Understanding multitier-sourcing behavior
Chae, Sangho; Lawson, B.; Kull, T. J.; Choi, T. Y.

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Improving sourcing practices can help supply management practitioners manage supply and supplier risks.

With increasing global supply chain risk and customer pressure for product provenance, some companies are managing their direct suppliers and their suppliers’ suppliers. For instance, Apple selects lower-tier suppliers for major components and directs Foxconn, its Tier-1 supplier, to work with the selected component suppliers. In the aerospace industry, companies engage in their suppliers’ supplier selection by using approved lists.

While decisions to use these multitier-sourcing practices are largely driven by corporate goals related to cost, quality, supply continuity, technology and sustainability, individual supply managers play significant roles in making such decisions. As the principal instigators and implementers of multitier-sourcing practices, supply managers can decide how much of the purchased item’s components should be directly controlled by the buying firm.

**BEHAVIORAL CHARACTERISTICS**

To understand how organizations make multitier-sourcing decisions, we focused on identifying behavioral tendencies in the decision-making of individual supply managers. We conducted a behavioral experiment involving 315 practicing supply managers and Institute for Supply Management® (ISM®) members. After providing different hypothetical
scenarios describing multitier-sourcing situations, we asked the participants (1) how much component control they would maintain within the buying firm and (2) how much control they would delegate to the Tier-1 supplier.

This enabled us to identify these key behavioral tendencies of supply managers:

1) Those familiar with suppliers at levels Tier 2 and below increase multitier-sourcing control when the performance of the Tier-1 supplier is uncertain.

2) In contrast, supply managers not familiar with suppliers Tier 2 and below do not increase multitier-sourcing control, even when the performance of the Tier-1 supplier is uncertain.

3) Supply managers who personally trust the sales representative of the Tier-1 supplier delegate more sourcing control to that supplier.

4) In making multitier-sourcing decisions, personal trust in the sales representative has a stronger effect on a supply manager’s willingness to delegate control to the Tier-1 supplier than the level of confidence in the performance of the Tier-1 supplier organization.

These findings suggest that supply managers’ familiarity with potential lower-tier suppliers plays a crucial role in deciding the extent of multitier-sourcing practices. Supply managers already knowledgeable about lower-tier suppliers can increase the level of multitier-sourcing control or delegate more control to the Tier-1 supplier, depending on their perception of the Tier-1 supplier’s expected performance. In this case, familiarity with lower-tier suppliers seems to enable supply managers to use multitier-sourcing practices more flexibly. In contrast, supply managers with less familiarity with lower-tier suppliers appear to find it difficult to adjust the extent of multitier sourcing.

Also — and most importantly — the result of our experiment shows that personal trust in the Tier-1 supplier’s sales representative can profoundly influence a supply manager’s multitier-sourcing decisions. Regardless of the uncertainty of the Tier-1 supplier’s performance, supply managers who distrust the sales representative tend to increase the level of multitier-sourcing control, while those who personally trust the representative tend to delegate more control to the Tier-1 supplier. When supply managers make multitier-sourcing decisions, they likely extrapolate the level of trust in the Tier-1 supplier’s sales representative to the expected performance of the Tier-1 supplier organization.

MULITIER-SOURCING STRATEGIES
Based on these findings, three strategies can help supply managers improve their multitier-sourcing practices.

Study potential key component suppliers at Tier 1 and below. Becoming familiar with sub-tier component suppliers can enhance the efficiency of multitier-sourcing practices. Exerting increased control over your Tier-1 supplier’s sourcing activities, however, does require additional managerial resources from you and your company. Therefore, the flexibility to adjust the extent of multitier-sourcing control according to needs becomes a critical supply management capability. The familiarity of your organization’s supply managers with potential lower-tier suppliers provides this flexibility.

Distinguish personal trust from expected performance. Supply managers most frequently interact with the sales representatives of Tier-1 suppliers, and interpersonal relationships with them could influence multitier-sourcing decisions. However, the level of trust in a sales representative may not result in commensurate performance by a Tier-1 supplier. The experiment shows that, when making multitier-sourcing decisions, supply managers are more influenced by interpersonal trust rather than expected performance of Tier-1 suppliers. Thus, it’s important to account for the effects of interpersonal relationships in your decision-making. Your ability to distinguish personal trust from expected performance of the supplier enables an effective use of multitier sourcing.

Be aware of the regulations and limitations of multitier sourcing. Antitrust laws in some Asian and European countries restrict buying firms’ abilities to dictate the selection of Tier-2 suppliers. Also, realize that a strict use of multitier-sourcing practices can increase tension and rigidity in supply chain relationships. Be aware of these regulations and limitations, and employ multitier sourcing smartly. For example, large chemical companies often use their huge purchasing volume to negotiate better prices with Tier-2 suppliers, then recommend them to Tier-1 suppliers. As a result, Tier-1 suppliers are more likely to select these Tier-2 suppliers because of better prices, not because they are forced to do so.

Multitier-sourcing decisions are important because they influence supply risks and supply network structures. Training yourself to be a better multitier-sourcing decision-maker will help your company develop powerful supply chain strategies.