Towards a "theoretical toolbox" for strategic sourcing

Christopher L. Shook, Garry L. Adams and David J. Ketchen Jr
Department of Management, Auburn University, Auburn, Alabama, USA, and

Christopher W. Craighead
Supply Chain Management Program, Auburn University, Auburn, Alabama, USA

Abstract
Purpose – The goal of this paper is to provide a broad foundation for future research in the area of strategic sourcing.
Design/methodology/approach – The foundation is derived by drawing from various well-established organizational theories. Specifically, strategic sourcing was viewed from the perspective of institutional theory, resource dependence theory, network theory, systems theory, resource/knowledge-based views of the firm, transaction cost economics, agency theory, strategic choice theory, sociocognitive theory, and critical theory.
Findings – By viewing strategic sourcing through the lens of ten organizational theories, this research provides multiple insights into many interrelated strategic sourcing questions, such as when to make, buy or ally, how many and which suppliers, and how to manage sourcing relationships. The paper offers a rich and diverse foundation to foster future theory-building activities in sourcing and supply management research.
Originality/value – While some of these theory bases have been utilized, to some degree, in the supply management research, the paper offers a more holistic perspective of theoretical insights for strategic sourcing. Each of these organizational theories could be utilized as a foundation for future studies. Further, the paper offers competing and/or complementary theory bases to enhance possible insights into many strategic sourcing questions such as when to make, buy or ally.

Keywords Sourcing, Supply chain management, Procurement, Purchasing, Organizational theory

Paper type Research paper

Introduction

The strategic importance of sourcing has increased over time (Krause *et al.*, 2001), and has been projected to increase in the future (Benton, 2007). Further, this strategic importance is prevalent in both manufacturing and service industries (Monczka *et al.*, 2005). As strategic sourcing continues to increase in importance (Krause *et al.*, 2001), it is necessary for researchers to continue to enhance the extant body of knowledge to offer theoretical and pragmatic insights.

Building knowledge may be accomplished through a variety of approaches (Handfield and Melnyk, 1998). One method, and the one used in this paper, is to build knowledge by applying well established theoretical bases outside of the discipline. For example, Mentzer *et al.* (2004) utilized several theoretical bases to create a "unified theory of logistics". By viewing logistics through multiple theoretical lenses, each offering insights, they were able to offer a more holistic framework to guide future research efforts. We take a similar approach in this paper, but with different scope and intent.

The goal of this paper is to provide a broad foundation for future research in the area of strategic sourcing. We derive this foundation by drawing from well-established *organizational theories*. The study of organizations has produced an extensive "library" of theoretical perspectives (Scott, 2003). As detailed below, each of these perspectives provides a different "lens" to view strategic sourcing and therefore each offers valuable insights.

By viewing strategic sourcing through multiple theoretical lenses, each offering unique insights, we believe that we prove a more holistic framework to guide knowledge creation and application. We also believe that our choice of established theoretical bases should instill confidence in the resultant insights. For example, when discussing the value of theories to researchers and managers, Lundberg (2004, p. 14) concludes:

> Because conceptual frames (theories) are a requisite for sensemaking, the more accurate, focused, and verified the frame, the better sensemaking is likely to be – for managers and scientists, for everyone.

Because we discuss well established and heavily scrutinized organizational theories, we hope to provide a strong foundation for researchers and managers alike as they face the challenge of enhancing and building knowledge in the critical area of strategic sourcing.

Theoretical perspectives applied to strategic sourcing

We viewed strategic sourcing from ten perspectives. Specifically, we utilized institutional theory, resource dependence theory, network theory, systems theory, resource/knowledge based views of the firm, transaction cost economics, agency theory, strategic choice theory, sociocognitive theory, and critical theory. Table I provides the key premise of each theory and illustrative, as opposed to exhaustive, implications.

The current issue and full text archive of this journal is available at
www.emeraldinsight.com/1359-8546.htm

Supply Chain Management: An International Journal
14/1 (2009) 3–10
 [ISSN 1359-8546]
[DOI 10.1108/13598540910927250]

Table I Important theories and their implications for the sourcing function

Theoretical perspective	Key premise	Key insights for sourcing
Institutional theory	External forces pressure firms to behave in certain ways and not behave in others	Avoid fads. Firms should use a sourcing approach only if the approach matches the firm's strategy, not just because the approach is used by others
Resource dependence theory	Firms seek to become less dependent on others for resources, and to make other firms more dependent on them	Make when the resource is important and there are few sources Buy when the resource is unimportant and there are many sources Ally when the resource is important and there are several sources Enhance the dependency of suppliers and alliance partners
Network theory	Managing interorganizational relationships is central to success	Choose suppliers that are central to the network
Systems theory	Organizations are best viewed as part of an interwoven and intertwined system	Multiple sources should be sought in complex and uncertain environments
Resource/knowledge-based views of the firm	Unique assets and capabilities are the source of enduring competitive advantages	Do not outsource capabilities that create competitive advantage Buying and alliances may be vehicles for obtaining capabilities Pick sources with complementary capabilities
Transaction cost economics	Firms should make decisions that minimize costs	Buy when transaction costs are less than production costs
Agency theory	When one firm delegates responsibility to another, the first firm must monitor the second or risk opportunistic behavior	The costs of monitoring agents are part of the transaction costs Buy when transaction costs are less than production costs
Strategic choice theory	The decisions managers make about strategic issues are the primary driver of firm performance	A firm's strategy should drive decisions about whether to make, buy, or ally
Sociocognitive theory	The interpretations managers make of events and trends are the primary driver of their decisions	Decisions about whether to make, buy, or ally are shaped by past practices Firms with a strong identity will tend to make rather than buy or ally
Critical theory	Commerce has been a means for the powerful and privileged to exploit others for their own gain	The make, buy or ally decision should be guided by how best to improve society Suppliers and employees should not be exploited Choose providers that have been historically exploited and alienated

Institutional theory

Institutional theory explains how an organization's environment, through regulative, normative and cognitive mechanisms, institutionalizes and legitimizes strategies (Scott, 1995). Although institutional theory and "neo-institutional" theory (e.g. March and Olsen, 1984) differ on whether organizational adaptation is the result of conscious decision processes made to conform to the organization's environment (the latter ascribes more importance to such decisions), both predict that institutional pressures may cause the organization to adopt sourcing strategies that conform to its environment. Varying institutional pressures may cause organizations to source in different ways, which may have economic consequences and may lead to ethical dilemmas. Nonetheless, it is important for firms to be within the range of legitimate sourcing strategies because a legitimate firm obtains resources of higher quality at more favorable terms than does an illegitimate firm (Deephouse, 1999). On the other hand, if firms are too similar strategically, performance may suffer (Gimeno and Woo, 1996). Thus, it would appear that firms should select sourcing strategies that help legitimate them, but do not lead to "isomorphism" (i.e. close duplication).

When making sourcing decisions, managers should be aware that whereas some strategies are rational for individual organizations, these same strategies are not rational when adopted by large numbers of firms (DiMaggio and Powell, 1983). For example, outsourcing is a strategy that has become widespread (Rosetti and Choi, 2005); however, outsourcing may have serious negative short- and long-term consequences, such as increased costs and decreased performance, and the loss of critical skills and knowledge (Jennings, 2002). Hence, managers should be careful to make sourcing decisions based on their strategic merit.

Knowledge of the mechanisms of isomorphism may help identify sources of information for managers. To be more specific, regulative mechanisms, such as government policies

Supply Chain Management: An International Journal
Volume 14 · Number 1 · 2009 · 3–10

and regulations, institutionalize and legitimize strategies (Scott, 1995). Accordingly, monitoring changes in government policies and regulations (e.g. changes in changes in free trade agreements among countries, or changes in tax regulations, or legislation supporting minority- and women-owned businesses) as they relate to sourcing decisions may allow a firm to be an early adopter of sourcing innovations.

Mimetic isomorphism is the result of firms reacting to uncertainty by modeling themselves after successful firms (DiMaggio and Powell, 1983). If all firms model industry leaders, the best possible result would be competitive parity, not competitive advantage (Porter, 1996); thus, there likely would be value in modeling successful sourcing strategies that competitors are not attempting to model. As such, the search for unique successful sourcing strategies may best be started outside the organization's industry. However, the mimicked organization must be similar enough to make mimicry meaningful. A comparison of the firms' value chains may be the best place to ascertain if similarities exist and if mimicry could have strategic implications.

Resource dependence theory

Resource dependence theory maintains that the key to an organization's survival is the acquisition and maintenance of resources (Pfeffer and Salancik, 1978). Firms who lack resources will seek to establish relationships with others to obtain the needed resources. In relationships where the firm is dependent, they will attempt to alter the relationship to minimize their dependence (Medcof, 2001; Pfeffer and Salancik, 1978).

The decision to make, buy, or ally with a supplier is informed by the importance of the activity and whether or not the control of the resources is concentrated. Activities that are not critical and could be performed by many suppliers can be outsourced. Activities that are not critical but could be performed only by a few suppliers can be outsourced, but ways to make the firms interdependent (e.g. interlocking boards; Boyd, 1990) should be used.

To the extent that there are few sources and the resource is important, the supplier would have excessive power. Thus, such resources should be made, if possible. One approach to bringing the resource into the firm is to purchase a supplier (Casciaro and Piskorsky, 2005). If it is not possible to source internally, then attempts should be made to reduce dependency on the supplier by becoming interdependent through an alliance.

If the activities are critical but control of these activities is not concentrated, firms should look to alliances with suppliers. The activity is too important to buy on the open market, and firms can reduce their dependency on an external source by seeking to ally themselves with the provider. By allying, they create mutual interdependencies in a stronger way than interlocking directorates (Casciaro and Piskorsky, 2005). To further reduce their dependence, multiple sourcing partners should be sought. Historically, resource dependence theory would have been used to suggest that in relationships where their exchange partner is dependent, firms should seek to enhance that dependence (Pfeffer and Salancik, 1978). However, given the insights of the other theories reviewed in this paper, exploitation of resource dependencies may have long-term negative implications for trust and reputation as well as performance.

Network theory

Network theory centers on the relationships a firm has with other firms, and on how these relationships influence a firm's behavior and outcomes (Thorelli, 1986). Network theory does not seem to inform the choice of when to make, buy or ally. It does, however, appear to inform to choice of which firms an organization chooses to buy from or engage with as alliance partners.

Centrality is a key concept within network theory. Centrality refers to how pivotal a firm is within a network. High centrality refers to a firm that is always sought out as a partner. Such firms enjoy high regard and status among the network (Gulati *et al.*, 2000). Being central within a network would seem to offer the potential to enhance the four key competitive priorities within supply chains: speed, quality, cost, and flexibility (Hult *et al.*, 2006). A highly central firm can tap its tight links in order to rush orders when needed, seek out the provider offering the best materials and lowest prices, and make seamless transitions over time. Thus, with regard to sourcing, a firm should strive to be central to its network and should seek sources that are central to their networks.

Balance theory is a closely related theory that contends that a firm can build trust with a firm it does not "know" through a third firm with whom both other firms have worked (Heider, 1946, 1958). In other words, firm B has worked with firms A and C, but firm A and firm C have not worked together. If firm B indicates to firm A that firm C is trustworthy, firm A will be more comfortable working with firm C. One implication of balance theory is that a firm that acts in a way that erodes trust will find that its reputation falls across the entire network. This will be especially true if the network is dense (i.e. there are many linkages between network members), and if the firm is central to the network.

Systems theory

Systems theory views the organization as a system of interconnected parts which interact together to produce products and services (von Bertalanffy, 1951). From a systems perspective of sourcing, the assumption is that one or more parts of the system is being externalized, and has an effect on the interconnected parts of the system. The nature and strength of this effect is primarily determined by the nature of interdependence between firm work processes.

There are three types of interdependence:

1. pooled interdependence occurs when each part of the system makes a distinct contribution to and is supported by the whole;
2. sequential interdependence exists when one part of a system has to complete its contribution before the next can take action from start to finish in the production process; and
3. reciprocal interdependence occurs when outputs of one system serve as inputs to the other, and *vice versa* (Thompson, 1967).

The type of interdependence offers insights into the associated costs of coordination and communication in sourcing relationships. Increases in interdependence, complexity, task variety, or specialization in production processes increase the coordination and communication costs between firm and sourcing partners (Combs and Crook, 2007). Further, coordination and communication costs are lower for outsourced process beginnings (inputs)

Supply Chain Management: An International Journal
Volume 14 · Number 1 · 2009 · 3–10

and endings (outputs) than for dually interconnected outsourced system parts.

Beyond the implications on the coordination and control costs associated with the type of interdependence, systems theory also provides insights on the desirability of multiple and plural sourcing relationships in turbulent environments. Ashby's (1956) work on requisite variety implies that as firms face and operate in increasing turbulent and complex external environments, that firms must maintain increasingly complex structural connections and mechanisms to survive and prosper in the environment. Thus, one interpretation of requisite variety is that firms maintaining multiple and plural sourcing relationships with external partners have stronger dyadic and network relationships than firms eschewing outsourcing. In such cases, firms in sourcing partnerships and networks have greater requisite variety and an increased ability to navigate complex environments successfully.

Resource/knowledge-based views of the firm

The resource-based view of the firm (RBV) and knowledge-based view of the firm (KBV) are internally based theories designed to explain differences in firm behaviors and performance (Barney, 1991; Wernerfelt, 1984). RBV proposes that firms have different resource endowments, and that the manner in which firms acquire, develop, maintain, bundle, and apply these resources leads to the development of competitive advantage and superior performance over time (Black and Boal, 1994; Teece *et al.*, 1997). RBV tenets prescribe that resources and capabilities (bundles of resources) need to be valuable, rare, inimitable, and organizationally activatable (firm has complementary resources to leverage and maximize capabilities) to drive sustainable competitive advantage (Barney, 1991; Black and Boal, 1994). KBV theory was developed as an extension of RBV, and maintains that intangible and tacit resources such as human capital and knowledge are the only resources that are unique across firms over time, and therefore are the key components to competitive advantage (Grant, 1996, Kogut and Zander, 1992).

From a sourcing perspective, RBV theorists have traditionally maintained that firms should not outsource any business function or activity that contributes to building and maintaining competitive advantage. Firms that establish connections with external firms through mechanisms such as outsourcing run the risk of transferring vital knowledge and resources by engaging in sourcing partnerships (cf. Barney, 1991; Wernerfelt, 1984). Other potential negative sourcing outcomes include creating competitors via vertical integration of sourcing partners and losing vital internal knowledge and resources by engaging in sourcing relationships with external partners. As a result, RBV called for a protectionist stance regarding outsourcing, recommending that firms should only outsource support functions that do not directly contribute to the firm's value-adding and competitive advantage generating mechanisms.

From a more proactive perspective, RBV and KBV tenets denote that firms may engage in outsourcing as a means of identifying, exploring, and transferring knowledge and resources from external sourcing partners to internal control. In this perspective, firms may establish sourcing relationships with leading resource and knowledge providers in order to gain access to knowledge and resources not currently possessed internally. Under such conditions, sourcing can be viewed as a boundary spanning mechanism through which firms can use sourcing relationships to gain access to resources critical to the firm's competitive advantage development or maintenance (Combs and Crook, 2007). In such cases, firms establish a short-term relationship with an established sourcing partner with the intent of transferring knowledge, human capital, and other resources from the sourcing firm to the partner. Mechanisms emphasized in this strategy can range from the transferring of knowledge to help develop internal capabilities, to the hiring of management personnel from the sourcing firm to develop internal capabilities for the partner, to the outright acquisition of the sourcing firm to internalize capabilities previously existing externally.

Firms may also choose to ally themselves with sourcing partners possessing complementary resources and capabilities as an alternative alignment to joint ventures and merger and acquisition activities. In such cases, sourcing partners may provide the combination of complementary knowledge bases with a lack of direct competition that can fuel R&D activities for innovative product and service development.

Transaction cost economics

Transaction cost economics (TCE) has been the predominant theory used to examine business sourcing decision from a make versus buy perspective (Bajari and Tadelis, 2001; Poppo and Zenger, 1998; Rubin, 1990). TCE tenets imply that sourcing decisions involve a comparison of the production costs incurred from producing a process/product internally (hierarchy) with the transaction costs associated in purchasing a process/product from an external source (market) (Williamson, 1975, 1979). The total transaction costs included in the sourcing (market) decision include the direct economic costs associated with sourcing service development and delivery, transaction-based monitoring and control costs incurred to ensure that the sourcer acts in the best interest of the firm, and mediation and legal costs accrued should the sourcer act in a manner inconsistent with the terms of the sourcing contract (Williamson, 1975). Sourcing transaction costs also increase with asset specificity, where the increased complexity of interactions required to produce sourcing outputs necessitates increased monitoring and control costs to protect sourcer investments (Poppo and Zenger, 2002). TCE offers a very rational view for evaluating make versus buy decisions, where the sourcing choice is made strictly based on the economic merits of market versus hierarchy costs associated with each individual sourcing transaction.

Beyond individual sourcing transactions, firms should consider and manage transactions from a holistic perspective. In such cases, the level of analysis implied by TCE moves from the individual transaction to the network of sourcing transactions at the organizational level, with firms making sourcing decisions that maximizes the economic value added from interactions with sourcing partners. The overall value of these sourcing interactions includes the minimization of economic costs incurred from managing a nexus of sourcing transactions, as well as maximizing the value of network connections and other knowledge gained from sourcing relationships and transactions.

Another example of a TCE-based interpretation in strategic sourcing deals with plural sourcing, where a firm may engage in both internal and external sourcing relationships to acquire key resources/processes (Welch and Nayak, 1992). Instead of the traditional make versus buy decision, plural sourcers may engage in make and buy and ally decisions, where the firm is maximizing short-term flexibility in the sourcing decisions. In such cases, the assumption is that the maintenance of

sourcing flexibility mitigates the additional transaction costs incurred by developing multiple make and buy and ally relationships. Sourcers may use plural sourcing partners in order to:

- maintain maximum flexibility for the supply of critical firm inputs;
- engage in short-term testing of multiple partners as a means to identify the most viable long-term sourcing partner;
- negotiate the best terms with any one sourcing option due to the existence of multiple viable options;
- provide the volume of sourcing inputs required if no one sourcing partner has the capacity to meet firm needs; and
- gain access to state-of-the-art process technology and knowledge not currently residing within the boundaries of the firm (Welch and Nayak, 1992).

Agency theory

From the perspective of agency theory, a firm outsourcing a function is the principal, and the supplier is the agent (Eisenhardt, 1989; Jensen and Meckling, 1976). Similar to TCE, agency theory maintains that the make versus buy decision should be determined by the economic relationship between production and transaction costs. If production costs are lower than transaction costs, firms should produce and manage the process internally. On the other hand, if transaction costs are lower than production costs, the firms should outsource the process to the agent. Included in the transaction costs are the actual outsourcing costs, as well as additional monitoring and control costs assumed by the principal. Monitoring costs are any costs incurred by the principal to ensure that the agent is not engaging in activities detrimental to the principal, as well as ensuring the principal is meeting the basic terms and conditions of the outsourcing contract. Control costs represent the legal costs assumed by the principal to enforce the terms of the outsourcing contract upon term violation.

Agency theory tenets imply that lower transaction costs are driving firms away from sourcing internally and toward purchasing or alliance outsourcing relationships. Several primary forces are cited in the literature as driving the movement towards more frequent and stronger sourcing relationships between principals and agents (Logan, 2000). First, the advent of the Internet and of other information systems technologies has given firms an increased ability to monitor agent actions in outsourcing relationships at a lower cost and may foster supply risk reduction (e.g. Zsidisin *et al.*, 2004). In addition, the increased use of outsourcing as a strategic tool has given many firms increased experience in designing effective monitoring and control systems to manage agent behaviors (Logan, 2001). Further, as agents build businesses and industries around the provision of sourcing activities, reputation becomes critical in building and maintaining sourcing partnerships. Given the increased information available to sourcing principals, agents assume higher risks for engaging in opportunistic behaviors against principals. Finally, both the increased number of agents and heightened competition among agents have led to decreased tendencies for agents to engage in opportunistic actions and shirking behaviors.

Strategic choice theory

The basic argument of the strategic choice perspective is that top managers make choices regarding organizational structure and processes to align their organizations with the environment (Child, 1972). According to Miles and Snow (1978), the choices center around three interrelated "problems": the entrepreneurial problem, the engineering problem and the administrative problem. The entrepreneurial problem is to define the organizational domain in terms of the specific good or service and a target market or market segment. The engineering problem involves the creation of a system that operationalizes management's solution to the entrepreneurial problem. The administrative problem is that of rationalizing and stabilizing those activities which successfully solved problems during the entrepreneurial and engineering phases. An examination of how companies solved these three interrelated problems resulted in the identification of four strategic types:

1 the prospector;
2 the defender;
3 the analyzer; and
4 the reactor.

A firm's strategic type has implications for the sourcing decision.

Defenders concentrate on efficiently producing and distributing a stable portfolio of goods/services in an unchanging environment (Doty *et al.*, 1993). Accordingly, defenders tend to focus on a single core technology (Miles and Snow, 1978), thus sourcing related to the core technology should be sourced internally. However, defenders also stress efficiency and cost control; thus if lower-cost sources of components or services unrelated to the core technology are available, defenders should purchase that component/service.

Prospectors adapt to a turbulent environment by constantly searching for new products and new markets (Doty *et al.*, 1993) and by avoiding long-term commitments to a single technology (Miles and Snow, 1978). Accordingly, outsourcing and alliances often make more sense than the commitment to technology required by sourcing internally.

An analyzer combines aspects of both the defender and prospectors (Miles and Snow, 1978). Analyzers simultaneously maintain a firm base of traditional products and customers while locating and exploiting new product/market opportunities. To do so effectively, a dual approach to sourcing may make sense. To produce the core product efficiently, a strategic sourcer should produce internally, much like a defender. However, to effectively exploit new product and market opportunities, outsourcing or alliances may make more sense. In some cases, once the product has been proven, it may be added to the base of traditional products, and a company could invest in the technology.

Perhaps the most important insight into sourcing is derived from the fourth strategic type, the reactor. Reactors lack fit among their strategy, structure, and environment (Miles and Snow, 1978). Reactors have no consistent sourcing strategy, and instead blindly imitate other firms. Because reactors lack consistency, their performance tends to be poor (Smith *et al.*, 1989). Reactors offer a lesson in sourcing in that blindly imitating other firms is not a recipe for long-term success.

Sociocognitive theory

Sociocognitive theory has some interesting implications for how human cognition and sensemaking are likely to affect the make/buy/ally decision. Sociocognitive theory makes it very clear that humans are boundedly rational decision makers, thus firms may not always make logical decisions (i.e. those that maximize outcomes) (Simon, 1955). Instead, organizations tend to rely on scripts, schemas and routines developed in response to their firm's past actions and sense of identity (Brown and Duguid, 1991; Weick, 1995; Weick *et al.*, 2005).

Sourcing decisions are occasions for sensemaking. From a sourcing perspective, a firm generally follows well-established schemas and routines around the make/buy/ally decisions. If a firm currently buys a particular item, it is very likely to continue to buy the item, even if the firm's context has changed. Careful analysis might show that another option would be better, but this analysis seldom takes place. Organizations with a strong knowledge content base for distinctive products or services might be more inclined to make the component. Similarly, organizations that consider themselves to be "learning organizations" might reasonably be expected to try to learn new techniques for producing their own products. Likewise, organizations with a strong sense of identity – "who they are" – might be expected to opt to make rather than buy products, especially if their sense of identity is wrapped up in what they produce. Successful firms will use a reflective approach to sourcing (cf. Simon, 1955). Firms try to learn lessons and store them in organizational memory. This builds the firm's repertoire and develops more complex schemas.

Sourcing decisions are not only occasions for sensemaking but are also occasions for sensegiving (Weick, 1995). Some firms try to manage the interpretations of their partners within the sourcing process. For example, a firm might try to convince a partner that a particular deal is good for the partner even if objectively it is not.

Critical theory

Critical theory is a departure from the other theories examined, in that the theory is concerned with actively improving society, as a whole, rather than just understanding or explaining it (Frost, 1980). An important objective of critical theory is the elimination of social domination resulting from economic, political and cultural systems (Orlikowski and Baroudi, 1991). The elimination of social domination is achieved by reconstructing organizational forms and social interactions so that individuals can be freed from alienation and exploitation (Benson, 1977). Whereas the other theoretical lenses provide sourcing insights focused on improving firm profits, the insights derived from critical theory are focused on redefining performance away from a firm perspective and toward a societal perspective. Accordingly, sourcing decisions are viewed as vehicles to improve society. In general terms, when making the sourcing decision, rather than focusing on short-term profitability, a company should compare the benefits to society of the sourcing alternatives and chose the alternative that maximizes societal welfare. Although improvement of the organization's performance is not a key concern of critical theory, businesses have found that actively trying to resolve social problems have energized their own business development (Kanter, 1999).

When sourcing internally, critical theory would suggest that organizations should actively improve society by alleviating gender-, ethnic-, and race-based discrimination when staffing. Further, because the expansion of autonomy in employees' personal and social lives is a goal of critical theory (Alvesson and Willmott, 1992), the firm's relationship with employees should be carefully managed so as to emancipate the employees. When sourcing externally, the choice of providers or alliance partners should be informed by the notion of liberating oppressed groups. It should be further noted that the choice of from whom to buy or with whom to ally is not limited to local concerns because the conceptualization of society is global (Orlikowski and Baroudi, 1991). Thus, goals such as alleviating poverty in lesser-developed countries are worthy goals when considering sourcing alternatives.

Critical theory also has much to say about managing the relationships with suppliers. Power differentials between organizations and their suppliers should not be exploited. Instead, organizations may be called upon to extend loans and long-term contracts and make other seemingly unfavorable concessions to disadvantaged parties to ensure their long-term survival.

Research implications

From a research perspective, we believe the ideas above offer a schema to foster future theory building in sourcing research. By viewing this research area through the lens of ten organizational theories, we have provided a rich and diverse conceptual frame for future research. This conceptual frame goes well beyond simply being "one theory for one future study". Indeed, each of these organizational theories could be utilized as a foundation for a single study or even a series of studies. However, in some cases, multiple theoretical perspectives may be used to enhance possible insights into strategic sourcing questions such as when to make, buy or ally.

For example, a sourcing study that built on both resource-based view and resource dependence theories may provide substantial insights. Using tenets from the resource-based view, resources that are critical to long-term organizational performance could be identified. Resource dependence theory could prescribe the best means for obtaining such resources, and for managing the dependence relationships with supplier firms.

In addition to complementary views among the theoretical bases, many of the theoretical bases may be contradictory. For example, the resource-based view indicates that firms should not outsource commodities that are inherent in capabilities contributing to competitive advantage. Transaction cost economics (TCE) indicates that we should outsource commodities that have lower transaction costs than production costs. So what should a firm do when a commodity is inherent in a core capability but is much more expensive to make than buy? This situation seemingly puts the RBV and TCE at odds with one another. These are just two examples of using competing and/or complementary theory bases that will likely provide significant opportunities to develop strategic sourcing theory.

When future researchers use the "theoretical toolbox" offered by this paper, it is important to note that the research question should always drive the theory choice. There are many interrelated questions that fall under the "umbrella" of strategic sourcing such as when to buy/make, how many and which suppliers, and how to manage the relationship (Benton, 2007). As future research focuses on these and other strategic

sourcing questions, the investigator should utilize the most appropriate theory by "matching" the theory bases' conceptual offerings to the question. Also, the unit of analysis should be considered when choosing from the theoretical toolbox. For example, there have been several calls in the supply literature to move beyond functional, individual firm and dyad analyses to more systemic, holistic understanding of the network of nodes (e.g. Harland *et al.*, 2003; Buhman *et al.*, 2005). As researchers consider these calls in light of strategic sourcing, they may find some of the theoretical bases discussed may be more fruitful than others. For examples, systems theory and network theory may offer the researcher a more holistic theoretical lens to analyze sourcing decisions at the network level of analysis.

Practical implications

From a practical perspective, we believe the paper offers a conceptual frame for managers as they make strategic sourcing decisions. As Kurt Lewin's adage goes, "There is nothing so practical as a good theory". By utilizing well-established organization theories, we believe that we have offered managers ten "good theories" to aid in decision making relative to strategic sourcing. Although empirical investigation should be used to support/extend the conjectures laid forth in this paper, we believe the paper offers a foundation for possible actions by managers. It appears that some companies are following the suggested insights of the theories. For example, Starbucks appears to be adhering to the concepts put forth by critical theory. Starbucks cultivates stable relationships with coffee bean growers by paying premiums, establishing long-term contracts, providing affordable credit, and investing in social projects in coffee growing communities (see www.starbucks.com/csrannualreport). Of course, systematic investigation is needed to scrutinize these anecdotes to determine to what degree these theories are being employed and what benefits are being realized.

Lundberg (2004) maintains that managers, like researchers, also use theories, but employ them as conceptual frames that inform them on what to do and how to do it. Also, these theories allow managers to recognize the current situation's (i.e. how things are) departs from what the conceptual frame prescribes (i.e. how things should be) and perhaps even how to close the gap (Lundberg, 2004). For example, it would be an interesting pursuit to further analyze the theoretical bases put forth in this paper in light of the current versus desired sourcing strategies. In some cases, the theoretical base, such as transaction cost economics, may *describe* current strategies, whereas others, such as network theory, may *prescribe* alternate future strategies. Again, future investigation is necessary to fully explore these issues thus enabling enlightened sourcing decisions.

References

Alvesson, M. and Willmott, H. (1992), "On the idea of emancipation in management and organization studies", *Academy of Management Review*, Vol. 17 No. 3, pp. 432-64.

Ashby, W.R. (1968), "Variety, constraint, and the law of requisite variety", in Buckley, W.F. (Ed.), *Modern Systems Research for the Behavioral Scientist*, Aldine Press, Chicago, IL, pp. 129-36.

Bajari, P. and Tadelis, S. (2001), "Incentives versus transaction costs: a theory of procurement contracts", *The Rand Journal of Economics*, Vol. 32 No. 3, pp. 387-407.

Barney, J. (1991), "Firm resources and sustained competitive advantage", *Journal of Management*, Vol. 17 No. 1, pp. 99-120.

Benson, J.K. (1977), "Organizations: a dialectical view", *Administrative Science Quarterly*, Vol. 22 No. 1, pp. 1-21.

Benton, W.C. Jr (2007), *Purchasing and Supply Management*, McGraw-Hill/Irwin, New York, NY.

Black, J. and Boal, K. (1994), "Strategic resources: traits, configurations, and paths to sustainable competitive advantage", *Strategic Management Journal*, Vol. 15, pp. 131-48.

Boyd, B. (1990), "Corporate linkages and the organizational environment: a test of the resource dependence model", *Strategic Management Journal*, Vol. 11 No. 6, pp. 419-30.

Brown, J.S. and Duguid, P. (1991), "Organizational learning and communities-of-practice: towards a unified view of working, learning and innovation", *Organization Science*, Vol. 2 No. 1, pp. 40-57.

Buhman, C., Kekre, S. and Singhal, J. (2005), "Interdisciplinary and interorganizational research: establishing the science of enterprise networks", *Production and Operations Management*, Vol. 14 No. 4, pp. 493-514.

Casciaro, T. and Piskorsky, M. (2005), "Power imbalance, mutual dependence, and constraint absorption: a closer look at resource dependence theory", *Administrative Science Quarterly*, Vol. 50, pp. 167-99.

Child, J. (1972), "Organizational structure, environment, and performance: the role of strategic choice", *Sociology*, Vol. 6, pp. 1-22.

Combs, J. and Crook, T. (2007), "Sources and consequences of bargaining power in supply chains", *Journal of Operations Management*, Vol. 25, pp. 546-55.

Deephouse, D.L. (1999), "To be different, or to be the same? It's a question (and theory) of strategic balance", *Strategic Management Journal*, Vol. 20, pp. 147-66.

DiMaggio, P.J. and Powell, W.W. (1983), "The iron cage revisited: institutional isomorphism and collective rationality in organizational fields", *American Sociological Review*, Vol. 48 No. 2, pp. 147-60.

Doty, D.H., Glick, W.H. and Huber, G.P. (1993), "Fit, equifinality and organizational effectiveness: a test of two configurational theories", *Academy of Management Journal*, Vol. 36 No. 6, pp. 1196-250.

Eisenhardt, K.M. (1989), "Agency theory: an assessment and review", *Academy of Management Review*, Vol. 14, pp. 57-74.

Frost, P. (1980), "Toward a radical framework for practicing organization science", *Academy of Management Review*, Vol. 5 No. 4, pp. 501-7.

Gimeno, J. and Woo, C.Y. (1996), "Hypercompetition in a multimarket environment: the role for strategic similarity and multimarket contact in competitive de-escalation", *Organization Science*, Vol. 7, pp. 322-41.

Grant, R.M. (1996), "Toward a knowledge-based theory of the firm", *Strategic Management Journal*, Vol. 17, Winter Special Issue, pp. 109-22.

Gulati, R., Nohria, N. and Zaheer, A. (2000), "Strategic networks", *Strategic Management Journal*, Vol. 21, pp. 203-15.

Handfield, R.B. and Melnyk, S.A. (1998), "The scientific theory-building process: a primer using the case of TQM", *Journal of Operations Management*, Vol. 16 No. 4, pp. 322-39.

Harland, C., Brenchley, R. and Walker, H. (2003), "Risk in supply networks", *Journal of Purchasing and Supply Management*, Vol. 9 No. 2, pp. 51-62.

Heider, F. (1946), "Attitudes and cognitive organization", *Journal of Psychology*, Vol. 21, pp. 107-12.

Heider, F. (1958), *The Psychology of Interpersonal Relations*, Wiley, New York, NY.

Hult, G.T., Ketchen, D., Cavusgil, S. and Calantone, R. (2006), "Knowledge as a strategic resource in supply chains", *Journal of Operations Management*, Vol. 24 No. 5, pp. 458-75.

Jennings, D. (2002), "Strategic sourcing: benefits, problems and a contextual model", *Management Decision*, Vol. 40, pp. 26-34.

Jensen, M.C. and Meckling, W.H. (1976), "Theory of the firm: managerial behavior, agency costs and ownership structure", *Journal of Financial Economics*, Vol. 3 No. 4, pp. 305-60.

Kanter, R.M. (1999), "From spare change to real change", *Harvard Business Review*, Vol. 77, pp. 122-34.

Kogut, B. and Zander, U. (1992), "Knowledge of the firm, combinative capabilities, and the replication of technology", *Organization Science*, Vol. 3 No. 3, pp. 383-97.

Krause, D.R., Pagell, M. and Curkovic, S. (2001), "Toward a measure of competitive priorities for purchasing", *Journal of Operations Management*, Vol. 19, pp. 497-512.

Logan, M. (2000), "Using agency theory to design successful outsourcing relationships", *International Journal of Logistics Management*, Vol. 11 No. 2, pp. 21-32.

Lundberg, C.C. (2004), "Is there really nothing so practical as a good theory?", *Business Horizons*, Vol. 47 No. 5, pp. 7-14.

March, J.G. and Olsen, J.P. (1984), "The new institutionalism: organizational factors in political life", *American Political Science Review*, Vol. 78, pp. 734-49.

Medcof, J.W. (2001), "Resource-based strategy and managerial powers", *Strategic Management Journal*, Vol. 22 No. 11, pp. 999-1012.

Mentzer, J.T., Min, S. and Bobbitt, L.M. (2004), "Toward a unified theory of logistics", *International Journal of Physical Distribution & Logistics Management*, Vol. 34 Nos 7/8, pp. 606-27.

Miles, R.E. and Snow, C.C. (1978), *Organizational Strategy, Structure and Process*, McGraw-Hill, New York, NY.

Monczka, R., Trent, R. and Handfield, R. (2005), *Purchasing and Supply Chain Management*, Southwestern Publishing Co., Cincinnati, OH.

Orlikowski, W.J. and Baroudi, J.J. (1991), "Studying information technology in organizations: research approaches and assumptions", *Information Systems Research*, Vol. 2, pp. 1-7.

Pfeffer, J. and Salancik, G.R. (1978), *The External Control of Organizations*, Harper & Row, New York, NY.

Poppo, L. and Zenger, T. (1998), "Testing alternative theories of the firm: transaction cost, knowledge-based, and measurement explanations for make-or-buy decisions in information services", *Strategic Management Journal*, Vol. 19, pp. 853-77.

Poppo, L. and Zenger, T. (2002), "Do formal contracts and relational governance function as substitutes or complements?", *Strategic Management Journal*, Vol. 23, pp. 707-25.

Porter, M.E. (1996), "What is strategy?", *Harvard Business Review*, Vol. 74 No. 6, pp. 61-78.

Rosetti, C. and Choi, T.Y. (2005), "On the dark side of strategic sourcing: experiences from the aerospace industry", *Academy of Management Executive*, Vol. 19, pp. 46-60.

Rubin, P.H. (1990), *Managing Business Transactions: Controlling the Cost of Coordinating, Communicating, and Decision Making*, The Free Press, New York, NY.

Scott, W.R. (1995), *Institutions and Organizations*, Sage Publications, Thousand Oaks, CA.

Scott, W.R. (2003), *Organizations: Rational, Natural, and Open Systems*, Prentice-Hall, Englewood Cliffs, NJ.

Simon, H.A. (1955), "A behavioral model of rational choice", *Quarterly Journal of Economics*, Vol. 69 No. 1, pp. 99-118.

Smith, K.G., Guthrie, T.R. and Chen, M. (1989), "Strategy, size and performance", *Organization Studies*, Vol. 10, pp. 63-81.

Teece, D., Pisano, G. and Shuen, A. (1997), "Dynamic capabilities and strategic management", *Strategic Management Journal*, Vol. 18 No. 7, pp. 509-33.

Thompson, J.D. (1967), *Organizations in Action*, McGraw-Hill, New York, NY.

Thorelli, H.B. (1986), "Networks: between markets and hierarchies", *Strategic Management Journal*, Vol. 7, pp. 37-51.

von Bertalanffy, L. (1951), "General systems theory: a new approach to unity of science", *Human Biology*, Vol. 3, pp. 23-9.

Weick, K.E. (1995), *Sensemaking in Organizations*, Sage Publications, Thousand Oaks, CA.

Weick, K.E., Sutcliffe, K.M. and Obstfeld, D. (2005), "Organizing and the process of sensemaking", *Organization Science*, Vol. 16 No. 4, pp. 409-21.

Welch, J.A. and Nayak, P.R. (1992), "Strategic sourcing: a progressive approach to the make-or-buy decision", *Academy of Management Executive*, Vol. 6 No. 1, pp. 23-31.

Wernerfelt, B. (1984), "A resource-based view of the firm", *Strategic Management Journal*, Vol. 5, pp. 171-80.

Williamson, O.E. (1975), *Markets and Hierarchies: Analysis and Anti-Trust Implications*, The Free Press, New York, NY.

Williamson, O.E. (1979), "Transaction-cost economics: the governance of contractual relationships", *Journal of Law and Economics*, Vol. 22, pp. 233-61.

Zsidisin, G., Ellram, L., Carter, J. and Cavinato, J. (2004), "An analysis of supply chain assessment techniques", *International Journal of Physical Distribution & Logistics Management*, Vol. 34 No. 5, pp. 397-413.