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Problem-Solving Partners

Supplier alliances can help regional EMS providers expand support and service offerings.

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In today's electronics manufacturing services (EMS) environment, original equipment manufacturers (OEMs) expect their suppliers to support the full product life cycle, regardless of their size. This is particularly true in the medical industry, where lower volumes and long product life cycles can make regional EMS providers a good choice. Such projects often are less attrac-

tive to larger EMS providers because of the smaller lot sizes or higher levels of custom support. Logistically, a regional supplier also may be a better choice in low-volume programs because it can cost effectively support variable demand.

Some specific trends currently observed with the OEMs in the Midwest United States underscore this challenge:

- Greater focus on total cost, including the opportunity cost associated with the lack of schedule flexibility;
- A requirement for shorter lead-time driven by lack of demand predictability combined with concerns about inventory;
- Changes in business or product focus driven by the combination of an economic downturn and state economic incentives to add product lines that create jobs within the region;
- Growth in local startups looking to keep jobs in the region;
- Economic pressure on companies to focus on core competencies and outsource capital-intensive business activities such as manufacturing; and
- Increasing interest in systems level production for low- to medium-volume product lines.

The challenge for regional EMS providers becomes providing the breadth of services needed, while maintaining sustainable overhead costs. For example, while it is easy to provide design for manufacturability or testability (DFM/DFT) with one or two engineers, truly supporting product development often requires engineers specialized in software, hardware and various subsets of these elements. Keeping the engineers fully engaged requires a continuing flow of product development projects that tie to capabilities resident in-house. At a regional EMS level, that flow of business is rarely available, so most regional providers have limited in-house capabilities in this area.

Production volumes often drive another challenge. Custom parts suppliers often are reluctant to support the preferred lot sizes for lower-volume production. In such scenarios, OEMs and their EMS partners have to either agree to hold excess inventory driven by large minimum buy quantities or try to find a supplier willing to agree to quantities appropriate to the project.

Strategic alliances are one option for addressing this issue. However, loosely knit alliances often lack the needed con-

sistency of processes to provide seamless customer support. Prioritization also can be an issue, since alliance partners may feel their customers' business is more important than business coming through the alliance.

To address these issues, Burton Industries founded a supplier alliance group known as the Worldclass Industrial Network (WIN) alliance. Alliance partners now include a tooling and plastics injection molding firm with both U.S. and Asia manufacturing capabilities, Asian and U.S. printed circuit board fabricators, a liquid-crystal display manufacturer, two Asian EMS suppliers for higher-volume projects, product design firms, a manufacturer of soft-sided cases and a conformal coating supplier. Sources for potting and metal fabrication as well as Asian sources for transformers and other price sensitive components, are in the identification and evaluation stage.

What lessons can be learned from this process for companies wishing to participate in similar alliances?

Here are few points that help ensure a strong alliance:

- Define a shared business focus that aligns with likely customer requirements;
- Develop a mutually agreed upon set of business processes;
- Take a holistic approach to defining the network; and
- Be flexible.

Defining a Shared Business Focus

Many alliances grow out of a need to support a specific project. There often is a lead company that needs an alliance partner to do a specific task. When that task is complete, the need disappears and the partners drift apart. Forming a successful alliance requires that all partners see a sustaining need to work together.

In the WIN Alliance example, the core group identified a growing number of projects would be best served by a one-stop

shop, capable of full-service support beyond the services that any one of its members was able to provide alone. In forming the alliance, the partners agreed to a specific focus driven by business requirements in the customers they served:

- A strong ability to support new product introduction (NPI);
- The ability to scale production resources with project growth;
- Local presence in the region and, in some cases, the ability to support offshore production in higher volumes; and
- A supplier business model capability of supporting mission-critical projects, which includes a high focus on customer service, quality and a willingness to meet mutually agreed upon metrics for schedule flexibility and customer service.

Agreeing to a clear set of expectations ensures that alliance partners clearly understand the demands of the relationship prior to joining and can help screen out potential partners whose business models run counter to the types of projects likely to be bid through the alliance.

Developing a methodology for clear communication of expectations and building trust is important, as well. In the WIN Alliance, the shared vision started with informal conversations among the initial member companies. Management teams had been discussing the need for several years and as the group formed, there was strong consensus. The partners knew each other and trusted each other's business judgment on potential new projects. However, as cross-border partners were added, the group found it necessary to become more structured in relationship building efforts. As participants have been recruited from farther away, stronger initial relationship-building efforts have necessary. Communication is more structured and more feedback is solicited when requests are made.

Developing a Mutually Agreed Upon Set of Business Processes

When consumers buy a product, they often have little understanding of what was involved in producing it. It either works to their satisfaction or it doesn't.

However, purchasing contract manufacturing is an entirely different situation. OEMs want to understand what processes a contract manufacturer has in place to address their requirements for quality, adherence to schedule and support. One-stop shopping through a single supplier is appealing because of the time and transaction cost it can save. That savings only happens in a supplier alliance if the alliance support is transparent to the OEM. That drives the need for a common set of processes, so that customers feel they are truly dealing with a single entity rather than managing multiple suppliers who call themselves a network but work independently.

In the WIN Alliance model, this process commonality wasn't driven by contracts. Instead, the companies built their common processes off of the shared business focus mentioned above. As part of the screening process, each new supplier's NPI and production management processes are evaluated for consistency with likely customer requirements. Best practices are shared between members when there are inconsistencies that need to be corrected.

To provide transparency to the customer, the company bringing the customer to the alliance handles program management and overall purchasing. This is an important distinction in forming a successful alliance. Originally, Burton Industries had planned to be the overall program manager in all cases, but as business opportunities came in from alliance partners, customers often were most comfortable working directly with the partner who introduced them. Creating an alliance framework that allows for all partners to manage their customers provides greater incentive for each partner to bring business into the alliance. And while the EMS industry has a comprehensive program management model, there is a growing trend for suppliers in metal fabrication or plastics injection molding to offer a similar full-service program management and sourcing model to their customers.

Take a Holistic Approach to Defining the Network

A true supplier alliance network needs to have partners that potentially can address all likely customer requirements. One reason that strategic alliance networks can fail is because they don't have a broad enough range of partners and as a result only fit a few shared projects. Having a major gap in the required supply chain can cause customers to see less value in an alliance. The goal isn't to have an alliance supplier for every element in the project, but instead to have alliance partners that cover the areas that

would be most difficult to source.

In the case of the WIN Alliance, creating a network of suppliers capable of supporting full-product life cycles was the primary focus. The partners recognized that lower volume production was often difficult to support at a box build level and wanted to ensure that the network included the elements of the supply chain that were typically difficult to find. Not all suppliers are used in every network project.

Additionally, expanded product development support capability was another key benefit an alliance could provide. One issue frequently faced was customer-approved vendor lists that either lacked multiple sources or listed sources with availability or quality issues. Working around these constraints often drove both measurable and hidden costs at both contractor and customer. Additionally, once the product design gains regulatory approval, it is costly to make changes. By developing an alliance with strong product development partners, the Company improved its ability to get involved early enough in the design cycle to provide design for procurement, manufacturability and testability recommendations.

Be Flexible

Alliances are partnerships between individual companies and the best way to work together may vary by project. As a result, business relationship frameworks need to be structured with a high degree of flexibility.

For example, in the WIN Alliance, there are several bidding models that vary based on customer requirements. In some cases, alliance partners are simply suppliers to the partner bringing the business. In other cases, multiple partners may contract directly with the end customer and there may be a commission arrangement with the partner bringing the business. In cases where business only can be won with a partnering arrangement, companies may team to provide the required capabilities without a commission arrangement.

Achieving Success

Ultimately, a strategic supplier alliance succeeds or fails based on its ability to win enough business to satisfy its partners over time. Defining a clear vision, strong customer-related processes and recruiting the right network are the keys to achieving this success. ❖

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