



## Make vs. buy? Do the math

In mid April home furnishings retailer Williams-Sonoma announced plans for an upholstered furniture manufacturing plant in Hickory, N.C. In five years the new plant will employ up to 820 workers. The average job will pay \$42,000 annually. That's over 20 times what a Chinese furniture worker earns. And remember that the market share of foreign-made upholstery on U.S. retail floors is at 29 percent and growing.

Has Williams-Sonoma lost its mind? No, the company is looking well beyond the basic FOB port of entry cost of sofas and chairs it can buy from foreign furniture makers. Its decision to swim against the import tidal wave was built on a strategic cost equation that considered every factor impacting its costs and, more importantly, the ability to serve its customers.

Let's say, like Williams-Sonoma, you make sofas and are attracted by low manufacturing costs overseas. In a traditional make vs. buy analysis your purchasing department obtains a landed cost for that sofa from prospective foreign suppliers. Decisions are then reached by weighing those numbers against the cost of internally producing the item.

### Add up the costs

In most cases that overly simplistic assessment will prove the foreign-made sofa cheaper. But that level of analysis often compares apples and oranges. If you want the math to be strategically accurate, other factors must be considered:

#### ► Unabsorbed Overhead Costs —

Transferring the sofa offshore does not reduce your operating overhead unless

you truly eliminate those fixed costs. Any continuing costs must be added to the price of the foreign-made sofa. You can't simply reallocate those costs to other domestic products. Doing so makes those items more costly and leads to a downward spiral of more outsourcing/less domestic production for your plant.

► **Inventory Costs** — Most often the delivery promise to your customers is less than the time required to order and receive the product from offshore. As a result you must stock the sofa in your warehouse. Implicit in this inventory requirement is the safety stock necessary to ensure an uninterrupted supply given the production and shipping delays that inevitably occur in a global supply chain. The cost of holding this inventory is equal to about 2 percent of its value per month.

Note that implementing lean production methods in a U.S. plant often eliminates the need for this warehousing cost. And delaying production until receipt of the customer's order allows a higher degree of semi-customization that is critical in products like sofas and kitchen cabinets.

► **Cost of Lost Sales/Excess Merchandise** — Operating a lengthy global supply chain for our sofa relies on demand forecasting to set order quantities — a task that is fraught with opportunities for error. Predicting sales rates is most complicated during two phases of a product's life cycle — its introduction and closeout. Inevitably too few

*continued*

With the global economy shifting we could be approaching a tipping point in the make vs. buy math.

items are ordered in the early stages of the cycle, and sales are lost. At the end of the cycle, too many units remain in the warehouse, and steep discounting is required to move them. Both instances add costs that are often neglected in make vs. buy decisions.

- ▶ **Cost of Quality** — The cost of quality in a global supply chain is often higher than for its domestic counterpart. Early in the learning curve with an overseas supplier, management and engineering time must be invested to ensure that quality specifications are met. Often you must hire staff for on-site inspection. Refurbishing defective goods after arrival in the U.S. frequently means maintaining a domestic repair department or hiring a third-party specialist. As with closed-out products, second quality merchandise must often be discounted steeply.
- ▶ **Manpower Costs** — For a manufacturer, operating a global supply chain requires new management skills in sourcing, quality assurance and logistics. Hiring this talent or using experienced sourcing agents and third-party logistics operators adds cost to products purchased offshore.
- ▶ **Currency Risk** — The recent weakening of the U.S. dollar and the unpegging of the Chinese renminbi are translating to higher import prices. Doing business in this environment adds uncertainty to your pricing decisions and can complicate negotiations with your suppliers and customers.
- ▶ **Political Risk** — Potential instability in your source country adds the risk of supply interruption and the need for expensive back-up suppliers in other regions.
- ▶ **Transaction Costs** — Flowing products in a global supply chain requires numerous connections between your suppliers and customers across borders and time zones. These contacts are complicated by differences in business cultures and the lack of real control over processes that occur on foreign soil. Your order is at the mercy of your supplier's backlog and customer preferences.

### Adding up the costs

Quantifying these costs is difficult but not impossible. The foreign exchange risk can be hedged. Some of the transaction costs can be covered through an agent's fee. One fact, however, is certain in the make vs. buy calculation: these costs approach zero if the sofa is made domestically in a well-managed, lean factory.

In addition to the math, history offers a valuable lesson learned. The remarkable shift of furniture production offshore over the last 10 years has not significantly grown the size or health of the U.S. furniture industry in spite of price deflation. Furniture's share of the consumers' wallet remains stagnant at less than 1 percent of spending. The graveyard for bankrupt U.S. furniture retailers is rapidly filling. Could U.S. consumers want something more than cheap furniture? Has the industry simply failed in its mission of fulfilling the consumers' dreams?

Today imported furniture prices are rising. One can easily predict the impact of higher prices on future retail sales.

And remember that your foreign supplier can become your competitor. Many Chinese furniture makers are now selling direct to U.S. retailers through their own sales forces and warehouses.

The economics of offshoring vary as production costs rise overseas, currencies fluctuate, transport costs increase, and consumers' tastes evolve. With the global economy shifting we could be approaching a tipping point in the make vs. buy math that has prevailed over the past 10 years.

**Bottom Line:** Buying materials, components and products from low-cost countries like China is not a slam dunk. Good and bad reasons exist for pursuing such a strategy. Before automatically jumping offshore, carefully compute the real impact of that move on your costs and ability to satisfy your customers. ●

*Art Raymond is a manufacturing consultant specializing in furniture, cabinets, millwork, fixtures, and other secondary wood products. His firm, A. G. Raymond & Co., has developed management and technical solutions for manufacturers around the world. Contact him at 919.831.0070, by email at araymond@raymondnet.com, or on the Web at www.raymondnet.com.*