

Supply chain solutions support the eco-friendly imperative

By Julie Fraser -- Manufacturing Business Technology, 10/1/2008 6:00:00 AM

How can a company achieve sustainability and fight energy costs? This question has put a focus on supply chain management for several years. However, within the supply chain, there are many opportunities for lowering energy, materials, and fuel consumption; and generating a more sustainable and eco-friendly operating stance. A few examples:

Transportation management: Many companies have purchased transportation planning, execution, settlement, and analytics from companies such as RedPrairie, Infor, HighJump, Manhattan, Ramco, JDA, i2 Technologies, Intuitive Information Systems, and Sterling.

Supply chain network design: All of the major supply chain management providers and some ERP companies such as Infor have some of this capability, along with specialists Barlow World Optimus and Llamasoft. Llamasoft provides optimization and simulation for greenhouse gas emissions modeling across the network.

Demand planning: Attaining an accurate view of demand at a detailed level can lower inventory levels and all of the movement associated with inventory. Suppliers of advanced demand planning offer more capabilities for fine-grained views (see [March 2008 column](#) for specific software providers.)

Sales & operations planning (S&OP): One of the major causes of mismatched inventory and wasted effort is disconnected planning. Several suppliers provide support for the S&OP process, including IBM's Cognos, Kinaxis, Supply Chain Consultants, JustEnough, Steelwedge, DemandWorks, and most major supply chain management providers.

Planning and scheduling: Scheduling company Optessa is making hay with green recently. Certainly putting products through production in the right sequence can save energy and materials (see column [January 2008 column](#) for specific providers).

Warehouse management: Transportation between warehouses is one aspect, but efficient equipment and paths for inventory and forklifts inside the warehouse also save energy. Leading suppliers include Logility, HighJump, Apriso, IntelliTrack, Manhattan, TECSYS; and multiple ERP providers including Epicor, JDA Software, Infor, QAD, SAP, and Oracle.

Strategic sourcing & supplier management: Sourcing applications from Procuri, Ariba, Zycus, Epiq, and B2B industry portals connect suppliers in low-cost countries to buyers. Now manufacturers also must consider shipping costs, time, and flexibility. Many ERP and supply chain management systems have supplier relationship management that can include metrics on suppliers' energy efficiency or carbon footprint.

International trade management: In the global economy, it is critical to move materials across borders smoothly. In addition to fuel costs, manufacturers that automate with software from RedPrairie, Ross, Tradebeam, Solarsoft, Deacom, Descartes, and Management Dynamics will see enormous savings in time and paper.

Those are just some of the supply chain management disciplines involved. Plant-floor, product engineering, remote conferencing, and analytical software also make a company lean and green. We must learn to see green through the fly's eye. Companies not acting on all facets may find they can be killed by a good swat from a competitor—or a stiff economic wind.

Author Information

Julie Fraser is Principal Industry Analyst for Cambashi Inc., and has been an industry analyst, consultant, and marketer for more than 20 years, specializing in manufacturing value network processes and systems. Julie can be reached through Manufacturing Business Technology, or email at Julie.fraser@cambashi.com.