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ABSTRACT

Existing research on outsourcing uses several different theoretical perspectives to study outsourcing, including the resource based view, transaction costs analysis, contingency theory and agency theory. While studying a phenomenon from different viewpoints increases our understanding on the subject, we need a consistent theoretical framework to consolidate the ideas generated in the field, compare and contrast previous results, and build on for future analysis. In this paper, we integrate the concepts of these four theoretical viewpoints into a unified sourcing framework that encompasses both the antecedents to outsourcing as well as the consequences of outsourcing. The antecedents to outsourcing include environmental perceptions and resource perceptions. The consequences of outsourcing include greater environmental fit, higher rents, lower production costs and higher agency costs.

Keywords

Outsourcing, resource-based view, transaction cost, contingency theory, agency theory.

INTRODUCTION

Outsourcing has received increasing attention among researchers over the last decade. The field is still in an early stage, and a multitude of theoretical frameworks have been used to study it. These include the resource based view, transaction cost economics (TCE), contingency theory, and agency theory. Although these multiple viewpoints have increased our understanding of the subject, a study that uses only one of these viewpoints may provide limited understanding as it ignores the complexities of the others. A broader framework integrating these different perspectives may enable us to analyze outsourcing from a richer perspective, compare and contrast the results of previous studies, and provide a foundation for cumulative future research.

Outsourcing may be defined as the strategy of substitution or abstention of the internalization of an activity (Gilley and Rasheed, 2000). This definition differentiates outsourcing from procurement, the usage of external sources for good or services. Several business disciplines have studied the antecedents to the outsourcing decision using various theories, mainly from the fields of organization theory, strategic management and economics. In addition, the outcomes of outsourcing are also an important area of research that has been studied by different disciplines using different viewpoints. This paper aims at integrating the resource based view, transaction cost economics (TCE), contingency theory, and agency theory into a single conceptual framework. Through this framework, we see the overlaps and omissions between the theories. We also get a unified view of both the antecedents and outcomes of outsourcing. The antecedents to outsourcing include environmental perceptions and resource perceptions. The consequences of outsourcing include greater environmental fit, higher rents, lower production costs and increased agency costs.

OVERVIEW OF THE THEORIES

In this section, we provide a brief overview of the four theories in terms of their general propositions. The four theories we consider are the resource based view, transaction costs economics (TCE), contingency theory and agency theory.

Resource-Based View

The resource based view is based on the concept of productive resources. In this strategic theory, the firm is viewed as a collection of physical and intangible resources that enable it to compete with other firms. It makes the assumptions of resource heterogeneity and resource immobility (Barney, 1991). Resource heterogeneity is the assumption that the resources that firms possess and the strategies they pursue are idiosyncratic to the firm. Resource immobility is the assumption that all resources are not perfectly mobile, that is, all resources may not be bought and sold in open markets to create resource homogeneity between firms. Competitive advantage is gained through resources that are valuable, rare, imperfectly imitable, and without strategically equivalent substitutes (Barney, 1991). A conceptual understanding of these constructs is essential to understand the relationship of this theory to other theories. Value refers to the ability of a firm attribute to exploit specific opportunities and counter threats in the environment. Only when a firm attribute possesses value does it become a resource. To provide sustained competitive advantage, a resource must also have the remaining three qualities. The resource must be rare among the firm's present as well as potential competitors. As long as the number of firms possessing this resource is less than the number of firms needed to generate perfect competition, the resource is adequately rare to potentially create competitive advantage. A resource may be imperfectly imitable due to any of the following three factors: it is dependent on unique historical settings; its relation to competitive advantage is causally ambiguous; the resource is socially complex. Non-substitutability indicates that there are no strategically equivalent substitutes that are valuable but are either imitable or not rare. If potential competitors can easily acquire or imitate these substitutes for the resource, then the resource does not provide a means for sustained competitive advantage.

Transaction Cost Economics

Transaction cost economics (TCE) looks at firms as avoiders of market costs (Conner, 1991) by analyzing the relative efficiency of the market in comparison to internalization. This theory was pioneered by Coase in 1952 who predicted that "a firm will tend to expand until the costs of organizing an extra transaction within the firm become equal to the costs of carrying out the same transaction by means of exchange on the open market or the costs of organizing in another firm" (Conner, 1991). If the market is perfectly competitive, outsourcing may be more efficient than internalization. However, these conditions may not always exist. Williamson expanded on Coase's framework by identifying specific instances where firms can avoid market costs by internalizing. This approach has two behavioral assumptions that pay more attention to "human nature as we know it" (Williamson, 1981) - bounded rationality and opportunism. Bounded rationality recognizes that agents possess limited abilities in formulating and solving complex problems and in processing information, and therefore they remain "intendedly rational, but only limitedly so" (Williamson, 1981). The agents are also simultaneously subject to opportunism, or self-serving with guile. All transactions in a market are associated with production costs, as well as additional costs due to incomplete contracts caused to bounded rationality and the risk of opportunistic behavior. These costs depend on the asset specificity, small numbers bargaining, and imperfect information (Conner, 1991; Ruekert, Walker and Roering, 1985; Williamson, 1981). Asset specificity refers to the amount of dependence an asset has on an input or producer to which it is specific. A resource that is highly asset specific requires highly specialized or idiosyncratic assets. This can arise in one or more of three ways; site specificity, physical asset specificity and human asset specificity (Williamson, 1981). This puts the producer at a higher risk as the assets are so highly specific that they cannot be easily transferred elsewhere. This can lead to a lesser number of suppliers, and a potential for noncompetitive opportunistic behavior by the suppliers. This condition creates small numbers bargaining, as a replacement for the asset cannot be found without cost. Imperfect information is the condition that it is difficult for the buyer to assess the performance of the vendor, and a complete contingent contract is not possible, leaving open risk of opportunistic behavior by the latter. Transaction cost economics assumes that there is no danger of opportunism within the firm, and a firm therefore exists to decrease opportunistic potential. It predicts that when the conditions of asset specificity, small numbers of transactions, and imperfect information exist simultaneously, a firm would internalize the production of this asset. When these three conditions do not exist simultaneously, the opportunistic potential of the vendor is not significant, and market transactions will dominate instead (Conner, 1991). Under the conditions of low asset specificity, frequent transactions, and more complete information, the vendor may achieve economies of scale by outsourcing to several firms requiring the same asset or resource. This would result in a decrease in production cost for the buyer.

Contingency Theory

Contingency theory is probably the most studied but least defined of these four theories. Most propositions in organizational research may be considered a contingency theory (Drazin and Van de Ven, 1985), as long as they specify a relationship that holds during certain conditions. Structural contingency theories may therefore, vary greatly in terms of their constructs and predictions. However, all of them deal with the concept of 'fit' between organizational variables and environmental variables. However this concept of fit may vary greatly as well (Drazin and Van de Ven, 1985), and may be construed to mean moderation, mediation, matching, gestalts, profile deviation, and covariation (Venkatraman, 1989).

Agency Theory

Agency theory deals with the principal agent problem, in which the principal delegates an activity to an agent. Principals and agents are assumed to be self-interested, rational and risk-averse (Eisenhardt, 1988). Agency theory deals with two problems. The first is the agency problem, in which (a) the agent's goals do not always meet with the principal's, and (b) it is difficult or expensive for the principal to verify or control the agent's behavior. The second problem is that of risk-sharing. Since both the agent and the principal are risk-averse, they may prefer different approaches towards risk-sharing (Eisenhardt, 1989). This results in increased agency costs for developing monitoring and enforcing contracts. These costs may be predicted by outcome uncertainty, span of control, and programmability (Eisenhardt, 1988). Agency costs may decrease over time as principals and agents develop better relations through repeated transactions (Gong, 2003).

EXTENDING THE VIEWPOINTS TO OUTSOURCING

In this section, we extend the theoretical viewpoints to compare and contrast the theories as applied to outsourcing.

Transaction Cost Economics

From the above, we note that only TCE addresses outsourcing directly, as it deals primarily with firm boundaries (Williamson, 1981). TCE deals with both the antecedents as well as the outcomes of outsourcing. The antecedents to outsourcing according to TCE are asset specificity, small numbers bargaining, and imperfect information. All three of these have a negative relationship to outsourcing, i.e., higher values of these constructs results in lower outsourcing activity. In terms of the outcomes of outsourcing, increase in outsourcing will result in lower production costs of the market, but increased coordination costs of sourcing the good from the market.

Resource-Based View

The resource based view does not address the issue of firm boundaries directly. Silverman (1998) posits that the resource based view implies that a firm should possess all valuable resources within its boundaries, and therefore has underemphasized a firm's seeking competitive advantage through outsourcing rather than by expanding organizational boundaries. However, since the theory does not explicitly make this suggestion, it can be easily extended to include outsourcing.

On the antecedents to outsourcing, studies using this theory assume that a firm is not able to internalize more than a few resources (Gilley, McGee, and Rasheed, 2004; Gilley, Rasheed, and Al Shammari, 2004). The firm then decides between all the resources they need by comparing the attributes of the resources with each other. Resources with greater value and rareness and lesser imitability and substitutability are internalized while the other resources are outsourced. However, the resource based view may also guide the decision even in a situation in which a firm does have the luxury of internalizing all resources. The decision to outsource is a decision to replace a resource that the firm possesses with a resource in the external environment. The resource acquired should therefore be of greater value and rareness and of lesser imitability and substitutability than the resource previously possessed by the firm. Hence, a comparison of the resources of the firm with the resources of vendor firms is more crucial in deciding which resources to outsource than comparing the firms resources to each other. From a purely resource-based perspective, any resource that provides a greater competitive advantage than a substitute resource that can potentially be acquired through outsourcing should be internalized, while other resources should be outsourced. This decision, however, is affected by other factors, as predicted by economic theories. It may be noted here that the fact that a resource may be outsourced implies the availability of substitutes, which could possibly reduce the resource's potential for sustained competitive advantage. The resource may still possess this potential if the substitute resource is rare and imperfectly imitable. The resource based view also makes another prediction from its perspective as a unique combination of resources: a resource may be more productive in combination with certain other resources (Conner, 1991). Therefore, a firm has a reason to internalize when an equivalent resource is available in the environment. If the resource can create greater value in combination with the firms other resources than if it was outsourced, the resource should be internalized.

In terms of the outcomes of outsourcing, the resource should be able to provide the ability to generate above normal rents. Obtaining above normal returns requires that the outsourced product is distinctive or available at a lower cost than identical products. Sustained competitive advantage may not be possible through outsourcing according to the resource based view as this requires the resource to be rare, imperfectly imitable and non-substitutable. However, it may be achieved a unique combination between the outsourced resource and other internal firm resources are possible.

Contingency Theory

Under this view, it is suggested that organizations that face a high degree of uncertainty in their environments, for example due to fluctuations in rents and/or prices, may seek to ensure some stability by entering into outsourcing contracts (Koberg and Ungson, 1987). This framework may be understood in context of resources with regards to outsourcing. An organization has selected, acquired and combined a set of resources that were available in the environment. However, these resources may not be sufficient for it to meet its goals. This causes the organization to perceive a gap between its present capabilities and its intended capabilities. This gap may be also caused by the dynamics of the external environment. The changing environment may expose new opportunities and threats to the firm. This again causes the perception of a gap between the present resources of a firm and those needed to exploit opportunities and counter threats. The organization seeks to achieve a fit between the resources of the firm and the competitive environment by acquiring the resources in the gap either through outsourcing or internalizing. Contingency theory would predict the decision to be a result of the fit between environmental and firm-level factors. If the environment is uncertain, the firm cannot predict whether the resource would be needed in the future. The resource may lose value and would no longer be able to generate rents, or imitations or substitutes of the resource may be available that may have higher value. In such a situation, the firm may decide that greater flexibility may be achieved through acquiring the resource through short-term outsourcing rather than by internalizing through heavy investments.

Therefore, from the perspective of contingency theory environmental uncertainty or dynamism is an antecedent to outsourcing. We posit that greater environmental uncertainty will lead to an increasing in outsourcing. As a consequence of outsourcing, the contingency theory implies greater organization-environment fit.

Agency Theory

Agency theory has several areas of overlap with transaction cost economics. It includes the assumption of opportunistic behavior through the belief that the agent will not behave in the principal's best interests. It also includes the assumption of bounded rationality through the belief that it is not possible to write a complete contract. There is also content overlap between the agency theory constructs of outcome uncertainty, span of control and programmability, and the transaction cost construct of imperfect information. Imperfect information is the condition that it is difficult for the principal to assess the performance of the agent, and a complete contingent contract is not possible, leaving open risk of opportunistic behavior by the agent. This would include ability to assess that the desired outcome would occur (outcome uncertainty), ability to monitor and control the agent's behavior (span of control) and the ability to write a complete contingent contract (programmability). From the perspective of agency theory, these are the main antecedents of outsourcing. The lower the outcome uncertainty, the higher the span of control and the higher the programmability, the greater the likelihood to engage in outsourcing.

An increase in the transaction cost economics constructs of asset specificity, small numbers bargaining, and imperfect information, may also result in higher risk of opportunistic behavior by the agent, and therefore create increased costs for the principal to negotiate, monitor, and enforce a contract with the agent. This includes the costs predicted by agency theory, the costs of the agency problem and the costs associated with risk sharing (Schilling and Steensma, 2002).These are the primary outcomes of outsourcing as predicted by agency theory.

INTEGRATING THE FRAMEWORKS

From Table 1, we see the shortcomings of the resource based view (RBV) and transaction cost economics (TCE) in comparison with each other. The resource based view's major failure is that it overlooks opportunism. Transaction cost economics major drawback is that it does not consider competitive advantage when the potential for opportunism is not significant.

Empirical research on the antecedents of outsourcing has demonstrated that strategic theories and economic theories may be complementary in predicting the sourcing behavior. Schilling and Steensma (2002) find that the resource based view is helpful in explaining which resources the firms pursue, while transaction cost economics predict whether the firm would outsource the production of the resource to the firm instead of directly acquiring the producer of the resource. While juxtaposing the research based view with transaction cost economics, we see that the qualities that give a resource potential for sustained competitive advantage are similar to the qualities that may increase the risk of opportunism. Firms seek to create competitive advantage by pursuing resources that are valuable, rare, imperfectly inimitable and non-substitutable, as predicted by the resource based view. Transaction costs are increased due to bounded rationality and opportunism created by asset specificity, small numbers bargaining and imperfect information. The constructs between the two theories are not mutually exclusive. A resource that is rare (RBV) creates supplier power of small numbers bargaining (TCE). This condition is further exacerbated if the resource is also imperfectly imitable and non-substitutable. If this resource is outsourced, the opportunistic potential for the vendor is so high, that any sustained competitive advantage may be easily lost. Asset specificity is a complementary construct. If a resource being outsourced is highly asset specific, it creates a potential for opportunistic behavior by the buyer and the vendor is forced to increase transaction costs to cover the risk involved. Hence a resource that is highly asset-specific, rare, imperfectly imitable, and non-substitutable is not a rational candidate for outsourcing. This resource is preferably internalized by the firm. This conclusion is also reached empirically by Schilling and Steensma (2002), who posit that the potential for opportunism, not the potential for competitive advantage, heavily influences the firm's decision to outsource the resource or acquire the producer of the resource.

	Resource Based View	**Transaction Cost Economics**	**Contingency theory**	**Agency theory**	**Sourcing Framework**
Antecedents to Outsourcing					
Perceptions of Environment			Environmental Uncertainty / Dynamism		Environmental Dynamism
	• Rare • Imperfect imitability • Non-substitutability	Small numbers bargaining			Small numbers bargaining
Perceptions of resource	Value				Relative value of external asset vis-à-vis internal asset
		Asset Specificity			Asset specificity
		Imperfect information		• Outcome uncertainty • Span control • Programmability	Performance assessment uncertainty
Outcomes of Outsourcing	Rents				Rents
		Production Cost			Production costs
			Environmental fit		Environmental fit
		Coordination Cost		Agency costs	Agency costs

Table 1: The Sourcing Framework

THE SOURCING FRAMEWORK

By integrating these theories, we propose a sourcing framework (Figure 1). The firm is a collection of selectively acquired resources from the external environment. The firm continually assesses its external environment and attempts to meet potential opportunities and threats by either improving present resources, producing additional resources, or acquiring resources through transactions with external agencies. Choosing to transact with external agents may realize benefits of economies of scale and flexibility, but may come at the cost of managing potential opportunistic behavior through negotiating, maintaining and enforcing contracts.

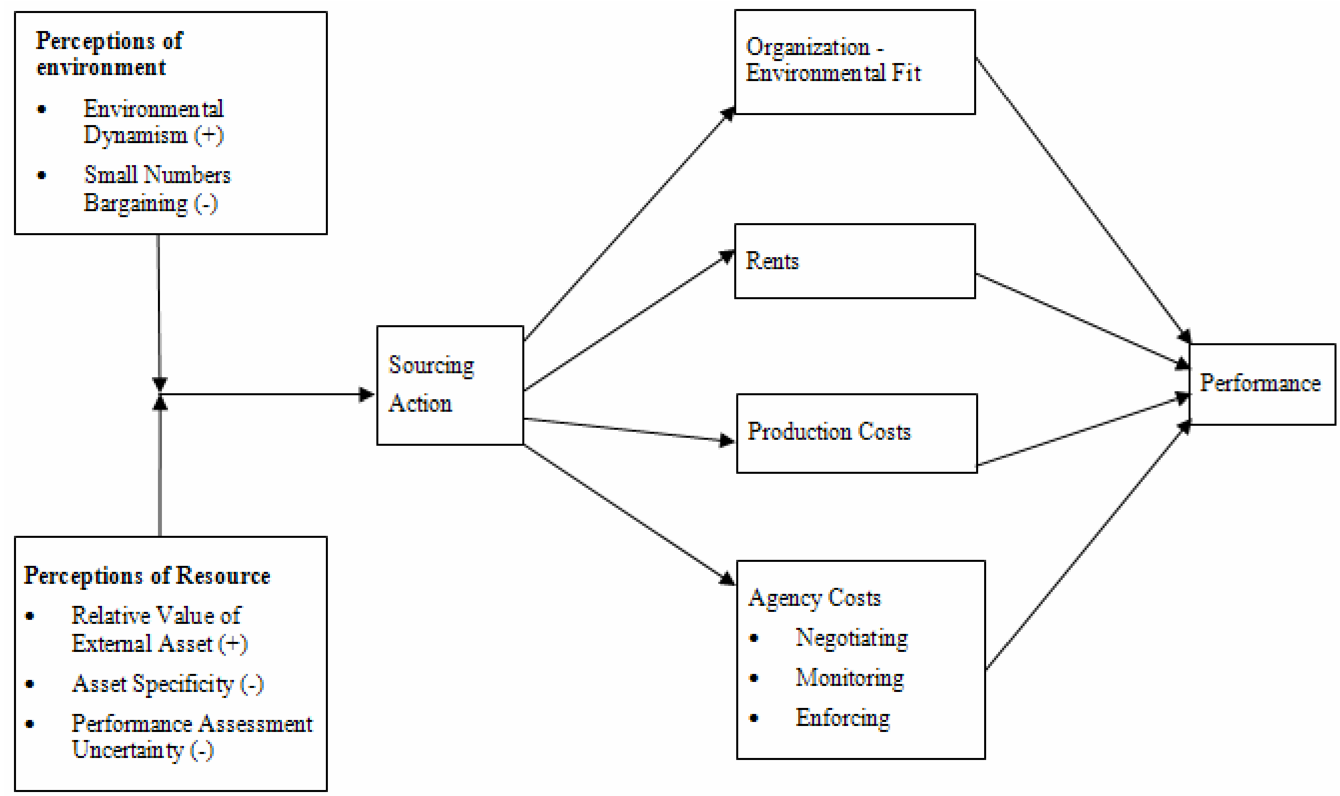

Figure 1. The Sourcing Model

Antecedents to Outsourcing

The antecedents to the decision to outsource or to internalize the production of a resource are based on perceptions of the environment and perceptions of the resource.

Perceptions of the Environment

The perceptions of the environment include the constructs of environmental dynamism and small numbers bargaining. Environmental dynamism, as used in the contingency theory, is the condition of uncertainty that the firm might have a need for the resource in the future. A highly dynamic environment would mean that the resource in question may not possess the same value, i.e. it may not be able to meet future opportunities or threats, there may be resource may become perfectly mobile, it may be imitated, or there may be an availability of substitutes. Environmental dynamism may make the firm decide to outsource the resource through a short term contract, to give itself flexibility to discard or substitute the resource or the provider in the future. Small numbers bargaining, as used in transaction cost economics, is the potential for vendor opportunism created by resources that are rare, imperfectly imitable, and non-substitutable. If this condition exists in the environment, the firm may decide to internalize the production of the resource.

Perceptions of the Resource

Perceptions of the resource include relative value, asset specificity, and performance assessment. Value is the potential of a resource to provide competitive advantage through outsourcing according to the resource based view after removing the potential for opportunism (rareness, imperfect imitability, and non-substitutability cause small numbers bargaining) as predicted by the transaction cost theory. Relative value is the difference between the value provided by a resource if it is produced internally as compared to a resource that is outsourced. This construct takes into account the possibility a resource may be more productive in combination with other resources. This potential of a resource to provide competitive advantage in the absence of opportunism is as predicted by the resource-based view but overlooked by transaction cost economics

(Conner, 1991). Asset specificity here is adapted from transaction cost economics, and includes the potential for opportunistic behavior by the buyer. Performance assessment as used here is the imperfect information construct from transaction cost economics and includes the outcome uncertainty, span of control, and programmability constructs from agency theory. The greater the ability of the principal to assess the performance of the agent, the higher the potential for outsourcing the resource.

Outcomes of Outsourcing

The outcome of the higher outsourcing activity are lower production costs, as predicted by TCE, higher agency costs as predicted by TCE and the agency theory, above normal rents, as predicted by the RBV, and increased organizational-environment fit, as predicted by the contingency theory. These mediating variables ultimately affect the dependent variable of firm performance.

Production Costs

Costs advantages are usually the primary reason cited by organizations that outsource. This is congruent with the predictions of TCE. By switching from internal production, a firm is able to avail of the lower production costs that the market is able to provide. Internal production is more expensive due to internal inefficiencies, moving to a market through outsourcing overcomes these inefficiencies. However, as both agency theory and TCE acknowledge, coordination costs or agency costs increase while switching to market procurement.

Agency Costs

Agency costs are present in any principle agent relationship. Agency theory may seem to indicate that it is always better to avoid this relationship through internal production. Agency costs include the cost of searching for vendors, the costs of drawing up contracts, and costs of monitoring the agents' behavior, and the costs of enforcing the contract in case the agent behaves opportunistically. This increase in agency costs may take away any advantage that production costs may offer.

Rents

The concept of rents is central to the RBV. The value of a resource is reflected in its ability to provide rent, or the return on the investment in the resource. It may be possible that an outcome of outsourcing is that the outsourced resource is much more valuable than the resource that was previously being produced internally. In addition, the RBV suggests that some outsourced resources may combine with other internal resources to provide greater value. Here, the RBV provides important insights into possibilities that TCE and agency theory overlook.

Organization-Environment Fit

Organization-environment fir is an outcome predicted by contingency theory that is overlooked by the other viewpoints. One of the reasons to outsource may be that the environment is too dynamic for the firm to maintain an investment in a particular resource. For example, in the case of Information Technology (IT), the average firm may not be able to keep up with the pace of rapid technological change. In this case, by outsourcing, firms may be able to avail of the dynamic capabilities of IT vendor organizations. If a vendor firm is unable to keep with the pace of technological change, the outsourcing company has the flexibility to switch to another outsourcing vendor. By not internalizing the IT functions, an organization may be able to avail of technological advances as they become available without the associated steep investments with unsure returns, and the learning curves required to internalize the function. This added flexibility and adaptability may be a major benefit of outsourcing that the other theoretical perspectives do not focus on.

CONCLUSION

Outsourcing has been studied from a variety of theoretical perspectives including the resource based view, transaction cost economics, contingency theory and agency theory. In this paper, we analyze how these four theories extend to outsourcing, and we make the following contributions. We identify the strengths and weaknesses of each viewpoint in the context of outsourcing. From this, we see that each viewpoint provides only a partial understanding. We extend each theory to identify the specific predictions each makes about the antecedents and outcomes of outsourcing. Through a comparison of the overlap between these constructs, we arrive at a unified framework for studying outsourcing. The antecedents to outsourcing are the perceptions of the environment and the perceptions of the resource. Perceptions of the environment include environmental dynamism, and small numbers bargaining. Perceptions of the resource include relative value of the internal asset vis-à-vis the external asset, asset specificity, and performance assessment uncertainty. Outcomes of outsourcing include greater environmental fit, increased rents, lower production costs, and higher agency costs.

This framework makes valuable contributions to practice. Several managers who are considering outsourcing may be unsure of which resources to outsource, and may be looking at cost considerations alone. We provide a valuable guide in making this decision. The outsourcing decision needs to look at more than cost alone. It needs to consider environmental factors such as dynamism and small numbers bargaining. In addition, the managers need to assess the value of the external resource vis-à-vis their internal resource, the asset specificity of the resource, and whether they will be able to assess the performance of the firm they outsource to. In addition, when monitoring their outsourcing activity, they may be able to get a more holistic picture by looking at combinative capabilities and environmental fit rather than on cost alone.

We make important contributions to research as well. By juxtaposing the varied theoretical viewpoints, we see that each provides us with only a limited understanding of the complexities of outsourcing. With the unified sourcing framework, we are able to get a more holistic view of outsourcing. The potential added explanatory power may be the primary contribution of this paper. Future research will need to assess the applicability of the framework in this regard.

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