

CASE STUDY



# Selling High-End Furniture at Scale: How We Built a Digital Sales Engine for Carvido

APRIL 2025

## INTRODUCTION

# From boutique brand to scalable business

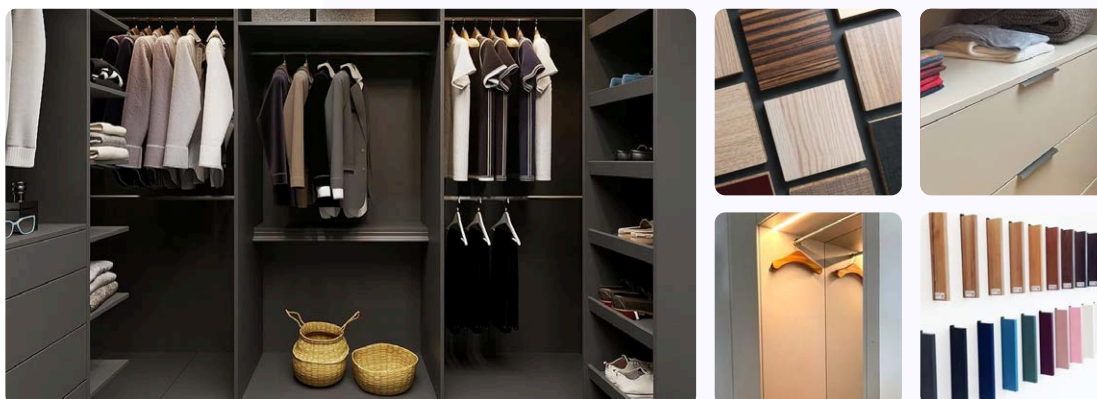
## What does it take to sell a €13,000 custom wardrobe online?

For most furniture companies, the answer is simple: a lot. Premium, complex, built-in cabinets have always required personal consultations, custom drawings, and weeks of back-and-forth communication. But our client Carvido, a German company specializing in high-end, made-to-measure wardrobes, decided to challenge that logic.

This is the story of how Carvido teamed up with Digital Tails Group to make that vision real — and how the result became not just a product, but a new digital transformation model in the custom furniture industry.



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## Carvido's vision for scalable luxury

Carvido's specialty lies in designing and producing premium built-in wardrobes and walk-in closets, tailored for complex, non-standard spaces. Every cabinet is a one-off, made of materials like real oak veneers, custom-painted MDF, or premium decor surfaces. The company operates on a distributed manufacturing model with a network of trusted production partners across Poland and Germany.

Their customer base is equally specific: mostly homeowners between 40 and 60, investing in their long-term living spaces where the furniture must fit perfectly, look timeless, and last.

Despite the premium nature of their product, Carvido had a clear ambition:

- To build an eCommerce-first brand
- To let customers design their own cabinets, understand pricing transparently, and place orders — all online
- To create a business that could run independently of its founders, using smart technology and automation instead of manual labor and designer bottlenecks

*“We want to be a good eCommerce brand.  
We're building a company that works without me  
or my brother.”*

*— Lukas Kaiser, Co-founder, Carvido*



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## Too complex to scale — Until the right partner came along

In their original operations, every order required a designer, detailed manual work, and heavy involvement from the founding team. Without a scalable system in place, Carvido risked hitting a ceiling — not because demand wasn't there, but because the process couldn't keep up.

So they began searching across Europe — from studios in Germany to tech firms in Austria and Poland. Some vendors offered elegant visuals, but couldn't handle the logic behind real-world cabinetry. Others had technical capabilities, but lacked user-friendly design. A few simply couldn't grasp the depth of Carvido's product complexity. And after several false starts, they found Digital Tails Group — and that's when things started to click.

Carvido's business was thriving, but it was also straining under its own weight. Every customer request kicked off a manual chain of actions: site visits, laser scans, custom visualizations, multiple design iterations, and personalized pricing calculations. It was a model that realistically couldn't scale, so we created a different one, which allowed potential customers to visualize their dream product in real-time, understand how choices affect the price, and submit a ready-to-build configuration or request a consultation — without waiting for a human reply.

But Carvido didn't just need a product configurator — they needed a solution that could balance the freedom of customization with the rigor of manufacturability, and the psychology of eCommerce with the reality of a €13,000+ product.



# Building a configurator that sells and scales

The task was clear: Carvido needed a scaling engine. Together, we designed and built a custom 3D configurator and CPQ (Configure-Price-Quote) platform tailored to their vision. The goals were ambitious but focused on:

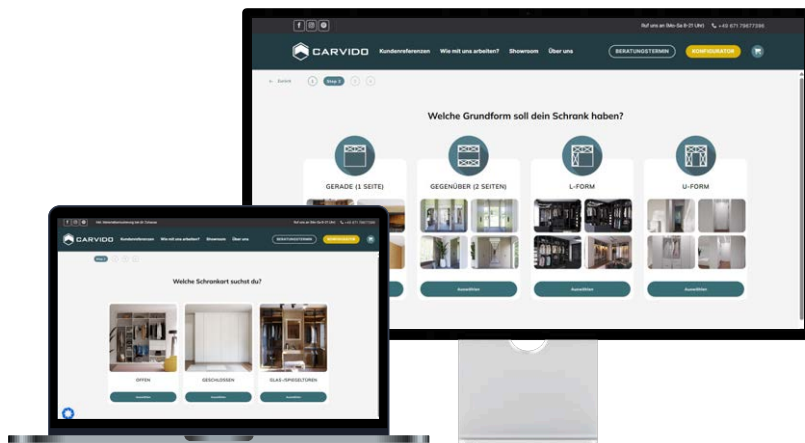
1. Automation of the configuration, pricing, and quoting process
2. Allowing customers to design their own wardrobes online, with real-time 3D visualization
3. Reduction of manual involvement by letting users explore options independently
4. Capturing and qualification of leads before handing them off to the sales team
5. Building a flexible foundation for future eCommerce expansion

Initially, the scope focused on just standard wardrobe layouts. But as development progressed, we understood that Carvido's customers rarely fit inside the "standard" box. We decided against constraining users to fixed templates, and evolved the solution into a hybrid tool — part self-service configurator, part intelligent lead-generation funnel.

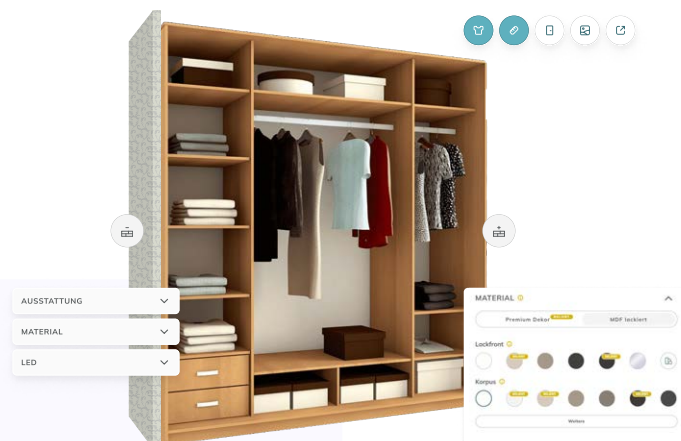
The result? A digital experience where users can:

- explore configurations with real-time 3D feedback
- adjust dimensions, materials, and features
- understand the value and visual result of their choices
- submit their design and move smoothly into consultation

This wasn't a traditional eCommerce experience — and that was the point. We didn't aim to replace human consultation; we optimized when and how it's introduced. The configurator became a bridge for turning passive website visitors into informed leads.



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## Smart configuration, real-world precision

At the heart of the Carvido platform is a highly flexible 3D product configurator designed to visualize and intelligently build real, manufacturable furniture.

### Parameters handled by the configurator

The system supports a wide range of user-controlled variables, including:

- Cabinet types - open shelves, closed cabinets with solid or glass doors
- Cabinet shapes - straight-line, L-form, U-form, and opposing-wall layouts
- Dimensions - custom height, width, and depth for each section
- Materials - premium decor, custom-painted MDF (RAL/NCS), and real oak veneers
- Lighting options - horizontal or vertical LED integration
- Handles - multiple design and color choices
- Interior layouts - predefined templates for drawers, shelves, and hanging space



## Configuration logic

Behind the interface, the configurator handles a set of rules to ensure every design is buildable:

- Parametric logic - internal components adjust automatically as dimensions change
- Dynamic sectioning - the system calculates optimal section widths based on total size
- Adaptive templates - interior layouts are filtered based on space availability
- Corner logic - special handling for L- and U-shaped cabinets, including seamless transitions
- Smart door placement - door sizing and hinge positions are automatically optimized

## Rules and constraints engine

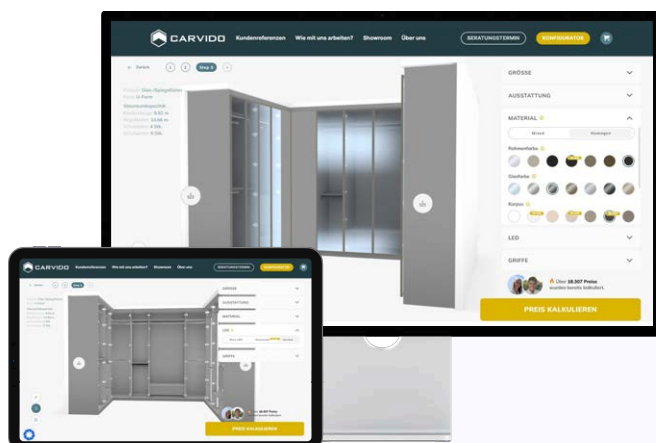
To eliminate design errors and post-order issues, the configurator includes a robust rules system:

- Material compatibility checks between internal and external surfaces
- Dimensional safeguards based on CNC and supplier capabilities
- Template auto-adjustment as sizes are changed
- Specific handling for fragile materials like glass and framed doors
- Functional constraints like hinge placement and door swing clearance

The built intelligence altogether reduces customer errors and minimizes back-and-forth between Carvido's team and the client.



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## Integrating technology into the heart of the business

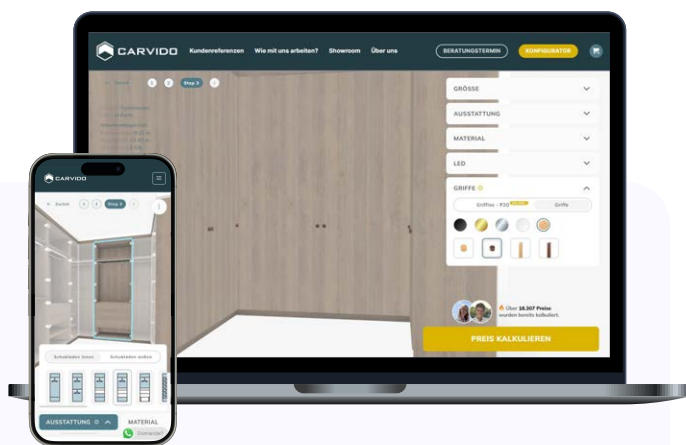
A great product configurator doesn't live in isolation. It integrates smoothly with a company's systems, reflects its brand identity, and guides users through a complex process with ease.

The configurator was built to work within Carvido's existing WordPress ecosystem to create a fluid and unified customer journey. Key integration points include:

- WordPress embedding - the configurator is embedded directly into Carvido's main website that preserves brand consistency and SEO value
- WooCommerce integration - pricing and product logic are connected to WooCommerce, giving Carvido full control over updates and price adjustments
- Order & lead management - user configurations are stored as WooCommerce orders or leads for seamless processing by Carvido's internal team



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## UX that guides, not hides

Complex doesn't have to mean complicated. We designed the user interface to feel logical and effortless, and to guide customers through a process that would otherwise require expert support. In order to achieve that, we installed these key UX features:

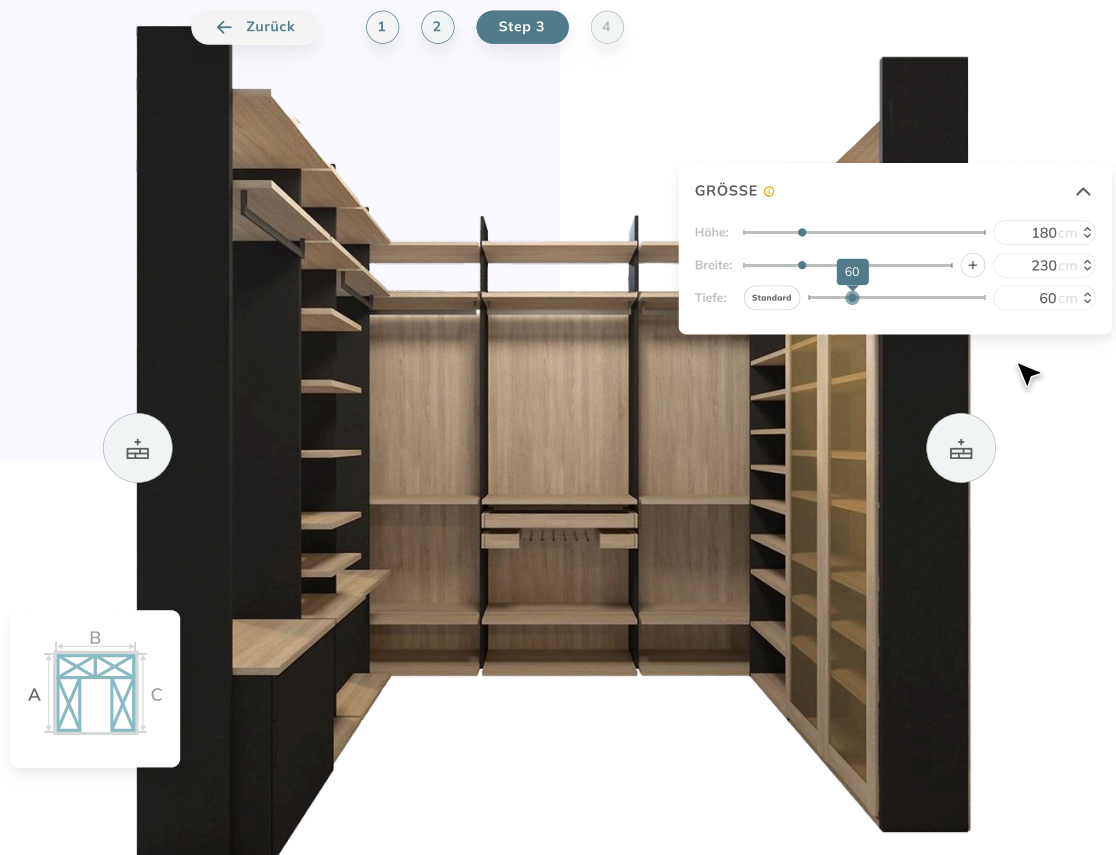
- Step-by-step configuration flow: customers are led through each design decision in a linear, digestible sequence — starting with cabinet type and shape, then moving to size, materials, accessories, and final review
- Visual ruler overlay: a dynamic ruler system displays dimensions directly on the 3D model to help users understand scale and proportion without needing a tape measure
- Context-aware logic: options dynamically appear, disappear, or adjust based on previous choices to reduce overwhelm and guide users toward viable configurations
- Mobile-ready interface: the solution is fully responsive and usable on desktops, tablets, and smartphones



# 3D visualization that builds trust

One of the most powerful elements of Carvido's configurator is what users don't have to imagine. From the beginning, our client knew that customers wouldn't feel confident spending thousands of euros on a piece of furniture unless they could see exactly what they were getting - not a schematic placeholder - but something that looked and felt real. We built the 3D configurator to bring this experience.

We used Three.js to develop a real-time visualization system for each custom wardrobe directly in the browser. Behind visualization is a strong decision-making support: we introduced intelligent camera behavior that adapts to each cabinet layout, and a built-in ruler system that overlays real-time measurements, which helps users stay grounded in the scale of what they're designing. And when someone wants to pause or collaborate, they can save their design and return later, or share it with a partner via email or a direct link.



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## A scalable tech stack built for complexity

The Carvido configurator was built on a scalable tech stack. The frontend is a ReactJS application written in TypeScript, using Redux Toolkit for efficient state management. For real-time 3D rendering, we implemented Three.js, allowing users to interact with cabinet models directly in the browser. The backend runs on Node.js and NestJS, with PostgreSQL handling structured data and logic. A key integration point was the admin panel, which connects to Carvido's WordPress dashboard, enabling the team to manage materials, accessories, and pricing through familiar tools.

Throughout development, we solved several technical challenges such as building dynamic parametric logic, strengthening performance, and visualizing difficult materials like glass and painted MDF with photorealism. We developed custom camera behavior for complex layouts and created a rule engine to translate real-world manufacturing constraints into digital logic. Integrating with WooCommerce also required careful handling of price calculations, giving Carvido full control while maintaining accuracy and responsiveness across the platform.



# Too much, too soon: How reframing the price built conversions

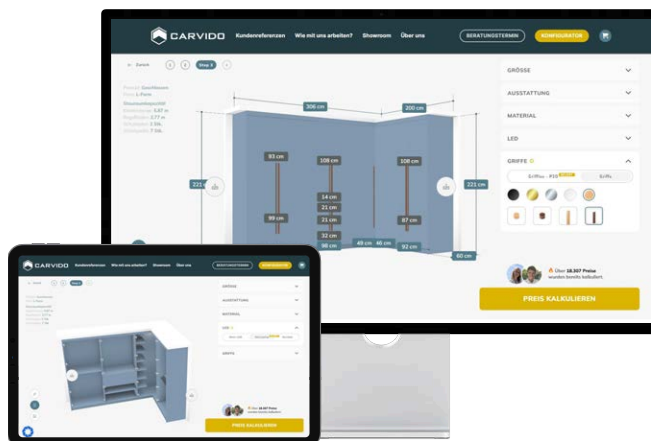
Technically, the configurator worked beautifully, but something unexpected happened: almost no one was buying. The customers had a fantastic configuration experience, and yet, they were dropping off before getting in touch. The product was engaging. The price? Not so much.

## The problem was simple – the configurator was too transparent, too early.

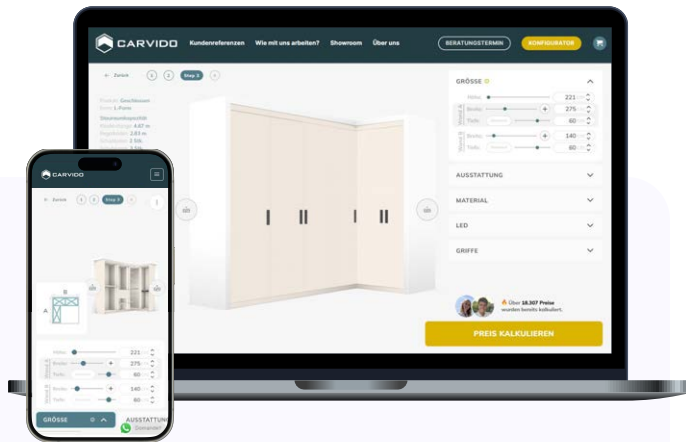
Users didn't understand how their choices were quietly increasing the price by thousands of euros. To them, it felt like they were playing with a tool, until they were confronted with a €13,000 price tag – and no context to justify it. Many left without reaching out, assuming the product was out of their range.

It was important to rethink the flow.

Instead of showing the price upfront, a lead capture step was added. Now, once a user completes their configuration, they're asked to submit their contact information before seeing the total price. After that point, they can explore how different materials or options affect the cost – but now with context, and the beginning of a relationship.



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## Turning a configurator into a scalable growth engine

Once the configurator was refined, both in terms of logic and flow, the results spoke for themselves. Lead volume doubled, but more importantly, the quality of those leads improved dramatically. People who reached out had already explored configurations, and had a clear sense of their preferences. And they were ready to talk.

With that shift, Carvido's marketing efforts finally became measurable and sustainable. Facebook and Google campaigns, which had previously underperformed due to lack of conversions, suddenly had traction. For the first time, Carvido could build target audiences based on real behavior, not just assumptions. Internally, the configurator absorbed much of the early-stage workload that previously fell on the sales and design team. The team could finally focus their time where it mattered: consulting serious buyers and closing deals.

Most importantly, the platform became exactly what it was intended to be — a scalable engine.



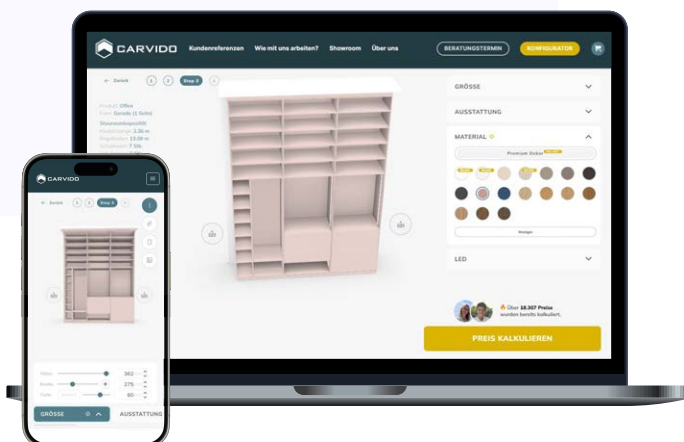
# Tech meets trust: Scaling vision into reality

With a successful launch behind them, Carvido isn't slowing down. The configurator has proven its value as a digital sales tool, but also as the backbone of an efficient, modern business model. Now, it's time to build further.

One of the top priorities is expanding the configurator to support additional product lines, including angled ceiling cabinets and other highly individualized storage solutions that currently require full manual handling. On the technical side, the team is planning to enhance the WooCommerce integration to streamline the checkout process and bring the platform closer to a fully automated eCommerce experience. The goal is to reduce friction not only in the configuration journey, but all the way through to order placement and fulfillment.

Long term, Carvido continues to move toward its founding vision: A premium furniture brand that runs independently — powered by technology, guided by design, and accessible to customers 24/7.

The foundations are now in place. The next phase is about depth, scale, and continued innovation — with the assistance of Digital Tails Group.



Get in touch

Let's discuss **how we can help**  
you with your projects

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