

## ARTICLE

# UPHOLSTERED FURNITURE MANUFACTURING IN TRANSITION: BETWEEN SUSTAINABILITY AND PROFITABILITY

From eco-conscious shoppers to unpredictable supply chains, the forces driving change in upholstered furniture manufacturing are hard to ignore. At the center of it all is a tough but essential balancing act: how to stay profitable while becoming more sustainable. It's a challenge that calls for agility, innovation, and smart use of technology.

## Changing consumer expectations

Today's consumers expect more than just comfort and design. They want to know where their furniture comes from and how it was made. In Europe and North America, aging populations prioritize durability and quality, seeking furniture that lasts and provides long-term value. Meanwhile, younger generations are moving away from materialism and embracing more eco-conscious lifestyles.

But there's still a gap between what people say they want and what they actually buy. Many are hesitant to pay more for sustainable options, especially when they are unsure if the claims are real. **Without clear, standardized certifications, it is hard to tell which products are truly green and which are just greenwashed.**



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## Regulatory pressures and industry response

Governments are accelerating the shift toward sustainability. The European Green Deal and Circular Economy Action Plan set ambitious targets for reducing emissions, cutting waste, and boosting recycling (read our white paper [Sustainable Upholstery Furniture: what Strategies and Technologies?](#) for more details). These policies are pushing manufacturers to adopt eco-friendly practices, such as using FSC-certified wood, non-toxic dyes, and recyclable materials.

Forward-thinking companies are already leading the way. For example, **IKEA has committed to using only renewable or recycled materials by 2030**. Poltrona Frau is testing digital product passports to offer customers greater insight into how their furniture is made, beginning with its Vanity Fair and Archibald collections. These initiatives are pioneering new standards in transparency and accountability, offering consumers clearer information about the processes behind their products.



## Supply chains under pressure

The Covid-19 pandemic and more recent geopolitical tensions have exposed the fragility of global supply chains. A disruption in one region can ripple across the entire system, delaying production, raising costs, and straining relationships with suppliers. For the furniture industry, this has meant re-evaluating not just where products are made, but how resilient and responsive their operations really are.

For years, furniture brands leaned heavily on low-cost manufacturing in Asia—especially China, which accounted for more than half of all U.S. furniture imports. **The introduction of tariffs under Donald Trump's administration has disrupted long-standing sourcing models** and prompted many companies to explore reshoring and nearshoring alternatives as a way to reduce risk and improve supply chain resilience. However, bringing production closer to home requires investment in new technologies and workforce training to stay competitive.

Retailers are feeling the pressure too. With margins already tight, many face a tough choice: raise prices and risk losing customers, or absorb the costs and watch profits shrink. Some have opted for a middle ground—modest price increases paired with strategic sourcing shifts—but the uncertainty is hard to manage.



## Smart manufacturing with Industry 4.0

To thrive in this new environment, companies need to be agile and sustainable. That is where the concept of Econogy comes in, the idea that implementing sustainable practices can yield economic benefits. According to Maximilien Abadie, Lectra's Deputy CEO, Econogy is about merging corporate social responsibility (CSR) with economic imperatives, meaning that 'choice' between profitability and sustainability is no longer necessary.

Lectra's Industry 4.0 solutions are designed to help companies do just that. By using smart technologies and data-driven processes, **Lectra's solutions can help upholstered furniture manufacturers cut waste, use resources more efficiently, and stay nimble all while keeping costs in check.**

**Furniture On Demand** is the industry's first solution to automate and streamline the on-demand manufacturing process. It supports one-off and small series production, allowing companies **to respond quickly to individual orders without compromising efficiency**. Furniture On Demand also provides production visibility and control through data-based decision support, helping manufacturers manage complexity and scale sustainably.

**Valia furniture** is the power behind Furniture On Demand's Industry 4.0 connectivity and data-driven workflow. This powerful digital solution, which can connect to cutting room components, enables the flow of data throughout fabric cutting preparation, production and analysis. Automated control of cutting room processes makes it possible **to optimize workflows and make informed decisions**. Rob Page, Production Director for Plumbs, highlights the impact: *"Automating our customized production allows us to reduce time to market by being able to create and process a wide variety of markers quickly. We can produce patterns for each sofa and send them directly to the cutting room through the cloud."*

**Virga** is a high-performance, single-ply cutting solution ideal for small series and customized production. Integrated with Valia, it enables manufacturers **to begin cutting within minutes of order placement**. It is particularly effective for handling patterned fabrics and one-off designs, making it a valuable asset for companies embracing personalization and modularity.

**Vector** is the solution of choice for upholstered furniture manufacturers performing low-to high-ply cutting and works seamlessly with Valia. With Vector, manufacturers can **switch between small-series and high-volume production with minimal disruption**. Intelligent software optimizes fabric usage, while predictive maintenance ensures high machine availability and energy efficiency. The latest Vector range also features a reduced environmental footprint, supporting both agile production and sustainability goals.





To remain future-ready, manufacturers must adopt digital technologies, invest in flexible production systems, and build resilient supply chains that can withstand disruption while meeting the growing demand for transparency and environmental responsibility.

Lectra's Industry 4.0 solutions help make that possible. By aligning **profitability, sustainability and agility**, these technologies empower manufacturers to streamline operations, reduce waste, and respond quickly to market shifts. By building agility and sustainability into their core business strategies, companies will not only meet today's challenges but also **shape a more resilient and responsible future for their business.**