

# When “insourcing” is the right choice

Why abandon your 3PL partner when it is performing well? Apparel maker Joseph Abboud brought distribution in-house to make its operations leaner.

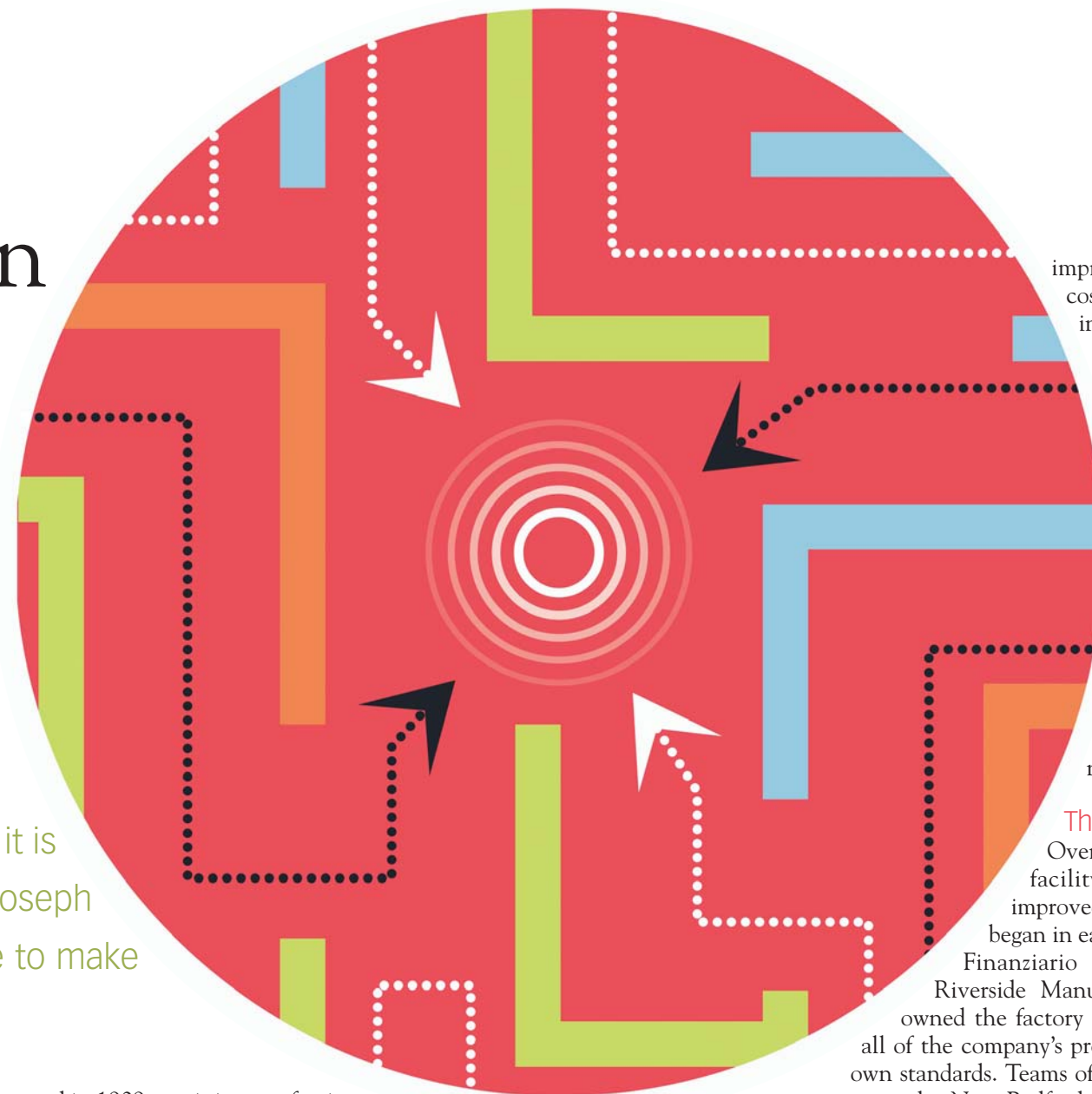
**JA APPAREL CORPORATION, OWNER OF THE JOSEPH ABBOUD BRAND** of clothing, accessories, and home furnishings, is celebrating its 20th anniversary this year. Over the course of two decades, the company has grown worldwide retail sales of its stylish and finely constructed products to an estimated \$300 million.

The company manufactures all of its tailored clothing at its wholly owned facility located in New Bedford, Massachusetts. The sprawling but highly efficient manufacturing layout is housed within a brick building con-

structed in 1909, reminiscent of a time when this small city bustled with apparel and textile trade.

Times are different now in New Bedford, and Joseph Abboud is one of the last of its kind to maintain a local manufacturing presence, even as others succumbed to economic pressures and moved or outsourced their manufacturing overseas.

Joseph Abboud certainly felt those same pressures. But by redesigning its manufacturing processes and streamlining its distribution methods, the company was able to



improve efficiency and reduce costs enough to be able to stay in its historic hometown.

The keys to Joseph Abboud's success were identifying and reducing waste through examining and questioning its entire supply chain; customizing a solution that took advantage of unique local characteristics; adopting a methodical approach to project planning that included periodic adjustments; and extracting the knowledge and expertise of the company's experienced staff.

### The lean team

Over the years, the New Bedford facility had fine-tuned and improved efficiencies. Those efforts began in earnest in 1987, when Gruppo Finanziario Tessile (GFT) purchased Riverside Manufacturing Company, which owned the factory at the time. GFT converted all of the company's processes and machinery to its own standards. Teams of Italian engineers descended upon the New Bedford facility, armed with detailed drawings of workstation layouts and instructions for GFT-approved methods and quality specifications. Cutting, sewing, and pressing machinery, built to GFT's specifications, was imported from Italy, and manufacturing managers were trained to produce highly engineered men's clothing. But things changed in 2004, when Joseph Abboud was purchased by the private-equity firm J.W. Childs Associates.

The new owner was determined to improve cycle times, customer service, and sales; that focus would in turn improve EBIDTA (earnings before interest, depreciation, and amortization), an approximate measure of a company's cash flow. To achieve these goals, J.W. Childs advocates the implementation of

“lean” processes throughout its portfolio of companies. In order to free up working capital, reduce costs, and shorten lead times—and thus improve customer service—J.W. Childs sponsored Joseph Abboud's adoption of lean manufacturing processes.

Lean is a set of principles that helps companies improve quality, reduce production time and operational costs, and identify and eliminate waste. Waste typically falls into one of three categories: work that does not add value, imbalances, and “overburdens” (nonstandardized work and/or improper work flow). Some of the tools used to eliminate waste are continuous process improvement, “mistake proofing,” and asking a series of standard questions (“the five whys”) to find the source of the waste. Joseph Abboud's leadership team didn't limit its quest for improvement to manufacturing; its members also pondered whether they could apply lean to other parts of the company's supply chain.

Toward that end, Joseph Abboud brought together an experienced, cross-functional project team that included its own operations, manufacturing, and finance personnel as well as representatives from XCD Performance Consulting (including the authors of this article). This team scrutinized the company's existing supply chain, which included a lengthy product-development process, both international and domestic manufacturing of apparel, and outsourced distribution using a third-party logistics company (3PL) in New Jersey.

The 3PL was responsible for receiving, locating, storing, picking, conducting value-added services, packing, shipping, and customer service, and it had deep expertise in apparel industry processes. It had been performing quite well for several years and had strong relationships with key customers. This was certainly a valuable arrangement that deserved to be considered very carefully during the team's objective evaluation of the supply chain.

### Local factors favor insourcing

The project team's analysis showed that Joseph Abboud could reduce its costs and shorten order-to-delivery times by pursuing three strategies:

- Streamlining product development and improving

[BY JEFF BOUDREAU AND BRAD SAMPSON]

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planning and forecasting;

- Implementing lean manufacturing for domestically produced items; and
- Configuring a lean distribution process that would take advantage of the company’s unique strategy, assets, physical location, and local culture.

One step the team recommended was to “insource” (bring in-house) the distribution of the tailored clothing manufactured in New Bedford. Insourcing part of the company’s distribution seemed counterintuitive and was a difficult concept for some to accept, as Joseph Abboud had outsourced that function for years. However, the team was able to show that the benefits of insourcing would be magnified if the company took advantage of several local factors, such as company-owned space adjacent to the manufacturing area, the availability of material handling equipment due to the shrinking apparel industry in the region, and Joseph Abboud’s strong relations with its labor union, UNITE HERE. The union represents the combined membership of the former UNITE (Union of Needletrades, Textiles, and Industrial Employees) and HERE (Hotel Employees and Restaurant Employees International Union). By working together with the union, Joseph Abboud would be able to balance the need for both warehousing and manufacturing staff.

There were several other factors that worked in the proposal’s favor. One was that it would not involve all of the distribution operations, which would have required a much larger, more complex, and more

expensive project. This first-step solution would also allow Joseph Abboud to maintain its successful partnership with the 3PL, which would continue to handle warehousing and distribution of the company’s sportswear, dress shirts, and neckties.

Historically, 3PLs have added value by creating economies of scale and access to customers or markets. From a lean perspective, however, outsourcing does not add much value. Other drivers that influenced Joseph Abboud’s decision included:

**1. Product characteristics:** Joseph Abboud’s business is undergoing a transformation. More and more retailers are demanding made-to-order suits, which drives down manufacturing batch size and outbound order size. In addition, customers’ inaccurate planning creates variability in forecasting and the product’s lifecycle.

**2. Technology and know-how:** To design, plan, and manufacture suits domestically, Joseph Abboud needs to blend experienced craftsmanship with specific technologies. Moreover, even companies with some in-house production can become vulnerable to counterfeiting or fast-followers. Therefore, carefully controlling and closely integrating manufacturing expertise with a better understanding of order-fulfillment processes and technologies is important.

**3. Local culture:** Insourcing some distribution would bring employees on the manufacturing floor closer to the customers’ requirements. This would enhance the company’s cohesive and cooperative culture. Moreover, a shared understanding of lean practices and the vagaries of customers’ demands would provide a better framework for inventory management, customer retention, and responsiveness to the market.

**4. Sustainability:** Leading companies not only reduce and recycle resources, they also examine whole systems for ways to eliminate the need for those resources. By insourcing part of its distribution, Joseph Abboud is taking initial steps in that direction as it eliminates a significant amount of shipment miles. The company is also seeking other recycling opportunities within its manufacturing processes.

In the end, all of these factors, along with the potential cost savings and lead-time reduction, led senior management to approve this new vision of lean manufacturing and insourced domestic distribution.

**Optimized by design**

The entire project played out over the course of about one year. The first step on the distribution side was “leaning out” the existing planning, distribution, and inventory processes to create the underpinning for the design of a 75,000-square-foot warehouse that would be added directly onto the end of the manufacturing line. The second step was refurbishing the

existing facility, which required detailed coordination with several teams of workers to optimize the cost of both labor and equipment. The final step was transitioning responsibility from the 3PL with the least amount of disruption possible.

These three interdependent and overlapping plans resulted from the project team taking a holistic, lean approach and deciding against upgrading systems and adding expensive automation. Instead, the plan exploited Joseph Abboud’s location, access to adjacent space, simple technology coupled with focused business processes, and local presence as an employer of choice.

The facility’s design allowed the team to piggyback on lean initiatives that were taking place within manufacturing to support both current and future processes. One example is the single accumulation area for matching suits and bundles of work. This work previously was done in two separate areas, one for coats and another for pants. Changing to one work area allowed the company to free up valuable space adjacent to manufacturing, transfer labor from nonvalue-added areas, and redistribute tasks to more appropriate workstations upstream. This improvement maintained more than 95 percent of the original capacity despite a 50-percent reduction in the amount of space used. (See Figure 1.)

Another simple yet powerful application of lean was the establishment of independent work cells located in the processing area. These work cells are capable of completing any of the value-added processes required for finishing garments for specific customers. The workstations also provide maximum flexibility during times of variable demand. Prior to this new design, garments had to be separated by type in order to be sent to the correct work cell, which created wasteful labor inefficiencies. (See Figure 2.)

The company also created an old-fashioned rail system that transports garments on hangers through each step, from final inspection in manufacturing to packing and shipping. This design aspect improved flexibility and efficiency. Unlike the previous system, which transferred the goods from rail to rolling rack and back again several times, this design keeps the merchandise hanging from the rail throughout the entire process, which eliminates even more labor waste. The single, interconnecting rail system also works in reverse, allowing inbound goods to be received directly onto the rails, which are attached to a boom that reaches inside a 53-foot trailer. The booms move the goods onto the rails, which then transport the items in the opposite direction, from the outbound merchandise area to the returns/repairs area, to storage, or even back to the manufacturing area if necessary.

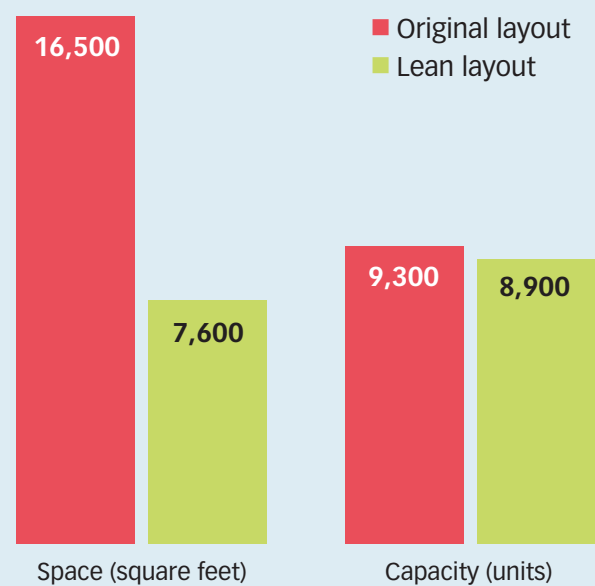


*Textile workers arrive in the early 1900s at the building that now houses Joseph Abboud’s manufacturing and distribution facility in New Bedford, Massachusetts.*



*The building and its manufacturing systems were refurbished and a new distribution center was added in 2006.*

**[FIGURE 1] PROCESS REQUIREMENTS PRIOR TO STORAGE**



ALL PHOTOS COURTESY JOSEPH ABBOUD MANUFACTURING CORP.

in each other's way. These factors, along with careful project management, provided the flexibility needed to react and adjust to new information or unforeseen obstacles.

A few sections of the facility were completed during the initial phase of the refurbishment in order to test the new process with certain products. These were not just any goods; they were personalized garments from a newly created division that produces perfectly fitted clothing made to customers' individual measurements. This pilot was a great way to test the facility's physical flow as well as its processing capabilities in a time-sensitive environment.

The transition from the 3PL, the last of the three plans to take effect, was the most fluid. During this part of the project, Joseph Abboud relied heavily on several of its internal team members. These experienced people made sure that no detail was overlooked when it came to planning and communications regarding the transition from the 3PL's DC in New

Jersey to the new facility in Massachusetts.

Sales, customer service, finance, the 3PL, and—most importantly—the customers all required different pieces of information about the transition in order to properly complete the cut-over from one facility to the other. Any misstep or miscommunication might lead to disastrous results. Maintaining availability of goods for the customers was, of course, a top priority. Equally important, though, was minimizing the amount of finished goods requiring transportation to the new facility. Working closely with the sales team on the transition plan helped Joseph Abboud achieve those objectives by changing the timing of certain orders and implementing creative selling opportunities to reduce the amount of goods to be transported prior to the cut-over.

As the go-live date for the new facility neared, the project reached its most critical point. Under a carefully planned process, goods began to return from the 3PL on a Thursday evening. Within four days, more

than 40,000 garments on hangers had been unloaded, verified, and stored in the new warehouse. Meanwhile, new merchandise was flowing into the facility from production. When all was said and done, almost 50 percent of the finished goods in the new warehouse had come from the 3PL.

Three days later, after a full inventory verification that was more than 99.9 percent accurate, the new warehouse was shipping its first units out the door. The team fully expected there would be some initial implementation pains, but because all goods were accounted for, the group was able to focus its attention on process adherence and customer service.

### The lean journey continues

Joseph Abboud realized a host of benefits as a result of this project. "Because of our unique situation, we had supply chain opportunities present themselves in ways that seemed to contradict conventional outsourcing strategies. With insight from XCD Performance Consulting, we created a lean, insourced distribution flow that better serves our customers with lower cost," sums up Eric Spiel, JA Apparel Corporation's chief financial officer.

The most dramatic improvement was a 50-percent (seven-day) reduction in lead time from the moment the garments left the final inspection area in manufacturing until they were ready to ship to the customer. This improvement was largely due to the elimination of waste: The company was able to eliminate several nonvalue-added processes, including organizing groups of garments in a specific order; packing, tracking, and processing the goods for shipment; and transporting the goods to the 3PL and then to the customer.

With its ability to process and ship orders the same day, the streamlined distribution process also supported Joseph Abboud's new made-to-order business. The company no longer had to pay the insurance costs associated with protecting its goods in transit to the 3PL. Eliminating waiting time and staging space for the garments prior to shipment to the 3PL freed up valuable space for the new lean production cells. The company also was able to create a highly efficient and timely returns and repairs area adjacent to the receiving dock, which allowed workers to quickly separate damaged goods from other types of returns that could be returned to stock quickly.

Joseph Abboud's lean journey will continue. The company expects to be able to more readily identify the waste associated with the inventory imbalances that are created by the drive to hit monthly targets during the last few days of the month. As a result, inventory management will become more critical, as will the need to balance workflow and find improve-

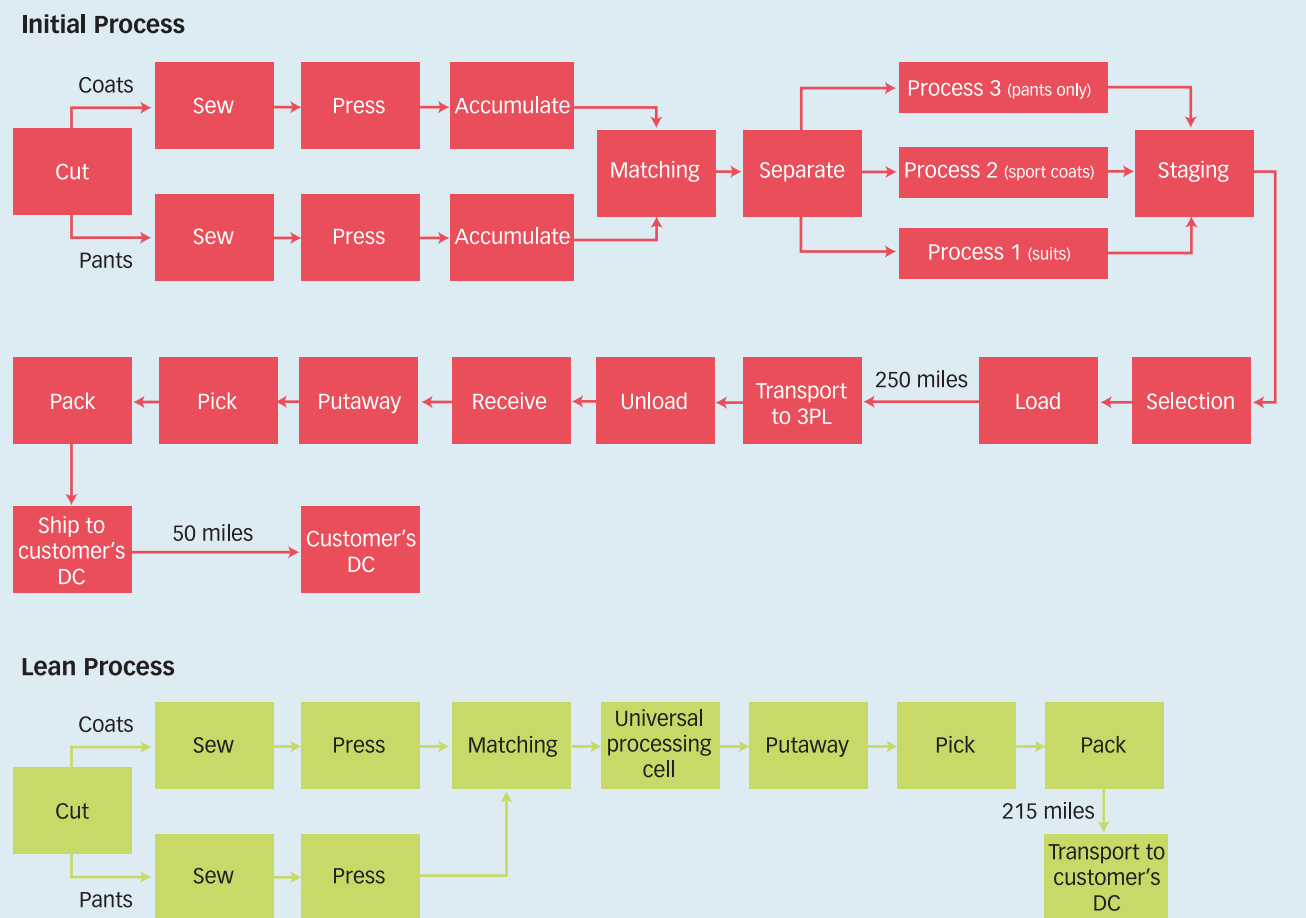


The spinning room produced thread later used for clothing manufacturing and assembly.



The building's unusual saw-toothed roof allowed more natural light to enter the manufacturing area.

[FIGURE 2] JOSEPH ABBOD BEFORE AND AFTER



ments in both systems and processes that can further reduce the company's operating costs.

At a time when more and more companies are shifting production and capital overseas, it is refreshing to see one company that chose to swim against the tide of automation and outsourcing. Joseph Abboud's management learned that if the company aligns its supply chain with its corporate strategy while keeping the customer in mind, its employees will accomplish great things while continually improving processes and service quality. Their people rose to the challenge of transitioning to a more complex yet leaner supply chain with increased individual responsibility. And they did it with the kind of precision and style that could only be matched by the products that bear the label of Joseph Abboud. △

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