

# PERSONALIZED FURNITURE ON AN INDUSTRIAL SCALE

How furniture, kitchen and bathroom manufacturers  
can optimize supply chains to achieve mass customization



## NEW GENERATION OF HOME GOODS EXPERIENCES

In the age of experience, personalization is fast becoming the core tenet of how companies do business. That's because today, consumers not only expect personalized interactions with the brands they engage with, but they also increasingly want to be able to shape the products they buy.

As consumer appetite for personalized products grows and the competition for their attention intensifies, Consumer brands are looking for ways to stay relevant and **provide unlimited configuration options, at scale.**

## MANUFACTURING AGILITY TO SUCCEED AT SCALE

However, in many ways, the shift to personalization contradicts the dominant model for high-volume production and mass distribution seen in the Home and Lifestyle industry today. For mass personalization to become a reality, businesses must develop the capabilities to know what each consumer wants, and effectively orchestrate their processes and resources to provide it. To do that, they can no longer rely on traditional manufacturing and distribution processes. They must **rethink their operations, plan effectively and build agility into every step of the production lifecycle.** Those that succeed have a compelling opportunity to deliver a differentiated product offering that commands a price premium and dramatically enhances the customer experience.

Personalization, customization, configuration. For brands and retailers as well as for consumers, the distinction between these different concepts becomes difficult as the borders that separate them are thin.

However, to help manufacturers understand the impact on the way goods are produced, we believe it is necessary to define these concepts.

	Personalization	Customization	Configuration
Definition	Personalization is an aesthetic adaptation of a product happening at the final step of product manufacturing to suit a consumer preference. It has limited effects on the product's engineering.	Customization is where the product's composition must be re-engineered, making it unique and capable of fulfilling a specific consumer requirement.	Configuration consists of adapting or modifying, according to predefined options, certain elements and functions of a particular product.
Example	Adding a sticker on a kitchen appliance to match the colors and the style of the kitchen is personalization.	We talk about customization when the furniture is 100% tailor-made and produced on demand to fit one consumer's particular need.	When consumers point to a model in a catalog and choose the color and material of its seats or its worktop, this is called configuration. It is limited and centralized in a product catalog.

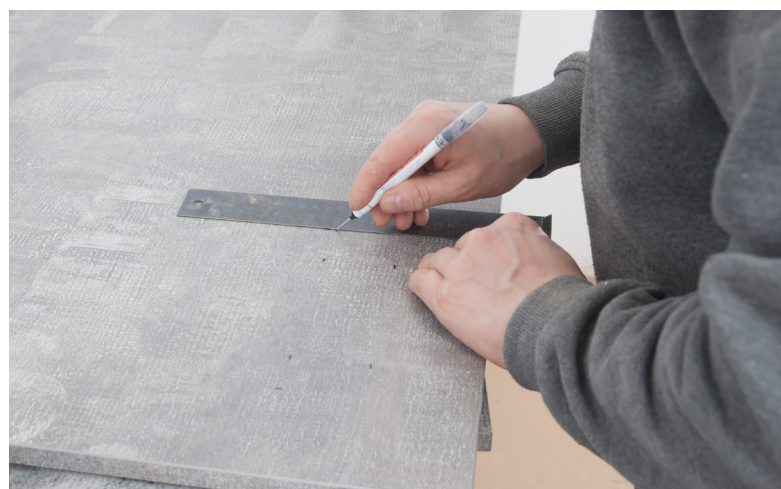
## CATERING TO THE RISE OF MASS PERSONALIZATION

For one leading European furniture, kitchen and bathroom manufacturer, personalization has always been at the center of its business offering. The company specializes in designing precision, made-to-measure furniture, differentiating itself in the market with its quality, tailor-made approach. At one of its showrooms, or online, customers can choose from numerous color schemes, materials, finishes, dimensions, handle fittings, shelves, drawers, racks, cupboards, functionality, electrical appliances and placing possibilities. They work with a designer who creates the perfect furniture, kitchen or bathroom catered precisely to accommodate their ideas, needs and budget. It's a truly tailored experience and they end up with a truly bespoke result.

Here are some of the customization options for consumers to consider as they go through the collaborative design process:

- **Color:** dozens of different colors for front, back and inside of cabinets, doors, drawers and boards.
- **Finish:** multiple finishes, including melamine, lacquered, gloss, grain and matt.
- **Material:** softwood, hardwood, wood veneer, MDF, plywood and foil.
- **Functionality:** designed to suit customer's specific needs, including different hinge configurations, storage options such as shelves and hangers, integrated software, handles or no handles, sliding doors, bifold, freestanding and integrated.
- **Dimension:** everything is configurable, measured to fit each individual room and maximize the available space.

Just like an artisan who makes the best modular product, each component produced in the company's factories is made to order. But doing this on an industrial scale requires a completely different approach. When you're a business taking thousands of orders and manufacturing hundreds of thousands of components per day, you cannot afford to let production schedules slip or lose track of what's being produced for who. Customers want transparency and control and expect accurate lead times of when their kitchens will be ready. To achieve that, the manufacturer must connect the dots between design and engineering, manufacturing, transportation, sales and marketing and services. It must be able to see and communicate real-time updates at every stage.



## PLAN AHEAD FOR BUILD TO ORDER

Home design has always been personal. But if Home & Lifestyle brands want to go beyond simple customization options and transition to a truly customized offering at scale, they must move from a product-centric to a customer-centric approach.

In most instances, the biggest constraints to this business model lie within the manufacturing plant. Companies that manage their production scheduling manually are more likely to struggle to meet demand and react to the latest consumer trends as they're unable to rapidly adjust their manufacturing setup. They need more sophisticated capabilities.

**Perfect Production** based on DELMIA Quintiq supports businesses to optimize their supply chains from end to end—from inbound supply to production planning to fulfillment methods and last-mile delivery logistics. It does this by mapping and building a complete Virtual Twin Experience of the business, including all supply, manufacturing and logistics constraints to cover the entire product lifecycle.

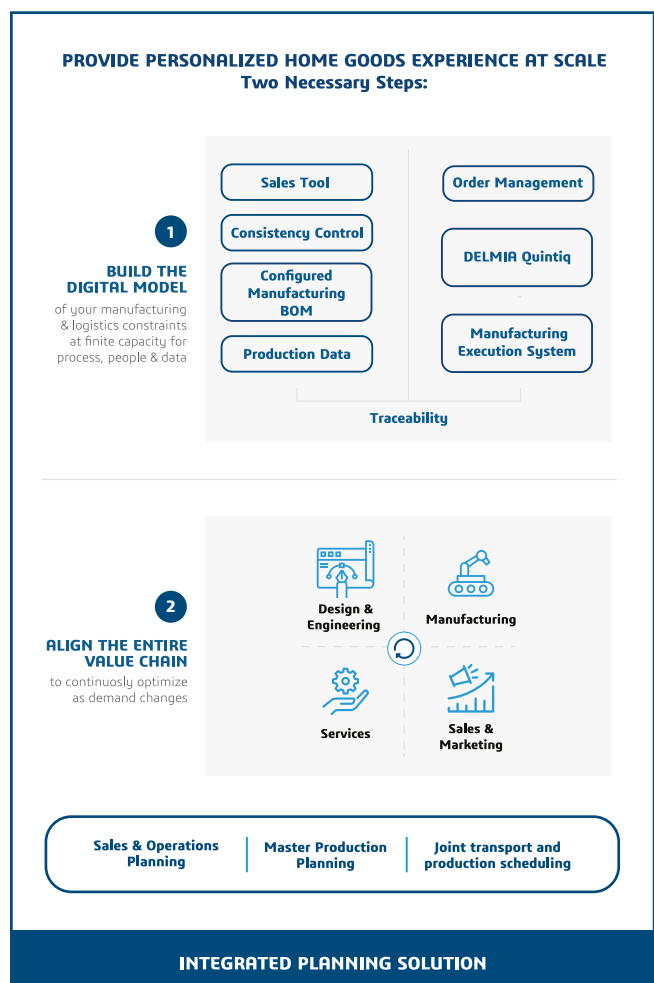
With the **Virtual Twin Experience**, it's possible to model and manage all elements of planning and execution down to the finest component. This helps to manage disruptions, avoid bottlenecks and promote customization. Indeed, businesses can model and modify their processes based on hundreds if not thousands of virtual "what-if" scenarios in terms of raw material supply, design, development, manufacturing and logistics to determine the best setup for each customized offering.

For the bespoke furniture, kitchen and bathroom maker, DELMIA Quintiq plays a crucial role in its daily operations, helping it to not only handle increasing complexity but achieve efficiencies across its processes and be even more transparent with customers.

On a daily basis, DELMIA Quintiq is used to optimizing the production of thousands of furniture elements across different sites in Europe. The solution covers sales and operations planning, master scheduling, general transport planning, detailed daily and weekly planning and resource optimization, contributing to end-to-end business sustainability objectives. By effectively planning every stage of its production and logistics processes, the company can make the best use of its resources and schedule production according to orders of the day.

Critically, **Perfect Production** allows the custom manufacturer to confirm delivery times with a high degree of confidence. Because it now has greater control and visibility of the production and delivery process, it can be as sure as possible that every piece of furniture will arrive on time, so much so that it has even introduced a delay penalty promise—if anything arrives later than planned, it will give its customers some money back.

Thanks to sustained innovation and a strong commitment to improving its processes with the latest technologies, the business is able to increase its revenue and product margins, maintain excellent customer service levels and adapt quickly to changes in supply and demand.

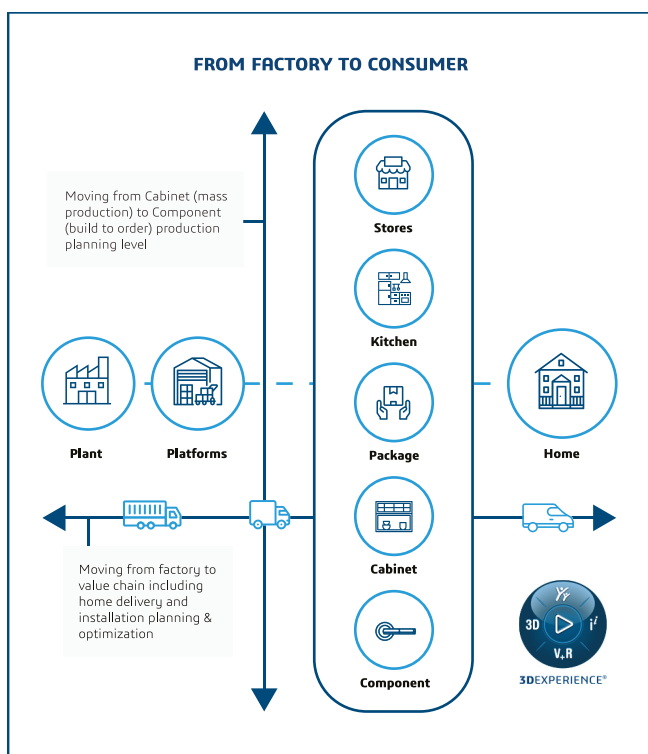




## SEAMLESS DELIVERY FROM FACTORY TO CONSUMER

Of course, the Home & Lifestyle business' responsibilities don't simply end once the furniture, kitchen or bathroom leaves the factory. Home delivery and installation are equally as important in the consumer journey. That's why **Perfect Production** covers the full supply chain, including comprehensive delivery and installation planning and workforce optimization.

With the Virtual Twin Experience extending to these downstream supply chain processes, businesses can tackle the complexities associated with logistics by tracking the flow of individual assets and shipments to their end destination. This ensures that customized furniture, kitchens or bathrooms are not only delivered to the customer's home or premises on schedule, but that the required resources are also made available at the right time to provide the necessary installation services and support. The result: the ability to deliver products that are configured and customized to match the specific requirements of individual customers with the added opportunity to provide additional flexibility and value to the consumer.



## INVESTING IN FUTURE-PROOF CAPABILITIES

Whether you're a brand focused on mass production or moving to mass personalization, there has never been a stronger business case for investing in sophisticated supply chain planning solutions like *Perfect Production* to deliver transparency, diversification and the ability for rapid reconfigurations when disruptions occur.

Indeed, the importance of supply chain resilience is more apparent than ever. Businesses across all industries are realizing they must build resilience into their supply chains and inject agility into their planning to protect themselves against events beyond their control. Those that lead the way have mastered organizational and supply chain visibility, and share a particular set of qualities and digital capabilities that slower competitors may not yet possess.

**For the Home & Lifestyle industry, now is the time to build buffers and gain critical insights into your supply chain to future-proof your business and meet the needs of the personalized consumer world.**



## HOW DELMIA QUINTIQ CAN TRANSFORM YOUR HOME & LIFESTYLE BUSINESS



▶ Provide **configurable furniture** at scale



▶ Gain **better visibility** of your resources and operations



▶ **Build a digital model** of your manufacturing and logistics constraints



▶ **Continuously optimize operations performance** against key business metrics



▶ Access a robust and **integrated planning solution**



▶ **Connect the dots** between design and engineering, manufacturing, sales/marketing and services



▶ **Increase revenue** and margin while **satisfying consumers**

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