Contract Services Make House Calls, Too

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Design, brand authentication and other functions can be done on an "outcall" basis.

Say "outsourcing" or "contract services" to most people, and the picture that comes up is a company that either makes product on behalf of another, or receives it in bulk and packages it.

That's a big part of the picture, of course. (For a look at reasons to use a contract packager, see "When to call for help" on page 22.) But third parties can also help in other ways, including improvements within the four walls of an end user's factory.

This Special Report looks at contract services in four areas: line/equipment integration, package design, brand authentication and R&D.

Line and equipment integration

Integrating new equipment into a plant is one of the most daunting tasks a manufacturer can face. It's also one of the most commonly outsourced ones.

Companies who are trying to integrate a machine into their plants can call for help from a number of sources. Probably one of the easiest is the manufacturer who made the machine. Some manufacturers maintain separate integration operations that can integrate not only single machines, but entire lines.

End users may well question the objectivity of an equipment supplier who offers help with integration issues. But suppliers who furnish such services say they can be as objective as anyone.

Cloud LLC, a supplier of filling and other equipment, regularly helps its customers integrate new equipment and entire lines, says Michael Bogar, vice president and general manager. Cloud has an "A list" of other machinery companies to recommend, but doesn't restrict itself to that list.

"If there's certain things [end users are] looking for, we will go to the outside and we will spend time and analyze the type of equipment that's out there, and then come back with a recommendation," Bogar says

On the other hand, third-party integrators not only tout their objectivity, they claim that they're in a better position to help end users who are less than sure what they want.

"A company like ours, that is basically an engineering company, usually has a broader array of services," says Howard Leary, VP engineering, Luciano Packaging Technologies. "More than just putting a line together, third-party integrators can help clients work through a concept: We like to start at the beginning, when the customer knows they need something but they don't know what they need."

No matter who does the integration, one of the first things to be determined in the contract process is the division of labor between the customer and the integrator. Some end users have specs in hand before they approach an integrator, including the machinery and layout they want. Others prefer to deal in general concepts and leave the details to the integrator.

Closely related to the preparation question is whether the company wants to, or is able to, work out the new layout entirely on its own floor. Some equipment vendors who offer integration services, such as Nalbach Engineering Co., can do complete integration and factory acceptance tests of new lines at their own research facilities. This is especially convenient for overseas customers.

Conversely, end users who want to augment an existing line, such as with a new vision system, usually have to handle things within their four walls. For instance, Leary says, a common job for Luciano is integrating a new vision system into an existing line. Common issues involve making sure the packages get presented to the system's cameras for optimal exposure, and integrating with the machine's control system so that the results get properly tracked.

Package design and development

Maintaining control of a new packaging design project requires project management and scheduling skills that not all in-house packaging departments would admit are their forte. It's common for end users to have to deal with widely scattered contractors, including designers, prepress houses and converters. The biggest challenge consists of keeping everyone on the same page during the development process.

The stakes are high. Even something as seemingly simple as ensuring that a signature color remains consistent can be hard when you're dealing with different substrates and, perhaps, a new converter—especially if the converter is across the ocean.

Robert Wilkes, president of Wilkes Creative, says smaller companies often run into such problems as part of their growing pains.

"Some of these family businesses mature and they get hit on the knuckles often enough and it costs them money, they start to realize they need to pay some attention to this," Wilkes says.

No matter how far-flung the various collaborators may be, it's up to the end user to keep everybody on track—both third-party contractors and internal departments. That's where some new Web-based tools come in.

Prepress houses, converters and others are offering Internet software packages that allow end users to keep track of contributions to a graphics project and manage the process. One such product is PaxPro, from the Paxonix division of MeadWestvaco.

"What I hear over and over is, 'I've now got 96 projects in process but I can't tell you where I am with any of those projects, or the components of the projects, other than, I'm positive I'm late,'" says Don Armagnac, CEO of Paxonix.

The biggest problem comes from the confusion inherent in keeping track of changes from multiple sources. PaxPro's advantage is that it allows end users to maintain a single master copy of a package, label, logo or other graphic design.

This not only helps prevent changes from getting lost between the cracks, it allows end users to perceive bottlenecks in the process and reallocate resources to deal with them.

"Let's say you've got six projects all waiting for approval by the legal department, or the artwork/design team, or the engineering team. But you've only got three people over there, and you've got seven projects all showing up at the same [stage]. You can see this ahead of time so you can allocate resources, you can add resources, you can move resources around, understand when to outsource, when to insource. So you get visibility into the project."

Esko-Graphics, a provider of software for packaging structure and graphics, touts what it calls Design Life-Cycle Management. Through the use of WebCenter, its own Web-based tool, end users can oversee the workflow of packaging structure and graphics projects.

WebCenter has certain embellishments, such as plug-ins for Adobe Illustrator that make it more suited to package design, and a plug-in to ArtiosCAD that can generate a three-dimensional design. The latter can avoid egregious mistakes later in the process, says Mark Vanover, Esko Graphic's director of marketing.

"I had a customer tell me that they had 10,000 folding cartons printed and no samples had been made, and nothing had been done from a 3D perspective," Vanover says. "And when they brought them to manufacturing and started to fold them into the real carton, the bar code was underneath a flap."

Getting everyone to use such a system harmoniously can sometimes be a challenge, but end users must remember they are the customers and thus, are always right.

"There's obviously, at times, reluctance among all the players to play together," Vanover says. "[But] really, it's the consumer goods company that realizes that those efficiencies enable them to bring products to market quicker. And they strongly encourage their suppliers to participate in these programs."

Brand authentication

Counterfeit items are a significant and growing problem with all kinds of consumer packaged goods, especially pharmaceuticals. According to the World Health Organization, up to 8% of pharmaceuticals worldwide are fake.

Many anti-counterfeit strategies exist, for primary and secondary packaging. They use all kinds of technologies, but can be roughly divided into two categories: those that can be applied outside the end user's factory, and those that are applied inside.

Much of current-day brand-authentication technology falls into the former category. Fancy printing and markings that can only be read with specialized equipment, like ultraviolet scanners, are usually applied by converters.

But two of the most promising brand authentication technologies need application by the end user. Mass serialization involves applying a serial number or code, either through the bar code or some other means, to each individual package. Even if this is done at the converter level, the end user must authenticate each individual code and maintain a database of the codes (or pay someone else to do it).

Closely allied with mass serialization is radio frequency identification (RFID). Ten states have laws mandating the use of "electronic pedigrees" in the near future, and RFID is widely considered the best way to implement that mandate.

The use of RFID, especially at the unit level, is problematic, for various reasons. That's where a pharmaceutical packager can use the help of an outside contractor, says Joe Tenhagen, marketing manager for converter Nosco Inc.

"That's where a drug company deals with much broader issues," Tenhagen says. "They're dealing with how do I manage and accommodate RFID capability and technology into my operation." Nosco's RFID business unit can help with such issues as validating and inspecting tags both before and after application, making sure they don't get crushed or mishandled during application, and coordinating with machinery immediately upstream or downstream.

Research and development

Product development used to be a jealously guarded prerogative of consumer goods companies. But many companies are now finding that developing new products, in some cases, is better left to third parties.

This phenomenon is perhaps most pronounced in the pharmaceutical industry. Startup companies, academics and others often develop new drugs on spec, with major companies picking them up once their commercial appeal emerges.

One outstanding recent case came with one of the most attention-grabbing drugs to hit the market in years: Exubera, a powdered form of insulin, marketed by Pfizer Inc. The product, recently approved by the FDA, represents the first-ever non-injectable form of insulin.

Exubera's development fit the pattern of many new drugs: It was the product of several partners, with Pfizer being the last link. The technology was developed by Nektar Therapeutics, a leading developer of power inhalers.

Even the process of getting Nektar together with Pfizer had to be outsourced. Nektar initially was rebuffed by several companies that sold insulin, and eventually it approached Plexus Ventures, a consulting firm.

Plexus is a corporate matchmaker, specializing in getting research outfits and pharmaceutical companies together. The need exists because it often happens that neither side realizes when a good fit exists, says Plexus president Bob Moran.

For instance, when Nektar—then called Inhale Technologies—developed a prototype of the inhaler, the company approached companies that were prominent producers and marketers of insulin. "They were somewhat surprised that there was interest but no enthusiasm from those companies," Moran says.

Nektar contacted Plexus for help, and Plexus helped them identify strategies that would help them find a partner, Moran says. Plexus decided to go after two types of pharmaceutical companies: those who put out asthma medications, and those who market insulin. Pfizer fit the latter category, but it wasn't an easy process, Moran says.

"Pfizer's natural reluctance existed because they're a pill company," he says. "They were used to tablets, and capsules and pills, and maybe some injectable products, but they had never worked with a device."

Plexus worked to overcome Pfizer's reservations, convincing the company to have an independent consultant of its own choosing study the devices. Pfizer ended up green-lighting the project, forming a joint venture with sanofi-aventis and developing the medicine in a joint venture. Pfizer recently bought out sanofi-aventis's interest for a reported $1.3 billion.

"We were always working to build trust in the relationship and to help both parties [Nektar and Pfizer] identify the issues that might prevent a deal, and then to work with them to resolve those issues," Moran says.

Nektar had its own contract partner in the deal: West Pharmaceutical Services, a contract pharmaceutical manufacturer. West's Tech Group, which specializes in plastic medical devices, worked with Nektar for seven years on Exubera. (West acquired the Tech Group in May, 2005.) West worked with Nektar on making the components easier to manufacture, then designed the manufacturing process, says Mike Treadaway, a spokesperson for the Tech Group.

For instance, a number of components in the inhaler originally had rubber gaskets; the Tech Group figured out a way to speed things up by adding the gaskets in-mold. The Tech Group also was responsible for tooling, validating and managing the automation vendors and other component suppliers.

The partnership between small research outfits and big pharmaceutical companies will likely continue for the near future, Moran says.

"The major multinationals are spending billions of dollars on internal R&D, but they also realize that there are many smaller companies with high-quality research, as well as many drug delivery companies with novel and interesting technologies," he says. "So they are always looking outside their own organizations to bring in additional opportunities." F&DP

For more information

The following companies contributed to the research of this article:

Cloud LLC
847-390-9410; www.cloudllc.com

Esko-Graphics
800-743-7131; www.esko-graphics.com

Luciano Packaging Technologies
908-722-3222; www.lucianopackaging.com

Nalbach Engineering Co.
708-579-9100; www.nalbach.com

Nosco Inc.
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Paxonix
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Plexus Ventures
310-392-6153; www.plexusventures.com

West Pharmaceutical Services
610-594-2900; www.westpharma.com

Wilkes Creative
425-451-8005; www.wilkescreative.com

When to call for help

Of course, conventional contract packaging—defined as hiring a third party to do your packaging for you in their plant—is still a major part of contract services.

When should you hire a contract packager? According to the Contract Packaging Association, these are some indications that it might be a good idea:

• The package requires equipment or expertise that the end user doesn't possess, or the equipment is tied up for an established product.

• The product needs to be packaged in a distant region.

• It's a limited run like a test market, gift pack, short-term promotion or seasonal item.

• The end user is overwhelmed by a sudden crush of business or other pressure on existing capacity.

• The end user's facility is unusable because of an accident, labor action or other occurrence.

• Already-packaged product needs to be repackaged to make it saleable.

Contract Packaging Association
630-544-5053; www.contractpackaging.org