WHERE ARE WE HEADED

To find out, look to the just-released report “The Future of Purchasing and Supply.” Results and reactions begin on page 23.
Put Me In, Coach!

A supply manager has become increasingly involved in product development at her organization. While excited about her participation, she is also concerned since her role has not been clearly outlined. Her next step? Examine the nature of integrated teams and establish goals and objectives that support the team from the purchasing and supply perspective.

As product development cross-functional teams become more prevalent, the role of purchasing becomes less and less defined. However, no matter what specific tasks supply managers bring to the team, it is evident they can play an integral role in teaming with other departments on new product development issues. A closer examination of successful new product development practices at two organizations provides insight into various facets that affect purchasing’s role.

Kathleen E. Meehan, vice president of purchasing at Jack-In-The-Box, a San Diego, California-based regional fast-food chain with over 1,000 restaurants, and Richard A. Fogle, director of global raw materials purchasing for Baker Refractories, a York, Pennsylvania-based manufacturer of heat-resistant ceramic materials used for liners and kilns, both represent organizations that value purchasing and supply as new product development team members.

The Integrated Nature of Teams
At Jack-In-The-Box, cross-functional teams are the core of the product development process. Purchasing, quality assurance, research and development, operational services, training, and marketing are represented. Individuals from these areas typically serve on several teams simultaneously, and membership rotates periodically, according to Meehan.

Quality control, research and development, and purchasing work closely together at Baker, according to Fogle. “Cross-functional teams search the world to select suppliers for participation in new product development projects,” says Fogle. Cross-functional communication between Baker personnel and the supplier’s staff is critical to the success of new product development.

Purchasing’s Role
Purchasing’s role in new product development teams at Baker has a long history. “Baker eliminated the functional silos 15 years ago. Turf problems are handled by walking all over them,” says Fogle. “Competitive pricing puts enormous pressure on our industry to innovate, improve quality, and reduce costs.” Purchasing is actively involved in all aspects of new product development teams, and actively seeks new sources of minerals and technologies along with other team members. Purchasing monitors all contacts between Baker and supplier personnel. This avoids conflicts and misunderstandings. “All supplier call reports by Baker personnel go to purchasing,” says Fogle.

The solid communication lines developed are evident in a recent agreement with a foreign firm regarding long-term sourcing of raw materials. The supplying firm was a major supplier of Baker, and Baker was the supplier’s largest customer.

“Purchasing’s role in this agreement was primarily one of a cheerleader.” Ten years in the making, this long-term purchasing agreement is an alliance where the participants cooperate and willingly modify their business practices to improve joint performance. According to Fogle, “The focus here is on the relationship, rather than on individual transactions.” The alliance agreement is simply a document of understanding between Baker and its supplier in which both agree on a philosophy of conducting business. Subheadings of this agreement include the mission statement, the spirit of the relationship, guidelines and expectations for each party, timing, success measurements and sharing, alliance meetings, and shared administrative costs. The only contractual component of this relationship is the purchase order for specific releases. Says Fogle, “This sort of agreement required the cooperation of all functions in the organization all the way up to the CEO’s commitment.” Both firms enter into a flexible, long-term, mutually beneficial alliance without binding arm’s-length agreements that restrict the creativity of either organization.

At Jack-In-The-Box, purchasing’s role includes early involvement, active participation on teams, and the identification of suppliers that offer competitive technologies.

“Purchasing’s role is to maintain the team’s focus from a business perspective,” says Meehan. In particular this focus relates to the issues of due diligence regarding a potential supplier’s financial strength, its capacity, its ability to serve the entire Jack-In-The-Box system, length of time in business, and how long they have been...
producing the items under consideration, whether they have adequate insurance, and whether they are willing to enter into an indemnity agreement. Additional concerns include the prospective firm’s size, number of employees and capacity, the percentage of its business that Jack-In-The-Box will account for and the percentage of its business controlled by other customers.

Bradford L. Goldense, president of Goldense Group, Inc., a consultant based in Cambridge, Massachusetts, also stress the importance of purchasing’s role in the earliest stages of product development. “The best buyers for the next millennium will have a technical expertise that allows them to truly conceptualize and understand new product concepts and proposals at their earliest stages,” says Goldense. For example, when a purchaser understands the preliminary technical work, he or she can facilitate the whole process.

Responding to Change

In the fast food business, customers drive change. As a result, top management has a very strong marketing orientation. “In this company, marketing strategically directs everything,” according to Meehan. New product development may start with new idea “Idea Team,” of which purchasing is a part, which visit a wide range of fast food and casual dining restaurants, buffets, coffee shops, and food emporiums at fairs to evaluate competitors and identify new ideas. Promising ideas are presented to the senior marketing staff, and approved product ideas go through extensive consumer research.

It’s not customers, but rather technology that drives change in the refractory industry. “The technology has changed dramatically in the refractory business,” according to Fogle. “Finding the right refractory grade minerals and binder systems is crucial to the success of Baker’s products.” For example, Baker has worked closely with sources in Australia, China, and Sweden to develop sources of raw materials that provide the needed properties for specific product requirements.

Supplier Certification

Supplier certification plays an important role in new product development in both firms. At Baker, it’s the first step in new product development. Purchasing, along with quality control and research and development, identify, qualify, and conduct regular quality audits of all suppliers, according to Fogle. “Quality audits are key to determining which suppliers to integrate into the new product development process.”

An extensive formal process is used to qualify suppliers as Jack-In-The-Box suppliers. The initial process establishes relationship ground rules that will guide supplier involvement in new product development, according to Meehan. Supplier involvement emphasizes four areas. They are (1) new technology, (2) new raw materials, (3) new operational equipment, and (4) refined ingredients and processes. Jack-In-The-Box works closely with its suppliers in the new product process, especially in the achievement of targeted cost objectives.

Where Do Suppliers Fit In?

Upon their separation from AT&T, Lucent Technologies, based in Murray Hill, New Jersey, became a separate company, and as such, was able to become more competitive than it had been in the marketplace. It became apparent that their traditional, silo-oriented methods of product development would not suffice. As a result, they developed cross-functional teams that included designers, marketing, operating shops, purchasing, production control, and engineering. Last year, Lucent was faced with the challenge of introducing a new Gigaspeed family of products, which would include procurement of injection molds, stamping dies, and automatic assembly equipment.

One critical factor to meeting their deadline was early supplier involvement. In the past, Lucent would create a design, have an injection mold built to run it, and then worry about a machine to assemble the molded part. Comments such as “if you would have designed a notch here, we could have increased the run rate on your assembly” were common. Naturally, these suggestions were ignored. This time, however, things were different. Lucent actively solicited suggestions and recommendations from suppliers, and brought them in early for their advice. Suppliers were informed of project progress, and given estimated time frames in which to expect jobs. Many suppliers were leery of our verbal promises of upcoming work. We asked “What can Lucent do to alleviate your fears?” “Cut a purchase order” was the response. Lucent issued a blanket purchase order to a die-stamping firm and others were issued to hold spots in production queues at other firms. These actions helped to instill a level of trust and mutual benefit in the process. Lastly, three different suppliers were solicited for comment on designs. One supplier’s recommendation resulted in a substantial cost reduction.

The Gigaspeed products are in the marketplace, and all indications are that the products will be extremely successful. The cross-functional team proved to be a huge success in helping Lucent reduce the new product introduction cycle time and is a shining example of how purchasing can help a business achieve its goals.

The use of cross-functional teams and early supplier involvement were both huge successes. Lucent will continue to forge close ties to critical suppliers, and the drive to reduce cycle time will continue. Purchasing proved to be a value-added contributor, earning a great deal of respect.

By Bryan Chapman, C.P.M., A.P.P. CPM, CIM, subcontract administrator at Rockwell International in Cedar Rapids, Iowa, formerly a purchasing specialist at Lucent Technologies’ Omaha Works Facility in Omaha, Nebraska.
Issues of buyer-supplier new product development commitment are addressed during supplier certification. Supplier participation in new product development is closely coordinated with the team. Communication between the supplier and new product development team members occurs routinely. Shared training, colocation of personnel, and sharing of physical assets occasionally occurs with strategic suppliers, says Meehan.

**Risk Management**

During new product development at Baker, technological, customer, product, and process information is frequently shared with suppliers. “Formal risk-reward agreements are mandatory and protect all parties,” says Fogle. “These agreements include the sharing of buyer and seller strategic plans; guarantees that specific percentages of annual needs will be purchased from the supplier, as well as guarantees that the supplier will satisfy those needs; and regular review of costs, volumes, and profitability. Provisions in these risk-reward agreements include hedging by the seller and/or buyer to protect themselves against international currency exchange rate risk, cost savings sharing between the buyer and seller, and the sharing of technical information, among others. These agreements may or may not be included in the contract depending on the nature of the buyer-seller alliance.”

Formalized risk-reward agreements are not used at Jack-In-The-Box, but procedures for protecting shared confidential information are part of the supplier certification process.

“The ownership of patents and other rights resulting from supplier involvement in new product development are largely determined by the level of each parties’ investment,” she says.

In an era of increasing use of cross-functional teams for product development, the challenge for the purchasing professional is to develop the skills needed to work effectively with colleagues from other functional areas. At the same time, the purchasing professional needs to maintain an awareness of the unique skills he or she brings to the team. Some of these skills include supplier identification and evaluation, negotiations, the ability to forge agreements that share risks and rewards fairly, contract administration, and coordination among diverse inter-organizational functions.

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*Illustration by Hector Acuna*

*Photo (page 52) by Jack-In-The-Box and (page 53) by Baker Refractory.*