

THE CHALLENGE

The rapidly increasing range of challenges for upholstered furniture manufacturers in today's market include lowering costs in the prototyping phase, reducing lead time from design to the finished product and customization while maintaining quality standards.

LECTRA'S ANSWER

Lectra's furniture solutions and expertise are revolutionizing the upholstered market. Through the creation of an exclusively designed sofa with Joly Design, Lectra, and Daveluy Creation have been transformed into physical reality. Game-changing 3D working methods using DesignConcept allowed the Lectra sofa to be developed collaboratively.

LECTRA SOLUTIONS

DesignConcept

Versolis[®]
Furniture

Vector[®]
Furniture

Sylvain Joly Design, Daveluy Creations and Lectra join forces for an innovative development project.

Sylvain Joly Design, Daveluy Creations and Lectra create the Lectra Sofa live!



In a trailblazing project, Lectra recently got together with Sylvain Joly Design and Daveluy Creations to create an exclusive sofa from design and product development to production using DesignConcept, Vector and Versalis.

A WINNING FURNITURE SOLUTION

With a solution that is able to virtually develop the prototype collaboratively, the perfect balance has been found between the designer's intentions, manufacturing constraints and costs. By harmonizing the input of everyone involved in the process, optimum performance levels have been achieved with a model that is 90% perfect first time and already rationalized for production.

MEETING THE NEW WAVE OF MARKET CHALLENGES

The upholstered furniture market is in the middle of a large scale renaissance. Faced with unprecedented levels of market competition and pressure, traditional prototyping and design methods are losing competitiveness. There is expanding demand for increased customization and a whole host of new features such as onboard technology, motion and modularity and the demand for immaculate quality has never been higher.

Meeting these challenges head-on, Lectra is leading the way with its range of furniture manufacturing solutions, from design & product development to cutting, that are fully adapted to anticipate the market needs of tomorrow. Trendsetting through Partnership, Expertise and Innovation, the 3 companies have put their extensive expertise into practice with the development of an exclusively designed sofa using Lectra's dedicated furniture solutions. With more than 30 years of experience, Lectra can help its furniture customers remain competitive while ensuring profit margins and being innovative.

“With the ability to follow the product conception and share it with the prototypist and production teams far more easily, the development of a virtual prototype ensures that the finished product is much closer to the original design. It is a huge bonus for our industry and provides the potential for significant increases in productivity.”

Pascal Daveluy
Daveluy Creations

FORGING THE WAY FORWARD FOR UPHOLSTERED FURNITURE DESIGN, PRODUCT DEVELOPMENT AND CUTTING

DesignConcept 3D was fundamental in the successful realization of this sofa partnership project. Styles were defined and models created quickly (using libraries for wooden components) as well as the creation of the technical documentation to build the physical prototype. The 3D virtual prototype was built collaboratively which guaranteed that Sylvain Joly’s design intentions were respected while ensuring feasibility for Pascal Daveluy. It also enabled the 3 companies’ to keep tight control over the budget constraints.

The model was validated using video conferencing based on the virtual 3D prototype. Automatically generated production data was then sent to the CNC system (Vector and Versalis) to cut the leather and fabric pieces. In the final stage, the assembly of the physical prototype was as straightforward as building Lego only one physical prototype was needed.

WORKING TOGETHER APART - ACCELERATING PROCESSES WHILE CUTTING COSTS AND REMOVING THE RISK OF ERROR

3D virtual prototyping ensured that all the design and feasibility constraints were met. This minimized the gap between design intention (as validated by Stanislas Joly) and the finished model made by Pascal Daveluy as well as allowing for the precise estimation of the cost price. Working remotely via video conferencing also removed the need for extensive travel.

The model was easily defined, adjusted and validated in terms of wood structure, foam, leather, fabric patterns and sewing lines. By example, tension areas were able to be visualized on the 3D model which allowed them to anticipate and effectively position sewing lines.



About Lectra

Lectra is the world leader in integrated technology solutions (software, automated cutting equipment, and associated services) specifically designed for industries using fabrics, leather, technical textiles, and composite materials to manufacture their products. It serves major world markets: fashion and apparel, automotive, and furniture as well as a broad array of other industries. Lectra’s solutions, specific to each market, enable customers to automate and optimize product design, development, and manufacturing. With more than 1,500 employees, Lectra has developed privileged relationships with prestigious customers in more than 100 countries, contributing to their operational excellence. The company is listed on Euronext. For more information, please visit www.lectra.com

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