SupplyChainDigest™

Your First Stop for Supply Chain Information

Success of Outsourced Manufacturing Strategies is Often Limited by Existing Supply Chain Applications that Don't Well Support New Contract Manufacturing Model

Outsourced Manufacturing, Like Globalization Efforts, Can Fail to Meet Expectations due to System Shortfalls, Experts Say; New Web-Based Solutions Emerging

SCDigest Editorial Staff

In the current tough economic times, it's likely that more companies will look to change their supply chain cost structures by increasing use of outsourced or contract manufacturing models.

Of course, in many industries, such as apparel and technology, the contract manufacturing model is already dominant. It has been spreading to other sectors rapidly, as companies look to shed fixed costs and gain flexibility.

Many consumer durable and industrial equipment manufacturers are increasing their use of contract manufacturers. Even Hershey Foods last year announced it would begin outsourcing much of its chocolate production.

But, in a similar way to the related area of global sourcing, many companies are finding that the savings they expected to achieve from outsourced manufacturing models are elusive.

As usual, there are many factors in why companies have problems achieving the level of savings or efficiency that they hope to achieve with outsourced manufacturing strategies, but lack of technology enablement is often one of them.

The basic problem: many companies have enterprise and planning systems that were built and implemented for a very different supply chain model. Suddenly, visibility is very hard to achieve. Existing planning models no longer work. Supply Chain constraints need to be thought of in a totally different and unfamiliar way. Institutional knowledge about supply chain control is suddenly of limited use. There are your plans, and then there are your contract

The basic problem: many companies have enterprise and planning systems that were built and implemented for a very different supply chain model. Suddenly, visibility is very hard to achieve. Existing planning models no longer work

manufacturers' plans.

As a result of the limitations of the currently installed technology to meet the outsourced model's requirements, many processes again become manual, and planning becomes increasingly based on spreadsheets. The time this all takes reduces the time available to manage suppliers and planning decisions, leading to execution disconnects that raise costs and result in inventory problems.

"Companies that outsource portions of their manufacturing often need to have the same – or better – visibility into production as they would need if they did the manufacturing themselves," **Greg Gorbach**, Vice President of Collaborative Manufacturing at ARC Advisory Group. "They want to have confidence in the quality, quantity, and timeliness of what is produced, because they are the ones who will be on the hook with customers if promises cannot be kept. It is not sufficient to rely on penalties for contract manufacturers to protect their interests."

Success of Outsourced Manufacturing Strategies is Often Limited by Existing Supply Chain Applications that Don't Well Support New Contract Manufacturing Model (Con't)

Hussain Mooraj, a Vice President of Research at AMR Research, agrees.

"Brand owners are challenged at deploying technology to manage the contract manufacturing network," Mooraj told SCDigest. "Most technology solutions, even ERP systems that support contract manufacturing, have the ability to only exchange limited demand/forecast information. Vendors of technology have fallen short in developing tools that can be used by the brand owners to successfully manage contract manufacturer interactions, such as exchange of timely quality and compliance information."

Solutions Starting to Emerge

ERP and traditional supply chain planning vendors recognize the issue and are starting to adjust solutions to meet these new challenges, but at the same time a new group of software providers is emerging to specifically address the visibility, planning and execution challenges of the outsourced manufacturing model. Technology advances such as Service Oriented Architecture (SOA) and on-demand solutions are opening up interesting new possibilities.

For example, **Amitive** is a relatively new solution provider focused specifically on this space. The company set up shop as a spin-off of Japanese industrial giant **Mistsui**, which had developed the first generations of the solution to meet the needs of clients of its logistics/supply chain outsourcing business.

One key tenet of Amitive's approach to the problem is that companies need to rethink what drives supply chain performance in the outsourced world.

"When manufacturing is in-house, asset utilization in those plants is a key driver of supply chain decisions," said **Sean Rollings**, VP of marketing at Amitive. "In an outsourced world, it is much more about product velocity and reducing total cycle times and inventory."

Certainly, balancing supply and demand becomes much different in an outsourced world – and requires different tools to manage. Collaboration, visibility and information with contract manufacturers become critical to supply chain success –often requiring multi-level visibility to the supplier's supplier, for example.

Supply capabilities and lead times across CM's can be dynamic, requiring a different approach than managing captive manufacturing capacities. Amitive argues that a new set of optimization tools that can dynamically "net out" supply and demand levels across CMs and arbitrate elastic supply capabilities are needed to meet this different supply chain scenario.

AMR's Mooraj says that new approaches to system to system integration will be key.

"Solutions that help integrate enterprise-level information with operational systems, such as Manufacturing Execution [MES] and lab systems between the brand owners and the contract manufacturers have great potential," Mooraj said. "Essentially, it is about bridging the two manufacturing architectures with an information pipe."

Since each company and CM relationship are different, solutions that can easily support development of custom processes or workflows will also be key, something SOA-based systems provide the potential to make much easier.