Case Study

Dramatic reduction of greige and dye processes by as much as two-thirds

Twice a year – in January and July – big sale events in the apparel world promise a field day for bargain-hunting consumers. But the sales extravaganzas represent huge losses for clothing manufacturers forced to liquidate excess product inventory.

One innovative Japanese textile manufacturer decided to challenge this long-standing practice. Using Adexa's eGPS suite, the company successfully implemented a new supply chain solution to shorten production time, improve enterprise-wide coordination and synchronization, and help the clothing manufacturers who were its customers reduce losses.



The Problem

Apparel production is a lengthy process; fully half a year passes between the production planning phase and the time clothes are available in shops. The production lead time itself takes five months, starting from the treatment of unprocessed yarn up to the working of finished material.

Compounding the long lead times is the lack of visibility in the production process. For example, greige plants cannot draw up production plans until they know when to expect delivery of unprocessed yarn from the textile manufacturer.

The textile manufacturer, however, is unable to issue production orders without knowing the capacity of its greige plants. This results in the accumulation of extra stock and the use of more production time to compensate for unknown variables, adding even more delays to the already long lead times involved.

The Adexa Solution

In searching for a supply chain optimization solution, the textile manufacturer – one of the largest in the world – sought to cut production lead time, increase visibility into data, and improve planning efficiency. Using Adexa's eGPS suite, the manufacturer instituted a new "Quick Response" system for boosting efficiency.

Improved coordination and synchronization. With its intelligent planning and solver engine, eGPS immediately allowed the textile manufacturer to model, monitor, and control the flow of information throughout its extended supply chain.

eGPS made critical data available to the yarn/greige/dye plants, showing customer orders, stock levels at various suppliers, and stage of completion. All information was accessible through the Internet, made possible by eGPS's open Internet architecture.

Boosted visibility and cut production time. Enhanced visibility provided by eGPS keeps information flowing between the textile manufacturer and the plants. And by enabling interactive collaboration, Adexa's solution slashed the greige manufacturing process from 60 to 20 days and the dye process from 30 to 10 days – a dramatic two-thirds reduction at each stage.

Enhanced customer service levels. Increased data visibility keeps customers informed. In the past, the textile manufacturer's sales division had to continually cope with calls from anxious customers wishing to confirm orders.

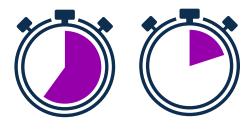
The new system with eGPS allows quick verification of order status, not only enhancing customer service but also freeing the sales team to concentrate on what it does best – the business of selling.

eGPS's success was not confined to shortening production time alone; it carried over to the entire apparel production process, slashing the 150-day lead time to just 45 days – a stunning 70 percent reduction.

Such radical time savings allowed the textile manufacturer to switch production planning from a monthly to a weekly basis, greatly increasing customer responsiveness. And because of eGPS's flexible business rules, the textile manufacturer was able to adjust lot productions to smaller sizes in accordance with the new weekly production schedule, successfully coping with the burdens imposed by more frequent demand planning.

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The Results

The eGPS model has blazed a new path for apparel production, yielding demonstrable benefits. The shorter lead times have boosted efficiency, allowing the textile manufacturer to begin production only after formal orders are received, instead of manufacturing on "guesstimates" alone.

At the same time, the new system allows the textile manufacturer to accept additional orders from customers during the same season – a benefit previously thought impossible to attain that promotes ever-greater levels of responsiveness throughout the apparel chain.

The shorter production process translates into accurate order promising and delivery for the manufacturer's customers, strengthening partnerships through tight coordination and shared visibility into important processes.

In an age where speed matters, this renowned textile manufacturer is weaving its warp with eGPS's woof to – quite literally – come up with spectacularly colorful results.

Business Drivers and Issues:

- Cut production lead time to improve customer responsiveness.
- Improve visibility into data for greater coordination among yarn/greige/dye plants
- Provide fast and accurate order commitments to customers
- Adjust production plan to smaller lot sizes as a result of greater efficiencies.



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