



# WHAT SOURCING CHANNEL IS RIGHT FOR YOU?

When should you use a reverse auction? When should you use a third-party integrator? Do all your purchases need to go through a strategic sourcing process? Effective supply management depends on selecting not only the right product or service but also the best way to buy those products or services.

Companies need a sound method for deciding which sourcing channel is right for which purchase.

Companies today face a variety of sourcing channels designed to help them reduce their purchased cost of materials and services. Reverse auctions, exchanges, third-party integrators, and procurement-card spot buys have all been heavily touted as the next best practice in supply chain management. But increasingly, these new channels have come under fire for causing strained relationships with suppliers, greater liability for the buying company, and deteriorating supplier performance.

Amidst this confusion, however, one thing has become clear: The biggest mistake supply chain managers can make is to use any single channel in the same way for all commodity-sourcing situations. Instead, they need to take a portfolio approach that considers market conditions and determines when it makes sense to adopt different sourcing approaches for different commodities. For any such effort to succeed, however, the channel decision must be made within the context of the company's overall strategic sourcing process (SSP). In this article, we discuss the strategic sourcing process and portfolio analysis. We also identify where and when it makes sense to use these channels based on a consideration of key operating factors.

### Strategic Sourcing and the Portfolio Matrix

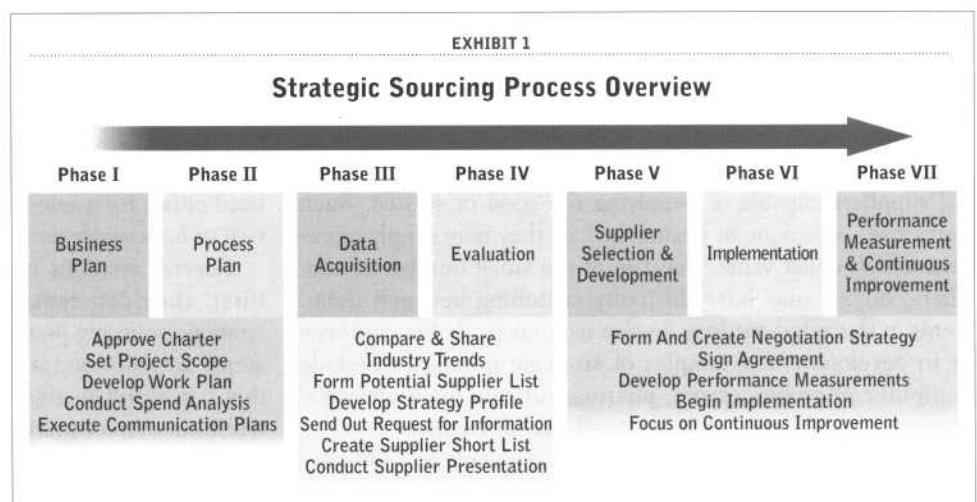
The channel-selection decision must be part of the broader strategic sourcing process—that is, the systematic structured approach to supplier evaluation, selection, and development. This process can be quite time-consuming, as it requires that a sourcing team conduct a series of focused research and analysis steps. Exhibit 1 shows an example of this process.

Early in the strategic sourcing process (around phase III or IV), the company's sourcing team should begin to identify the supply market characteristics associated with the commodity under consideration. This will provide a crucial foundation for the sourcing-channel decision. Market characteristics include such things as the value of the commodity to the buyer and the number of capable suppliers. The team may wish to apply a portfolio matrix, such as the one in Exhibit 2, to understand the nature of the company's spend and to map a strategy accordingly. As shown in the exhibit, the premise of such a portfolio analysis is that every purchase or family of purchases can be

classified into one of four categories or quadrants: (1) acquisition, (2) multiple, (3) leverage, and (4) strategic.<sup>1</sup> Further, certain categories of purchases are better suited to certain channel strategies, based on their characteristics.

**Acquisition Quadrant.** Acquisition items typically have a lower value and fewer capable suppliers within a region. Items that fall into this category include office supplies; maintenance, repair, and operating (MRO) supplies; and other standard items that users often need on short notice. Because many acquisition items have standardized quality and technology requirements, the switching costs of moving from one supplier to another are low. However, while other suppliers conceivably might be able to supply the item, the cost to search for and to compare supply alternatives often outweighs the item's value. Although these items generally represent relatively low total dollars, they often consume a disproportionate amount of time to acquire. For these items, then, the emphasis should be on standardization and automated ordering. Users should be allowed to purchase very low dollar-value items through a "spot buy," which may involve using a procurement card.

**Multiple Quadrant.** The value of purchases in this quadrant is still low to medium, but there are a greater number of suppliers capable of providing the product or service. The technology requirements for these items are relatively standard and widely available. Switching costs are still relatively low, but there are more potential suppliers than in the acquisition quadrant. Purchasing, therefore, should focus on price analysis as the primary tool for reducing costs. Price analysis effectively means "shopping around for the best deal" by sending out requests for bids to suppliers and accepting the most competitive bid. Bidding can be an effective strategy for standard items with many available sources of supply. Examples of such items are personal



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computers, office furniture, and steel castings and sheeting.

**Leverage Quadrant.** Items or services in this quadrant have a large number of capable suppliers with medium to high annual expenditure. Furthermore, they are often purchased across the entire organization. Steel and corrugated packaging are good examples of commodities that belong in this category. By combining the requirements of different units, purchasing can effectively negotiate a better deal for such items with a few select suppliers.

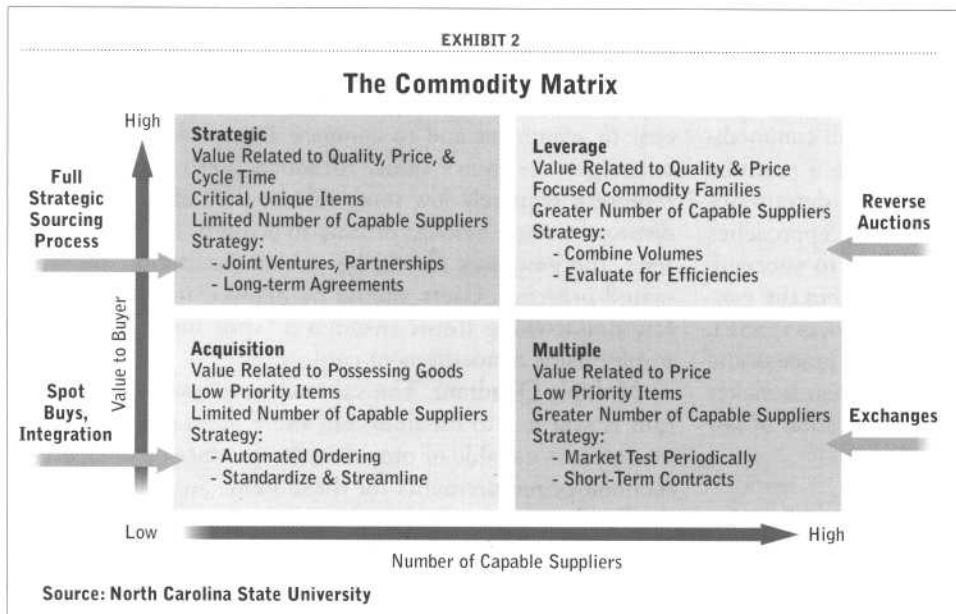
Consolidating purchases and reducing the supply base can

### Alternatives to the Strategic Sourcing Process

For all of the four major purchasing categories, the sourcing team should use at least some parts of the strategic sourcing process illustrated in Exhibit 1. Applying the full strategic sourcing process, however, is time-consuming. It usually requires painstaking planning, project management, and data acquisition. John Deere's sourcing process, for example, can take from nine to 18 months. Furthermore, strategic sourcing continues to require close monitoring over time.

This lengthy process is necessary and beneficial for some crucial commodities, such as high-value items where developing strategic relations with suppliers is essential. The full process also should be used when there is a significant opportunity to reduce costs through leveraging purchases across the company or supply chain.

Because the full process requires a significant amount of time to implement, however, it is not recommended for every commodity or buying situation. In most cases, some of the sourcing steps can be consolidated, automated, or eliminated by applying one of the four alternative sourcing strategy channels: reverse auctions, ex-



yield an immediate and significant cost reduction. The selected suppliers also benefit because their average fixed costs decline as fixed costs are allocated over larger volumes. Variable costs decline, too, because of improved productivity over a higher volume of product after consolidation. Purchasing must ensure that the selected suppliers have the capacity to handle additional business and that the quality of the product or service provided either improves or, at the least, does not suffer.

**Strategic Quadrant.** The fourth quadrant includes items that are essential to the company's success and have few critical suppliers capable of supplying the good or service. Such items may be unique or customized, or they may simply represent a high-dollar value. Because of the small number of suppliers, buyers may have difficulty switching between them. Items in this quadrant may involve technology that is unproven or in development. Examples of strategic purchases include computer microprocessors, pharmaceuticals, new chemical compounds, catalytic converters, and aircraft engines.

By properly classifying purchases into one of the four categories, the sourcing team can better comprehend the strategic importance of the item or commodity family to the business. This understanding is an essential prerequisite to identifying the most appropriate sourcing channels for the product portfolio.

changes, spot buys, or integrators. Each of these sourcing strategies is described below.

#### 1. Reverse Auctions

The goal of reverse auctions is to bring buyers and sellers together to expose prices in a dynamic and real-time basis. Instead of a traditional auction where buyers bid on an item, a reverse auction involves having *suppliers* bid online on a clearly specified buyer requirement. Bidding continues until a pre-established bidding period ends or until no seller is willing to bid any lower, whichever comes first. Reverse auctions can be used either for a one-time purchase of a specific product/service or for a yearly contract for products and services.

Reverse auctions have a number of important advantages. First, they can reduce the leadtime associated with the strategic sourcing process by eliminating some of the sourcing steps. In addition, auctions establish real-time competition that can result in significant cost savings. This also provides real-time market-pricing data, which can be especially useful in volatile markets. Further, reverse auctions can identify disparities in the market, in terms of suppliers with excess capacity that are willing to sell their products at a lower profit margin than their competitors. As such, they are an effective market-testing tool and are best used in the leverage quadrant shown in Exhibit 2. Auctions also can provide automated

data on pricing, products, and sellers, while reducing the possibility of “back-door selling” and sales calls from unqualified vendors.

But, just as companies should not use the full strategic sourcing process with all commodity types in all situations, companies should not apply reverse auctions to all of their purchase-family spend areas. To illustrate, one large pharmaceutical company decided to use reverse auctions for all of its major spend items. While the reverse auctions produced savings the first time around, the company is now trying to use them again on those same suppliers. It is discovering, however, that it cannot squeeze any more reductions from its suppliers. In general, the second round of auctions was not as productive as the first for the company’s buyers, unless there had been a major shift in market dynamics. For most of the pharmaceutical company’s spend items there hadn’t been a shift, and the return on the second

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round of reverse auctions was a mere fraction of what it had been on the first. Even worse, these returns often didn’t cover the cost of the overall reverse auction process. Additionally, performance from some suppliers has been slipping. As a result, this organization is beginning to question whether reverse auctions are still a valid tool for achieving its strategic purchasing objectives.

Reverse auctions have other drawbacks as well. Specifically, they often do not address issues such as the total cost of ownership. Further, they can be particularly risky when such factors as precise specifications or tight tolerances on engineered custom parts are involved. The following real-life example illustrates this point.

A buyer put out a bid request for a stretch film product used in packaging, but it failed to include detailed specifications. The incumbent supplier responded and beat out seven other manufacturers. One company, however, came in lower: the incumbent supplier’s own vendor, which got the bid. Because the buyer did not provide detailed specifications, however, the low-bid vendor did not understand how the product would be used. As a result, the stretch film does not run correctly in the buyer’s machines and is creating waste. Thus, although the new vendor’s bid was lower, the buying company is now using 300 percent more product. In effect, the original supplier not only had been providing the film but also had been helping the buyer use it properly in their machines. Now, instead of using 250,000 pounds of film per year, the buyer is using 1 million pounds at a substantially higher total cost.

Reverse auctions also are less useful in situations when demand exceeds supply, commodities are in an up-cycle, the

industry is experiencing reduced capacity, or suppliers are not openly competing or are acting in a “cartel-like” manner. Finally, surveys indicate that suppliers feel differently about reverse auctions than buyers (see sidebar on page 66.) These different viewpoints can put a strain on supplier-buyer relationships. Such a strain is detrimental in cases where good relations are crucial—particularly for specialized purchases.

### 2. Exchanges

Exchanges automate the transaction process by linking buyers and sellers electronically. They are arranged by a group of companies (not necessarily within the same industry) for purchase of a similarly pooled set of commodities. By combining or pooling purchases, organizations benefit from leveraged purchases, allowing for economies of scale and cost savings. This sourcing option is especially attractive for commodities



that do not require a high degree of specifications (such as those often found in the multiple quadrant of Exhibit 2). It’s also useful in situations where group-buying power may encourage negotiations and price reductions. Exchanges can be either public,

with little or no supplier screening, or private, with prequalified and trusted suppliers.

One of the main advantages of exchanges is that they enable buyers to reach more suppliers and suppliers to reach more buyers. Furthermore, private exchanges can be a productive tool for maintaining ongoing supplier relationships. Unfortunately, for a number of reasons, many exchanges have suffered from a lack of participation. First, a fee is involved with public exchanges, while private exchanges can be expensive to set up. Also buyers may balk at joining an exchange because, in order to use the shared technology platform, they may be required to share their competitive business processes. In other cases, the suppliers may refuse to participate.

### 3. Integrators

Integrators are third parties, such as consultants or large MRO providers, that assume responsibility for managing a company’s sourcing and purchasing activities. Typical responsibilities may include:

- Translating performance specifications into design specifications.
- Selecting and evaluating suppliers.
- Negotiating with suppliers.
- Measuring supplier performance and conducting ongoing conflict management.

In effect, integrators provide a way for a company to take the strategic sourcing process and outsource it to an expert in a particular commodity family or service. The company’s own sourcing team must work closely with the integrator to establish service-level agreements and requirements. But it is the

integrator, acting on behalf of the buying company, that does much of the heavy lifting on the actual research, supplier evaluation, and negotiation of terms. Examples of integrators include Inacom and Ingram Micro for computers and similar hardware. Integrators also are often used for outsourced services, such as computer programming, maintenance, and cafeteria services.

By using an integrator, a company can quickly reduce its overhead in the form of labor, time, and related procurement expenses, especially for commodities that fall into the acquisition quadrant in Exhibit 2. Integrators also enable the internal procurement team to focus on more critical strategic products or

services. By using an integrator, however, the buying company may lose control over certain processes associated with the product such as delivery scheduling. The buying company also risks losing strategic assets or having sensitive information leaked.

#### 4. Spot Buys

Spot buys—otherwise known as unplanned purchases—are parts or supplies that are not included in any negotiated contract but are required to keep the factory or business unit running on a day-to-day basis. These purchases are made on the open market and tend to be awarded on the basis of lowest price. Spot buys are costly because they are normally made on an individual basis and can involve a time-consuming process.

Spot buys are convenient and require short leadtimes. The lack of long-term contracts, however, means the supplier has little incentive to provide quality service. With spot buys, there is no guarantee of quality, delivery performance, exact specification matches, or long-term commitments.

To summarize, different types of commodities are more suited to different channels (as is shown in Exhibit 2). Items in the acquisition quadrant, which have few suppliers and are of low value, can be purchased directly by users via spot buys (using a procurement card), or in some cases, they can be managed by an integrator. Commodities in the multiple quadrant also are low in value but have many capable suppliers. They are best managed through exchanges. Leverage items, which have a large number of suppliers, can be managed by combining volumes and awarding the business to the lowest bidder in a reverse auction. Finally, strategic items, which are of high value and have few suppliers, require a detailed strategic sourcing process based on thorough supply market research and intelligence. Of course, these rules are not cast in stone and should be tempered by the judgment of the sourcing team on a case-by-case basis. A number of other criteria may also influence the decision.

## Two Different Views on Reverse Auctions

Members of the Institute for Supply Management (ISM) Pharmaceutical Forum participated in a study conducted by MBA students for the Supply Chain Resource Consortium (SCRC) at North Carolina State University. Twelve pharmaceutical companies with annual sales greater than \$1 billion participated in the survey. Seven had used reverse auctions previously; five had never used reverse auctions to purchase goods. Sixteen suppliers to the pharmaceutical industry responded to the supplier-related surveys.

As the exhibit below shows, buyers said that price was not the only decision factor they used during a reverse auction. However, the data also clearly suggests that suppliers see reverse auctions differently. Suppliers feel that, on average, the buyers base 65 percent of their decisions on price when selecting a supplier through a reverse auction. According to the supplier respondents, the buyer places secondary importance (about 10 percent) on the supplier's total cost structure. Quality is only 9 percent of the selection criteria and came in third in the decision tree. Suppliers generally feel that other criteria such as delivery performance, capacity, and supplier innovation are weighted less than 10 percent in a buyer's final supplier selection.

Other survey data support the suppliers' impression. The majority of the buyers indicated that they choose the lowest bidder in a reverse auction more than 60 percent of the time. The fact that price is the primary decision criteria is not surprising. What is surprising is that based on the buyer responses, the incumbent supplier is the lowest bidder less than 60 percent of the time.

Indeed, two-thirds of the suppliers who responded believe that it is difficult to develop a long-term relationship with a buyer through a reverse auction process. An overwhelming 85 percent of the suppliers feel that reverse auctions hinder the bid-winning supplier from providing the best quality and delivery performance to their customer. Seventy-nine percent of the suppliers feel that reverse auctions undermine price flexibility with the supplier.

This information suggests that reverse auctions can potentially work well for pharmaceutical buyers when purchasing commodity-type items. They may not be so beneficial, or even applicable, for more highly specialized purchases.

(For more information on SCRC, visit <http://scrc.ncsu.edu>.)

**Buyer and Supplier Perceptions on Evaluation Criteria**



Source: Supply Chain Resource Consortium

## Selecting The Sourcing Channel

As the summaries of the various sourcing strategies suggest, different sourcing channels have different strengths and weaknesses. No single sourcing process is equally suited to all commodity categories. Companies, therefore, need a sound method for deciding which channel is best for a given commodity family.

The key to the sourcing channel decision is to determine how each channel affects key operational measures or market factors. Research conducted by the Supply Chain Resource Consortium identified 16 such measures and key factors. A matrix of the relationships between the factors and the channels is shown in Exhibit 3. These relationships represent a composite of the elements shown in the portfolio matrix of Exhibit 2 and the sourcing strategy process in Exhibit 1. Each of the factors is discussed below within the context of both the alternative sourcing channels and the full strategic sourcing process.

**High annual spend:** If the annual spend on the item is high, then the company should conduct the full strategic sourcing process. Because both reverse auctions and exchanges entail some amount of supplier prequalification, they also can be used effectively in cases of high annual spend. On the other hand, spot buys are immediate decisions, often made without much research, so they are not the channel of choice for large purchases. Similarly, integrators are also negative as companies will want to control these critical buys internally.

**Low price as primary consideration:** Spot buys are rated negative for this category because their short leadtimes will prevent the company from getting the best price. Likewise, a full strategic sourcing process would not be appropriate because the SSP deals with much more than just price. Reverse auctions and exchanges are rated as positive channels because they allow suppliers to compete on the basis of price. Integrators are also positive because they have market intelligence and information on where to get the best price.

**Short cycle time from discovery of need to delivery:** If the company needs the product to be delivered quickly, then spot buys are a preferred channel. Reverse auctions and exchanges with prequalified suppliers also can deliver a fast turnaround time. The SSP and integrators, however, require more time and effort.

**Supplier base highly fragmented:** Reverse auctions are a good channel for this market environment because the company can make suppliers compete among themselves. Similarly, exchanges and spot buys generally give companies a large potential supplier pool. Integrators are also positive as they can keep track of a large number of suppliers and save the

company the headache associated with conducting the research. The level of effort required in the full strategic sourcing process is not productive here.

**Detailed specifications available early in the process:** If detailed product specifications can be provided early in the sourcing process, spot buys, reverse auctions, and exchanges are good channel choices. If the company has well-defined specifications early on, these channels will open up the field to a greater number of possible suppliers capable of meeting those requirements. Everyone will have the opportunity to bid on the same set of requirements.

**Highly standardized product:** If the product is highly standardized, it will be readily available, and its specifications can be easily communicated to the suppliers. Therefore, spot buys, exchanges, and reverse auctions are all appropriate channels. An SSP typically is not required.

**Minimized risk of supplier problems during service period:** Integrators and the SSP provide the depth of research, analysis, and relationship opportunities needed to minimize the risk of supplier problems. The loose specifications characteristic of reverse auctions and the short leadtime for spot buys, on the other hand, make these channels ineffective in reducing risk.

**Minimized impact of supplier problems during service period:** If a commodity is important and has a high impact on the company's performance, then the sourcing channel needs to minimize the impact of any supplier problems. Problems can be minimized by developing an ongoing relationship with suppliers or with someone who can work with the suppliers on your behalf. The SSP and integrators can accomplish this. Although exchanges and reverse auctions do provide some opportunity for relationship development, even prequalified suppliers do not always have strong after-purchase service. Finally, spot buys are negative because they create no inherent after-purchase service incentive.

EXHIBIT 3

### Factors to Consider in Sourcing Channel Selection

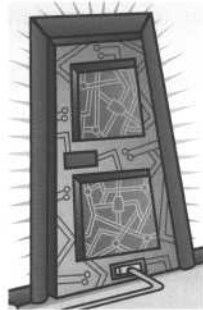
	SSP	RA	EXCH	SPOT	INT
High Annual Spend	+	+	+	-	-
Low Price as Primary Consideration	N/A	+	+	-	+
Short Cycle Time from Need Discovery to Delivery	-	+	+	+	-
Supplier Base Highly Fragmented	-	+	+	+	+
Requires Early Detailed Specifications	-	+	+	+	-
Product is Highly Standardized	-	+	+	+	N/A
Minimized Risk of Supplier Problems During Service Period	+	-	N/A	-	+
Minimized Impact of Supplier Problems During Service Period	+	N/A	N/A	-	+
Ability to Leverage Product Purchase Exists	+	+	+	-	N/A
Frequent Contact Negotiation or Product Orders in One Year	+	+	N/A	-	+
Easily Able to Switch Between Vendors	-	+	+	+	-
High Rate of Technology Change	+	N/A	N/A	-	+
High Market Volatility (Quantity/Price)	-	+	+	+	+
High Potential Savings Opportunity	+	+	-	-	+
High Service Requirements After Purchase	+	N/A	+	-	+
Desirable to Build Relationship with Supplier	+	N/A	+	-	-

SSP=strategic sourcing process RA=reverse auction EXCH=exchange SPOT=spot buy INT=integrator

Source: Supply Chain Resource Consortium

**Ability to leverage product purchases:** If a company has an opportunity to leverage its product purchases, spot buys are definitely negative because they are conducted on an ad hoc basis. However, the SSP, reverse auctions, and exchanges are appropriate here because they provide a way to pressure suppliers to provide a better price for a higher volume. Integrators are not applicable as they tend to work on a purely operational level, while leveraging purchases requires tactical and even some strategic effort.

**Frequent contract negotiations or product orders:** If the price of an item is negotiated many times in one year, using a spot buy is rated negative because the process will have to be repeated for every transaction. The SSP and integrators are positive because they can integrate repeat buys into the buyer's purchasing system, such as Ariba.



## The channel selection decision must be part of the broader strategic sourcing process.

**Ease of switching vendors:** If switching between vendors is easy, reverse auctions, exchanges, or spot buys can be a good channel choice because the risk of choosing an unqualified vendor is reduced. On the other hand, if switching between vendors is difficult because of proprietary technology or initial investment, then the SSP is the best option.

**High rate of technology change:** For items with a high rate of technology change, the best option is to utilize integrators that are field experts and are up-to-date on current technology developments. By using integrators, the company will benefit from not having to do the groundwork every time it has to procure the item. Reverse auctions and exchanges are not applicable here because the buy will be based in part on the channel's ability to collect and assess information, rather than on price and selection.

**High market volatility (quantity/price):** The long leadtimes associated with the SSP make it difficult to respond quickly to the price changes that occur in a volatile market. All the other channels allow the buyer to take advantage of the volatility to find the best price. Among these, however, spot buys are less capable of doing this because they normally require extremely short leadtimes. Short leadtimes, in turn, limit the time available for research and negotiation.

**High potential savings opportunity:** A spot buy does not offer much opportunity for savings because it is an ad hoc purchase, and the buyer cannot leverage its buying power. On the other hand, the SSP, reverse auctions, and integrators help develop relationships with vendors, which can translate into considerable savings potential.

**High service requirements after purchase:** After-purchase service is based on the service-level agreements (SLAs) negotiated during the purchase. The SSP, exchanges, and integrators

all have a positive influence on this metric. They create an opportunity to build a relationship with the supplier or someone who can work with the supplier for them. Maintaining this relationship gives the supplier reason to meet its SLAs. With spot buys, on the other hand, there is no incentive to provide good service—and SLAs may not even exist. Reverse auctions are neutral because, while they usually involve SLAs and some performance management, the one-time transactions lower a company's incentive to provide good service.

**Desire to build relationship with supplier:** This factor refers to the end supplier itself and not just to an intermediary that works with the supplier for the company. The extra layer that an integrator provides between a company and its suppliers means that it is not a good choice for this condition. In contrast, the SSP and exchanges are strongly positive. Reverse auctions, however, are only slightly positive. Although they do provide a structure that a company can use to build a relationship, they do not enable for the same depth of information exchange as the SSP and exchanges.

The information presented in Exhibit 3 provides some general guidelines for selecting a sourcing channel. However, a strategic sourcing team should not follow this table blindly. The team will have to consider each sourcing channel possibility within the context of its own market position and strategic goals. To aid this process further, the Supply Chain Resource Center has developed the framework into a patented decision-support tool. (For more information, visit <http://scrc.ncsu.edu>.)

### Develop Market Intelligence

The real work of deploying an effective purchasing strategy begins with developing supply market intelligence at the commodity family level. To succeed in this undertaking, we suggest the following steps.

Organizations need to “understand their spend.” Every commodity family within the organization's total spend should be mapped onto the portfolio analysis quadrant shown in Exhibit 2. The commodity team then should go through the list of criteria shown in Exhibit 3 and identify which of them apply to the supply market or purchase criteria for the selected commodity. Once these criteria are fully understood, the team can begin to explore the possibility of applying a reverse auction, an integrator, an exchange, or in some cases, spot buys. Of course, none of these channels is a “turnkey” solution. Instead all will require additional research and analysis. Furthermore, these decisions must be reviewed on an ongoing basis. Changes to the supply market may require strategic sourcing teams to revisit a channel decision.

We do not suggest that the framework presented here is a panacea for all sourcing channel decisions. However, by applying the guidelines outlined in this article, companies can make better decisions in a shorter amount of time. ☺

### Footnotes

<sup>1</sup>Monczka, R., R. Trent, and R. Handfield, *Purchasing and Supply Chain Management*, 2nd edition, Southwestern College Publishing, 2002.