Do Managers Look beyond Cost When Making Outsourcing Decisions? The Role of Innovation and Value Capture in Effecting Managerial Decision-Making

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ABSTRACT

The traditional perspective on outsourcing, based mainly on transaction cost economics, suggests that the fundamental reason behind a firm’s decision to outsource is to reduce costs and increase profits. However, mounting evidence reveals that focused outsourcing suppliers with the ability to assemble diverse expertise rapidly can provide critical strategic benefits in terms of the timing, cost and amplitude of innovations. This study extends the traditional outsourcing paradigm to incorporate the consideration of potential innovation benefits in outsourcing decision-making. This perspective differs from the traditional outsourcing studies in two important ways: first, it takes into account the innovation benefits firms can gain from outsourcing and, second, it considers the effect of value capture in outsourcing decision-making. We present the four potential innovation benefits from outsourcing – the motivation for creativity, innovation scale, innovation scope and complementary synergy – and argue that these four factors should increase the likelihood of a decision to outsource an activity. Having recognized the significant role of efficient contracts, we propose the moderating effect of value capture on the relationship between the potential benefits and a decision to outsource. The theoretical framework developed in this paper will provide insight into the organizational outsourcing decision-making, and opportunities for extending outsourcing as a strategic mechanism to drive innovation more broadly.

Keywords: Strategic Outsourcing, Innovation, Value Capture, Decision-making
Rational managers make decisions based on expected return (March & Heath 1994). There are an abundance of studies in the outsourcing literature showing that the conceptual appeal of outsourcing is for cost-saving benefit (Abraham & Taylor 1996; Brown & Wilson 2005; Domberger 1998; Lacity, Willcocks & Feeny 1996; McIvor 2005). For example, Yourdon (2005) found that more than sixty percent of firms claimed that cost reduction is the most important reason behind their outsourcing decisions. Apart from the traditional cost-saving benefit representative of the above, a growing body of evidence highlights the potential innovation benefits from outsourcing relationships (Clegg, Burdon & Nikolova 2005; Quinn 1999). The important normative questions are: do managers recognize the remarkable potential for innovation benefits from outsourcing? And, to what extent they take these potential benefits into account when making outsourcing decisions?

The purpose of this study is twofold. First, we go beyond the traditional cost focused approach to outsourcing and propose that potential innovation benefits exist that firms can leverage through outsourcing relationships. These potential innovation benefits are obtained from the structural changes induced by the act of outsourcing – heightened motivation for the outsourcing supplier and innovation scale and scope economies – and the synergies created in an outsourcing relationship. Assuming rational decision making on the part of all the contracting parties, we argue that these potential innovation benefits will (and should) increase the likelihood of a decision to outsource an activity. Second, we extend the existing outsourcing literature by addressing the issue of value capture. For firms to reap the potential benefits mentioned above, they must have an efficient outsourcing contract in place to protect and capture the beneficial value created (Barthelemy 2003). Yet a review of the literature reveals that our understanding of the influence of value capture on outsourcing decision-making is weak. We argue that the extent to which an outsourcing contract can be written that allows the outsourcing firm to capture value moderates the relationship between potential cost and innovation benefits and the decision of firms to outsource an activity.

We propose a strategic outsourcing decision model that incorporates cost benefits, innovation benefits and the issue of value capture in outsourcing decision-making. We undertake a comprehensive theoretical analysis as to how outsourcing can offer benefits relating to innovation. We believe this theoretical model will facilitate a greater understanding of the differential value of cost and innovation benefits on outsourcing decision-making and the moderating effect of value capture on the relationship between these potential influences and a decision to outsource an activity. An empirical analog to this theoretical model exists but is excluded from this discussion so that we can concentrate on explicating the model more deeply.

The model presented here integrates elements of theory from different academic literatures, such as transaction cost economics (Williamson 1985), motivation (Sternberg & Lubart 1991), innovation
A CONCEPTUAL MODEL OF STRATEGIC OUTSOURCING

There are two main beneficial components underlying outsourcing decision-making. First, cost reduction is the most well-known benefit of outsourcing and has been extensively explored in the outsourcing literature. Many, indeed nearly all, organizations make outsourcing decisions based primarily on the reward of reducing headcount and costs (Lonsdale & Cox 1997). Due to the fact that suppliers target their effort toward a small set of activities, these specialists can develop greater scale and be more efficient, hence offering lower production cost (McIvor 2005; Quinn 1999). Second, the innovation benefit is more tacit. Four potential innovation benefits are proposed to have a positive influence on a decision of firms to outsource their activity. These benefits include (1) the motivation a firm receives by controlling its own ‘core’ activities, (2) scale innovation economies, (3) scope innovation economies, and (4) complementary synergy between outsourcer and supplier.

Yet despite the potential for benefits from outsourcing it is not a given that the outsourcing firm will capture all, or even a portion, of the gains from a contract with a supplier. Firms need to ensure that an outsourcing contract is sufficiently efficient that they can capture these benefits and protect themselves from the associated risks common of arm’s-length contracts. Hence, the net benefit the outsourcing firm receives is a combination of the potential benefits times the degree to which the contract allocates those benefits to them.

In a nutshell, the strategic outsourcing decision-making model, depicted in Figure 1, proposes that apart from the traditional cost-saving benefit, potential innovation benefits should have some influence over a decision of firms to outsource an activity. It implies that circumstances could exist where cost benefits are foregone (i.e., cost increases) if the innovation benefits are sufficiently large. However, its main contribution is in adding an additional dimension to the outsourcing decision that does not immediately assume that outsourcing is de facto bad for innovation across the value chain of activities in which the sourcing firm and outsource supplier operate.
THE POTENTIAL COST BENEFIT

Much of the literature correctly identifies the desire for cost saving as the dominant explanation for why outsourcing occurs (Aubert, Rivard & Patry 1996; Bienstock & Mentzer 1999; Kremic, Tukel & Rom 2006; Vining & Globerman 1999). Theoretically, cost-driven outsourcing arises when outsourcing suppliers can achieve lower costs for a service than in-house production. Economies of scale and specialization are the major mechanisms driving this level of efficiency and allowing outsourcing suppliers to perform it specialized function (Domberger 1998; Hill 1990; Kremic et al. 2006; Monteverde 1995; Quinn, Doorley & Paquette 1990; Williamson 1975, 1985). For example, Cellon, the independent design house for wireless terminals and modules, helps many leading cell phone brands shave 70% of development costs of a new cell phone model by using a pre-designed platform and spreading the costs among many buyers.

Production costs are directly generated by the opportunity costs of the resources – labor, land and capital – used to produce the output. The higher the capital and labor requirements, the higher the production costs are likely to be. Production costs may be lower in outsourcing for a number of reasons. First, in-house production usually entails an insufficient level of production to achieve minimum efficient scale (Lyons 1995; McFetridge & Smith 1988). Outsourcing suppliers can lower this cost through economies of scale, which can be achieved by centralizing the work of several clients, or using volume purchasing to buy materials at substantially low cost. Second, internal production
units are prone to act like monopolists (Alles & Newman 1998; Crozier 1964), which reduces efficiency incentives due to lower comparative performance benchmarks for internal customers and an inefficient internal pricing mechanism (Vining & Globerman 1999). Profit-maximizing outsource suppliers in a competitive market will be forced to price at the lowest possible marginal cost, thus eliminating inefficient processes. Third, by managing multiple activities, firms may experience diseconomies of scope, part of the logic behind the suggestion that firms concentrate on their core competencies and outsource other activities (Prahalad & Hamel 1990; Ricardo 1969). Fourth, internal production generates significant negative organizational externalities that can be reduced or eliminated by outsourcing (Vining & Globerman 1999). For instance, an internal production may require a distinct corporate culture that is dysfunctional for the rest of the organization (Camerer & Vepsalainen 1988).

In summary, managers seek the regime that minimizes the production costs and compare the estimated outsourcing costs with the cost of internal production. Given the beneficial components discussed above, we argue that the cost saving from outsourcing will drive a decision of firms to outsource their activity.

Proposition 1: Cost saving from strategic outsourcing will, ceterus paribus, increase the likelihood of a decision to outsource an activity.

THE POTENTIAL INNOVATION BENEFIT

The common refrain heard in the literature is that because outsourcing is dominantly a mechanism for cost reduction more tacit benefits, such as the enhancement of innovation, are ignored or, even worse, lost. To date, research has paid little attention to the role of potential innovation benefits on outsourcing decision-making. However, we are suggesting that managers should look beyond cost and consider the potential innovation benefits that can be leveraged from their outsourcing engagements. Our focus is on four major potential innovation benefits – motivation in outsourcing suppliers, innovation scale, innovation scope, and complementary synergy – that could increase innovation and hence lead to a greater likelihood of firms outsourcing an activity. Where managers recognize these potential benefits in outsourcing, we argue that these innovation benefits will have positive influence on outsourcing decision-making. Therefore, we posit the following:

Proposition 2: The innovation benefits from strategic outsourcing will, ceterus paribus, increase the likelihood of a decision to outsource an activity.

Motivation in Outsourcing Suppliers

The pressures from the marketplace motivate firms to generate creative solutions to address demand. This logic also applies to the outsourcing service market where competition drives outsourcing
providers to be more innovative in their work. Specialist outsourcing suppliers have benefits over other firms because the concentration of outsourcing suppliers into a focused domain creates an incentive for them to engage in more product and process creativity.

Task-focused motivation, introduced in the investment theory of creativity (Sternberg & Lubart 1991, 1993), has been found to facilitate resources in organizations to develop their expertise in the target work domain and hence generate an incentive to innovate. By its very nature, an outsourcing supplier’s business is one of task-focused specialist suppliers. Take the example of Cellon discussed earlier. As a specialist in wireless handsets, Cellon focuses its resources specifically on the development and manufacturing of handsets. In contrast, the leading cell phone brands need to deal with a broad range of activities, such as customer relationships and brand management, in addition to the design and development of handsets.

Focused outsourcing suppliers also have the advantage of being more innovative in a particular activity because they do not have to make compromises amongst the management of customers, innovation and infrastructure. These three components rarely map neatly to the organizational structure of a corporation and inevitably conflict with each other (Hagel III & Singer 1999). For instance, consider Yahoo!, the leading global internet communications, commerce and media company. Still perceived as a search engine, Yahoo! in fact outsources their search product to Inktomi, an innovator whose expertise is in parallel computing. This outsourcing strategy enables Yahoo! to concentrate on attracting customers, gathering data on them, and connecting them with both advertisers and merchants while leveraging on the specialization of an outsourcing supplier in creative work and innovation.

Specialist outsourcing suppliers face greater incentives to engage in specialist innovative activities. Having recognized this potential benefit, firms will desire to leverage an outsourcing supplier’s motivation to innovate, thereby leading to a decision to outsource their activity. Thus, we expect the following:

*Proposition 2a: The heightened motivation to innovate in an outsourcing supplier will, ceterus paribus, increase the likelihood of a decision to outsource an activity*

**Scale Innovation Economies**

We define “scale innovation economies” as the efficient degree of specialization that yields an increasing marginal return of innovative output when a firm gains more knowledge and expertise. The greater experience and knowledge in a serving domain create greater innovation scale in outsourcing suppliers and allow them to access and utilize their knowledge during the innovation process.
Access to abundant, high-quality resources is one of the most important organizational capabilities facilitating innovation development process (Christensen & Overdorf 2000). By serving many clients with similar needs, outsourcing suppliers are more likely to build up their expertise in a specific area and, at the same time, spread their fixed cost of investment. It is evident that the combination of the expertise and assets of suppliers results in competitive benefits for outsourcing firms, as well as in saving cost of investing in technology and training the now-outsourced function (Brown & Wilson 2005).

For example, Covance, one of the world’s largest drug development service companies, achieves scale in knowledge and expertise by helping leading pharmaceutical companies, such as Pfizer, Merck, Novartis and Eli Lilly, fulfill their R&D and clinical trial needs in the drug discovery process rapidly and cost effectively. The scale innovation advantage of outsourcing in pharmaceutical industry was further supported by Quinn’s (2000) study that claimed that no single pharmaceutical company can hope to match the sum of all the external enterprises innovating in its value chain.

The advantage of having innovation scale allows outsourcing suppliers to generate innovative output at a more efficient level than outsourcing firms. Given that outsourcing suppliers can provide benefits from their innovation scale and economies of specialization that outsourcing firms do not possess, we argue that an outsourcing supplier’s specialization will have a positive influence on a decision of firms to outsource an activity.

Proposition 2b: The scale innovation economies from an outsourcing supplier will, ceterus paribus, increase the likelihood of a decision to outsource an activity.

Scope Innovation Economies
Innovation often results from combining existing knowledge and applying it to a new context rather than generating new knowledge and inventing from scratch (Cohen & Levinthal 1990). Diversity of knowledge and skills is claimed to be a powerful predictor of innovation because it brings usefully differing perspectives together (Paulus 2000; West 2002). The efficient exploitation of knowledge diversity, which we term “scope innovation economies”, is beneficial to an organization’s innovation development process (Chesbrough 2003; Hargadon & Sutton 1997; Sutton 2001). The scope innovation advantage is supported by Davis and Devinney (1997) who point out that successful innovative companies are more likely to source ideas from numerous places and engage in overlapping projects.

Organizations often do not possess an adequate knowledge/skill diversity to innovate in all functions they perform, while outsourcing providers, who serve many clients facing various challenges in different industries, are more likely to apply a range of knowledge and experience to generate
innovative products and processes. Research in team innovation shows that the more diverse disciplines and industry backgrounds the team possesses, the more likely the team is to engage in divergent thinking (Guilford 1967). Applying Hargadon and Sutton’s (1997) concept of “technology brokering” in the outsourcing context, we view a specialized outsourcing supplier as a knowledge broker who benefits from disparities in the level and value of particular knowledge held by different clients in multiple industries.

The case of IDEO, the largest product design consulting firm in the United States, provides a good example of scope innovation advantage. IDEO designs part or all of products that clients would like to manufacture but lack of the expertise to do so. This broad experience gives IDEO the advantage over others as they learn about potentially useful technologies by working with clients in various industries and find opportunities to apply the knowledge by incorporating them into new products for industries where there is little or no prior knowledge for these technologies (Hargadon & Sutton, 1997). IDEO is able to gain the wide scope of knowledge from different industries and exploit this cross-pollination to create innovation and bring value to clients.

Outsourcing firms potentially gain from scope innovation economies which outsourcing suppliers obtain through their work with clients in different industries. Seeking to leverage on supplier’s knowledge diversity, outsourcing firms will prefer to outsource an activity when innovation scope is recognized in an outsourcing engagement. These arguments lead to the following proposition:

Proposition 2c: The innovation scope of an outsourcing supplier will, ceterus paribus, increase the likelihood of a decision to outsource an activity.

Complementary Synergy

Critical resources may extend beyond a firm’s boundaries and organizations that combine internal and external resources in a unique way can gain advantages over firms that are unable to do so. The relational view (Dyer & Singh 1998) suggests that firms can develop valuable resources by carefully managing relationships with external entities and that complementary resources allow firms to generate greater rents than the sum of those obtained from the individual resources of each partner. For instance, the relationship between Cisco, with a strong product portfolio in networking equipment, and China’s ZTE, with a focus on 3G wireless equipment, allows both to create advantages in China’s networking equipment market over Huawei, China’s #1 producer of networking and telecommunication equipments.

The relational view is closely related to the knowledge-based theory (Lorenzoni & Lipparini 1999), which highlights the importance of inter-firm relationship and the capability to interact with other firms as a means to accelerate knowledge access and transfer with relevant effects on company growth.
and innovativeness. The creation of knowledge in the inter-firm relationship can be a source of competitive advantage (Lorenzoni & Lipparini 1999) and innovation in many industries is often occurring at the inter-organizational level. For example, the principal source of innovation in biotechnology industry has been in the linkages between collaborating organizations and not solely within single firms (Powell, Koput & Smith-Doerr 1996). In the study of critical success factors of innovations, Freeman (1991) found that external sources of technical expertise, combined with in-house basic research to facilitate the external linkages, were crucial in creating successful innovation. Through cooperation with outside suppliers, firms improve their processes and structures through introducing outside ideas and new techniques. Often, outsourcing suppliers become an important source of innovation (Clegg, Burdon & Nikolova 2005).

Drawing on these concepts, we propose that the combination of internal know-how and external knowledge from outsourcing suppliers could leverage the synergetic value of complementary knowledge and resources, thereby increasing the marginal return to outsourcing firms. Given that managers recognize this synergetic value from outsourcing, complementarity should positively influence outsourcing decision-making. Accordingly, we posit the following proposition.

Proposition 2d: The complementarity between an outsourcing firm and a supplier will, ceterus paribus, increase the likelihood of a decision to outsource an activity.

THE MODERATING ROLE OF VALUE CAPTURE

In spite of the appealing benefits discussed above, outsourcing also incurs the risk of opportunism arising from the conflicting interests and goals of outsourcing firms and suppliers (Williamson 1985). One classic point of conflict is the issue of specialized asset investment, commonly known as the hold-up problem. From a game-theoretic standpoint, the existence of specific assets potentially alters the bargaining power of the parties involved. By giving up its specific assets, an organization makes itself vulnerable to the renewal threats because it may not be able to obtain the service from any other suppliers when it comes to a renewal of the agreement (Elitzur & Wensley 1997). The hold-up problem is also a matter of concern to outsourcing suppliers. The more firm-specific the outsource activity becomes, the more difficult it will be for outsourcing suppliers to satisfy their clients (Klaas, Clendon & Gainey 1999).

Parties to a contract often cannot foresee all the possible contingencies, making most contracts incomplete (Afuah 2003). The incomplete nature of most contracts creates room for opportunism and other forms of moral hazard, which firms attempt to mitigate through monitoring, penalties and incentives and reputational investments aimed at aligning the interests of the contracting parties. Such issues are not only a concern for the outsourcing firm but the outsource supplier as well. They too
encounter incentive based risks where their performance and outcome can and will be influenced by the effort of an outsourcing firm (Cooper & Ross 1985).

Assuming self-interested corporations, drawing up an efficient outsourcing contract (Barthelemy 2003; Harris, Giunipero & Hult 1998; Saunders, Gebelt & Hu 1997) can govern a relationship, establish the balance of power and ensure that value from the potential cost and innovation benefits can be effectively captured. Having perceived that an efficient contract is essential to outsourcing success, we argue that our posited link between potential cost and innovation benefits and outsourcing decision-making will be stronger when an outsourcing contract can guarantee an efficient value capture.

Proposition 3: Value capture moderates the relationship between potential cost and innovation benefits and a decision to outsource an activity; the more efficient an outsourcing contract can be written to capture value, the more cost and innovation benefits can be realized by an outsourcing firm and will, therefore, increase the likelihood to a decision to outsource an activity.

DISCUSSION AND CONCLUSION

We have attempted to delineate how cost, innovation and value-capture factors influence outsourcing decision-making. In this effort, we have synthesized a different body of research on outsourcing and innovation, and discussed potential innovation benefits to leverage from an outsourcing supplier’s motivation for creativity, innovation scale and scope and complementary synergy created in an outsourcing relationship. We also identified the moderating role of value capture on the relationship between potential cost and innovation benefits and outsourcing decision-making. Figure 2 illustrates the strategic outsourcing decision model and summarizes the propositions we proposed in this paper.

More broadly, this paper contributes to management theory by linking an innovation perspective with outsourcing, which has traditionally been considered as a quick means of cost reduction. In addition, it extends the existing outsourcing literature by examining the moderating effects of value capture on the relationship between potential benefits and outsourcing decision-making, rather than solely considering transaction costs.

We articulate an idea that the managerial application of outsourcing is not restricted to a short-term solution for cost reduction, but can potentially be thought of and used as a strategic mechanism to drive innovation in organizations. Some of benefits may not be immediately obvious (e.g., motivation for innovation) and need more awareness from managers. The theoretical framework proposed in this paper will provide managers with a useful way of thinking how firms can use outsourcing to
complement the internal capabilities and achieve organization’s strategic goal. These will also assist
outsourcing practitioners in making more efficient decisions in their future choices of outsourcing
engagement.

**Figure 2: Strategic Outsourcing Decision Model**
REFERENCES


