

Trayton Group launches into the digital era with Lectra

The Chinese furniture manufacturer's transition from a manual to an automated, digital cutting process yields lower operational costs, increased flexibility and consistent quality.

The Challenge

Trayton sought a more cost-effective, flexible production process with consistent quality, which was difficult to achieve with their traditional production methods.

Lectra's Response

Lectra proposed Versalis for automated leather cutting, Vector for fabric cutting and Diamino software for pattern making. Lectra also collaborated with Trayton on its continuous improvement activities for overall process optimization.

Results

Increased automation has enabled Trayton to decrease material consumption by 3%, offset the shortage of skilled operators and achieve consistent cut quality.

The challenge

From its beginnings 20 years ago as a small sofa workshop, Trayton has grown to a three-factory, 2,000-person enterprise, manufacturing fabric and leather upholstered furniture for some of the world's most famous brands such as Ikea and BoConcept. In 2005, company founder Simon Lichtenberg's vision of making well-designed, high quality leather furniture accessible to everyone became a reality when Trayton launched its own furniture brand, Simon Li.

The company's manual fabric and leather cutting process necessitated heavy reliance on operator knowledge for accurate cutting and quality control. It also hindered the manufacturer's production flexibility. Difficulty finding skilled operators and rising labor costs in China, as well as stronger pressure on prices and delivery times contributed to making this production method impractical.

Lectra Solutions

DIAMINOFurniture
VECTORFurniture
VERSALISFurniture

Getting answers through in-depth analysis

A Lectra customer since 2012, Trayton executives did not need to look far for a knowledgeable, trustworthy partner to guide their transformation from a manual to an automated process.

“We were looking at the industry as a whole and, in particular, Lectra’s background in research into this industry and the way these details are reflected in their equipment,” explains Thunder Chen, COO, Trayton Group.

“However, equipment is only one aspect of automation. The real issue is the entire process—from product development to manufacturing to final sale—and how to connect the whole process together,” Thunder adds.

After an initial onsite analysis of the plant, production tempo and KPI data from certain operations, Lectra proposed the Vector and Versalis solutions, for fabric and leather cutting respectively. “This preparatory work and analysis allows us to gain a rapid and accurate understanding of the areas that are causing the customer problems. We can then provide them with the optimal business and improvement plan,” explains Pan Chunjian, Account Manager, Lectra. The Lectra and Trayton teams then worked together to redesign the company’s processes based on best practices and implement the solutions in a way that allowed Trayton to quickly experience the benefits.

A seamless transition from tradition to technology

Lower operational costs, consistent quality and an accelerated production flow are the main advantages Trayton has attained with digitalization. By automating its cutting process, the company has eliminated unnecessary material waste and ensured a stable quality of cut pieces. “Since we have started using this equipment, there have been no more mistakes. As a result, our material consumption rate has improved by 2-3 percentage points,” says Thunder.

Adopting Versalis and Vector has also enabled Trayton to simplify its staffing needs. “Now, we require a much lower level of leather cutting. Operators mainly need basic computing skills; it is much easier to find workers with this skill set,” Thunder explains. With the help of Vector, two operators can manage the work that required eight operators when using a manual fabric cutting process.

Greater production flexibility has opened up more opportunities for business growth. “In the past, we would have felt that producing short runs was too difficult. Now all of these orders can be handled by the machine so we are happy to do them,” continues Thunder.

Continuing collaboration brings continuous improvements

Cooperation between the two teams extends beyond solution implementation and into continuous improvement activities.

During a follow-up visit to the site, the Lectra support team realized that there was room for improvement in terms of the leather cutting efficiency rate. Working together, the Trayton and Lectra teams performed an in-depth optimization of some of the Versalis parameters. “In terms of improvements relating to patterns and standard adjustment of our techniques, we were able to increase the overall yield of cutting efficiency by over 2 percentage points within around two months,” declares Thunder.

“Lectra has been a very good partner for us. Solution implementation, training of our employees, improved material use rates and cutting accuracy, everything has been great,” concludes Simon Lichtenberg, founder and CEO, Trayton Group.

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Thunder Chen
Chief Operating Officer

About Trayton Group

Trayton Group’s main business is the design, manufacturing and distribution of upholstered furniture. The company’s global headquarters are located in Shanghai, China. It employs 2,000 people, owns and operates close to 100,000 m² of manufacturing facilities in Zhejiang and Shanghai. Trayton Group also established two joint ventures with BoConcept, the modern Danish lifestyle brand and Kvadrat, a high-end Danish fabric brand.

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About Lectra

For forward-looking companies that breathe life into our wardrobes, car interiors, furniture and more, Lectra is committed to crafting the premium technologies that facilitate the digital transformation of their industry. Lectra’s offer empowers brands and manufacturers from design to production, providing them with the market respect and peace of mind they deserve. Supporting the furniture industry, Lectra offers CAD software, cutting room solutions and expert services dedicated to upholstered models. Founded in 1973, today Lectra has 32 subsidiaries across the globe, serving customers in over 100 countries. With more than 1,700 employees, Lectra reported revenues of \$313 million in 2017. Lectra is listed on Euronext (LSS).

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