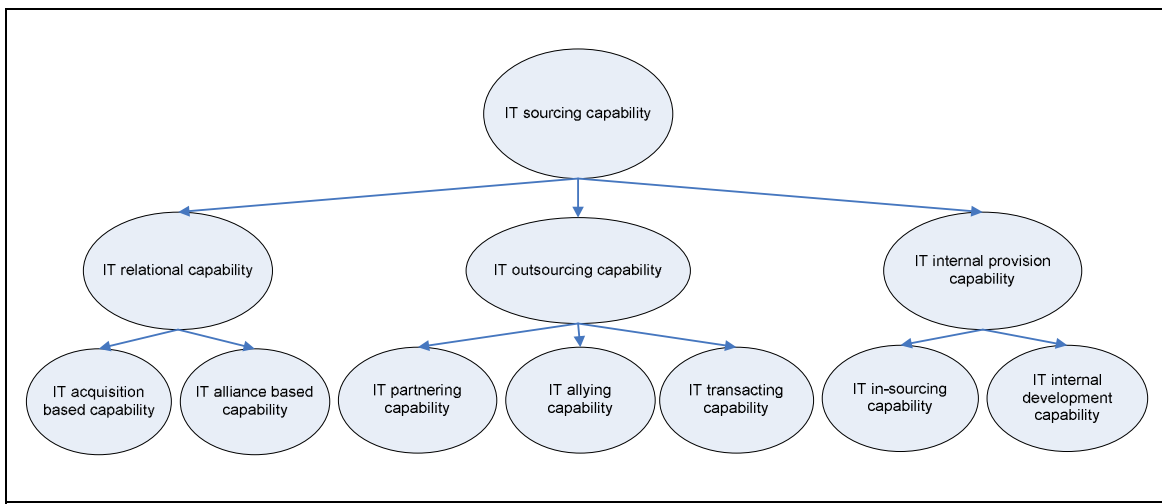
*creation/modification of IT competencies in order to achieve tight alignment with business strategy so as to support/initiate current/future changes in the business or enable a firm to capture a current/future opportunity.*

IT sourcing dynamic capability will determine which IT resources to acquire and how to acquire them. This capability's search and selection process identifies the IT resources that are needed to create or modify the IT competencies defined by enterprise IT architecture dynamic capability. We refer to these identified resources as target resources. This capability's configuration process determines how to acquire the identified target IT resources. Since there are different modes for acquiring the target IT resources, we distinguish between different IT sourcing dynamic capabilities by the acquiring mode (Figure 1). This is in line with Helfat et al. (2007), who suggest being as specific as possible when conceptualizing dynamic capabilities.

The first mode of acquiring IT resources is through relationships with other firms (acquisitions/alliances). We call the sourcing capability related to the relational mode of acquiring an "IT relational capability." When alliances (entering a joint venture) or acquisitions (buying a firm) are chosen for obtaining IT resources, then relational capabilities enable the firm to choose the most appropriate partner and reconfigure its resources by combining the resources of the firm with the resources of the partner. An IT relational capability is therefore *the capacity to purposefully create, extend or modify the firm's IT resource base, augmented to include the IT resources of its partners, by choosing the right partner and by defining how to combine the resources of the firm with those of its partners.*

Here, IT relational capability corresponds to the relational capability defined by Helfat et al. (2007). They suggest that when a firm does not possess all the required resources to, for example, produce a new product, it can enter into a relationship (alliance or acquisition) to augment its resource base. Similarly, if a firm needs IT resources that could be obtained through such a relationship, IT relational capabilities enable the firm to make decisions regarding its selection of partners and how their resources should be integrated.

The second mode is internal provision. In this case, IT internal provision capability will determine whether the firm should in-source the required resources or go through an internal development process. Internal development requires investment in R&D, and is appropriate for firms that try to shape the market and initiate the change themselves. Therefore, it may not be suitable in situations where a rapid response is needed to an unexpected change in the environment. In-sourcing refers to situations in which a firm delegates the provision of IT resources to its internal IT department. An IT internal provision capability would therefore be *the capacity to purposefully create, extend or modify the firm's IT resource base by creating resources or by reconfiguring the firm's existing resources in response to needs.*



**Figure 1. Types of IT Sourcing Dynamic Capabilities**

The third mode is IT outsourcing. In this case, the firm's IT outsourcing capability enables it to choose an outsourcing arrangement and define how the outsourcing should work. We define IT outsourcing dynamic capabilities as *the capacity of an organization to purposefully extend, create or modify its information technology resources (IT resources) through an outsourcing arrangement.*

Based on Ross and Beath (2006), we propose three different modes of IT outsourcing arrangements: the strategic partnership, the co-sourcing alliance, and the transaction exchange. In a strategic partnership, a firm delegates almost all of its IT activities to a vendor. In a co-sourcing alliance, the IT activities are carried out by a team that is staffed jointly by the firm and the vendor, which share responsibilities. Transaction exchange refers to the situation in which a firm buys a vendor's deliverable. Transaction exchange is similar to a strategic partnership, since the vendor takes complete responsibility for performing the activities, but the difference lies in their scope. In partnerships, the vendor is responsible for almost all of the IT activities, in a transaction exchange the vendor's activities are specific and narrowly defined.

We therefore suggest that a capability in partnership (an IT partnering capability) enables a firm to carry out a strategic partnership arrangement by choosing the right strategic partner and by negotiating a contract in which the partner bears clear but broad responsibilities that are specified and there is a vigorous focus on risk management. A co-sourcing alliance capability (an IT allying capability) enables a firm to develop a co-sourcing arrangement by choosing the specific expertise to be acquired, leading a joint team of the firm and the vendor, and managing project risks. Finally, a capability in transaction exchange (an IT transacting capability) enables a firm to carry out an arm's length relationship with the vendor by choosing the specific components to be outsourced, buying them through a narrow but detailed contract, and exercising minimal focus on the risks.

### ***Formation of IS Strategy***

We adopt Henderson and Venkatraman's (1993) definition of IS strategy, which comprises three components: IT scope (choosing specific information technologies), IT competencies (choosing the attributes of those specific IT) and IT governance (choosing how to acquire the IT). We propose that the two dynamic capabilities of enterprise IT architecture and IT sourcing correspond to these three components as follows. Enterprise IT architecture dynamic capability entails scope and competencies (since *IT competencies* are choices of specific information technologies along with their attributes and enterprise IT architecture dynamic capability creates or modifies the IT competencies to support or initiate business changes). IT sourcing dynamic capability covers the IT governance component, since it concerns choices made concerning how to acquire needed resources to create or modify IT competencies. Therefore, as illustrated in Figure 2, we propose that the IS strategy of a firm is formed through a combination of enterprise IT architecture dynamic capability and IT sourcing dynamic capability. These two capabilities cover all the strategic decisions that an IT department makes to support or shape business strategy.

### ***Performance of the Two Dynamic Capabilities***

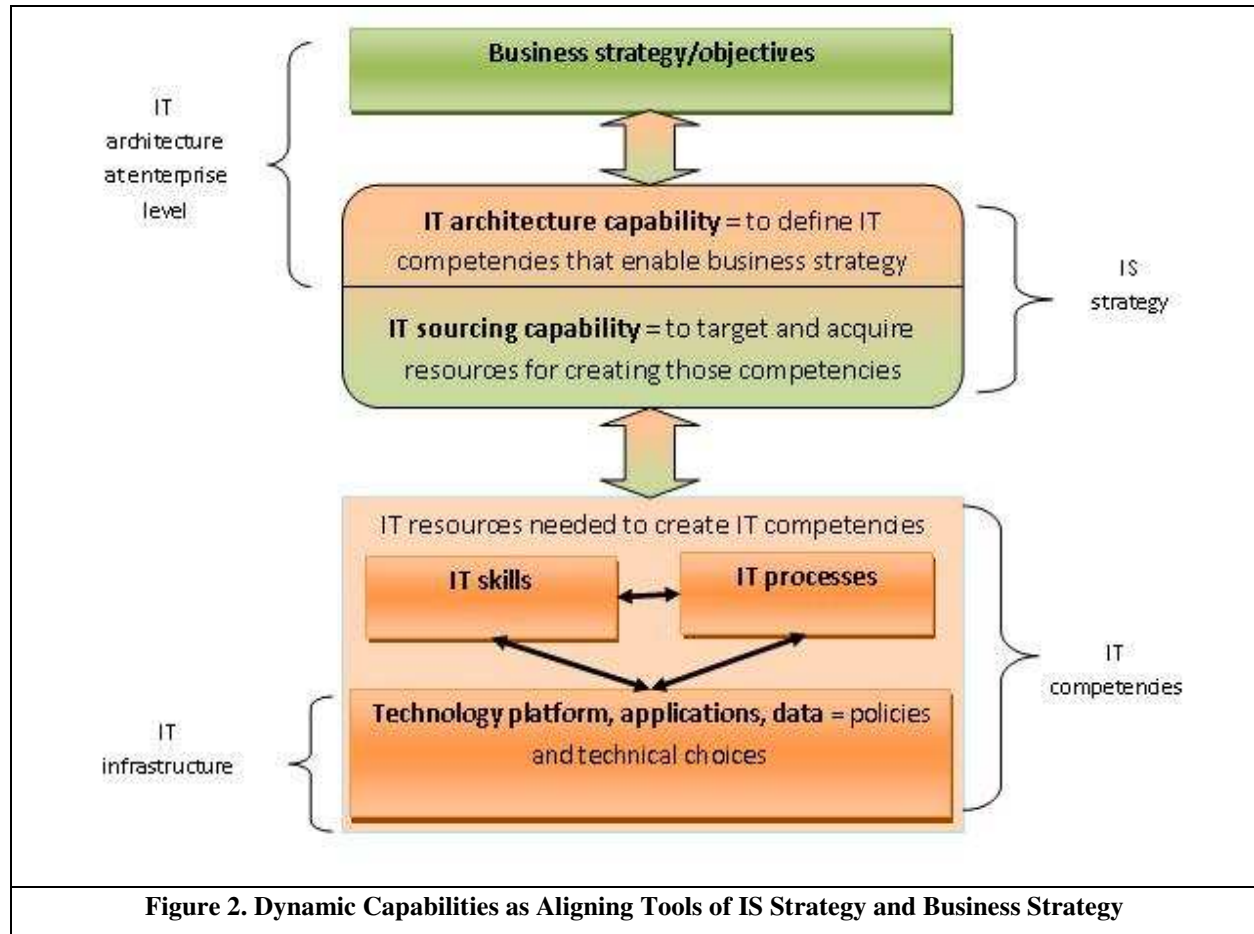
As stated earlier in the section on the foundations of dynamic capabilities theory, performance of dynamic capabilities comprises two dimensions: technical fitness and evolutionary fitness. Whereas technical fitness refers to how a capability performs its function (quality normalized by cost), evolutionary fitness refers to how a capability enables a firm to change its resource base in order to respond to or shape the environmental changes.

Since we conceptualized the IS strategy of a firm as a combination of two dynamic capabilities – enterprise IT architecture and IT sourcing – we also need to define the performance of these two capabilities. We define technical fitness for each of these dynamic capabilities, since they operate independently to fulfill their intended functions. We define one evolutionary fitness concept for both capabilities: the level of alignment attained between IT competencies and business strategy. The reason is that both dynamic capabilities combine to form the IS strategy with one ultimate goal of being aligned with business strategy.



The technical fitness for enterprise IT architecture dynamic capability is the feasibility of the IT competencies it defines. If the enterprise IT architecture dynamic capability identifies IT competencies that are too expensive or incompatible with current systems, then technical fitness is not achieved. As for the IT sourcing dynamic capability, technical fitness is defined in terms of the cost and quality of the acquired resources. For example, in the case of an IT outsourcing arrangement for system development, technical fitness is the cost of acquiring the system (development costs and governance costs, such as the costs of contracting) normalized by its quality.

We conceptualize the evolutionary fitness of the two capabilities combined as the alignment between IT competencies and business strategy, which means the extent to which the IT competencies enable the business strategy to either respond to a rapidly changing environment or enable the business strategy to initiate changes in the environment itself to gain and sustain a competitive advantage.



## Research Methodology

Our question is: *How do organizations use their combined enterprise IT architecture dynamic capability and IT sourcing dynamic capability, the basis of their IS strategy, to either respond to rapid changes in the environment or to make changes to the business strategy that can initiate changes in the environment?* To answer this question, we will adopt a research approach of theory building from case studies (Eisenhardt and Graebner 2007; Eisenhardt 1989). This approach is deemed necessary to refine our concepts of enterprise IT architecture dynamic capability and IT outsourcing dynamic capability. It will also allow us to develop theoretical propositions on how these capabilities interact to support business strategy.

Our unit of analysis will be the business unit, because at this level we will be able to understand strategic responses to the environmental changes (Venkatraman 1989). The cases will be selected from a population of organizations facing rapid changes in their environments, since dynamic capabilities are relevant in turbulent environments (Eisenhardt and Martin 2000).

We will select two cases for theoretical replication, with each case revealing an important theoretical condition. The first case will be a firm that possesses as many different sourcing modes as possible. This condition allows us to refine our definitions of IT sourcing dynamic capability. The second case will be a firm that has a mature enterprise IT architecture (standardized data and processes) or, according to Ross (2003), is in a “rationalized data stage” or higher. This will help us understand and revise the concept of enterprise IT architecture dynamic capability. Moreover, this is one condition in which we would most probably observe the creation or modification of IT competencies to support business strategy or shape business strategy.

Data will be collected from multiple sources: interviews, internal documents, and public documents. We will interview several people from each firm, including top executives of the business unit, the CIO, managers responsible for sourcing arrangements, and IT architects. We will also interview business experts knowledgeable about the business environments of the firms. An interview protocol will be used. A case study database will be created.

As suggested by Langley (1999), we will use a combination of different strategies to analyze the data. Narration will be used to describe the cases and their contextual details. We will also use temporal bracketing, because we anticipate mutual influences between enterprise IT architecture dynamic capability and IT sourcing dynamic capability. Moreover, this strategy allows for “the constitution of comparative units of analysis for the exploration and replication of theoretical ideas” (Langley 1999, p.703). Both strategies are also appropriate for generating insight from one or two cases (Langley 1999). Nonetheless, we do not rule out the possibility of using other sensemaking strategies if the opportunity arises.

## **Practical Implications**

Theorizing on IS strategy from a DCT perspective will bring special attention of senior IT executives to invest in building capabilities that are crucial to success. Both IT architecture and IT sourcing dynamic capabilities, which are identified as two main capabilities underlying IS strategy, particularly emphasize on *understanding and communicating with the business*; Without this component, neither search and select of IT competencies nor resource configuration to build them could be realized. Consequently no alignment between IS and business could be made unless systemic thinking and deliberate investment in fundamental capabilities are fulfilled (Ranganathan and Balaji 2007).

## **Expected Contributions**

This study will make several contributions. First, we propose a conceptualization of IS strategy based on DCT, which is new in the field of IS strategy. Second, we will enrich previous conceptualizations of IT sourcing as a part of IS strategy. Third, we will add to the concept of enterprise IT architecture competency by reinterpreting it according to DCT such that it becomes enterprise IT architecture dynamic capability, and we will combine it with IT sourcing capability. Finally, taking the case study approach, we will provide a better understanding of how the two dynamic capabilities interact to form IS strategy and how they support business strategy. The aggregate contribution of the study is therefore to present a theory of IS strategy as a combination of IT sourcing dynamic capability and enterprise IT architecture dynamic capability.

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