BEN SEELEY

PORTFOLIO

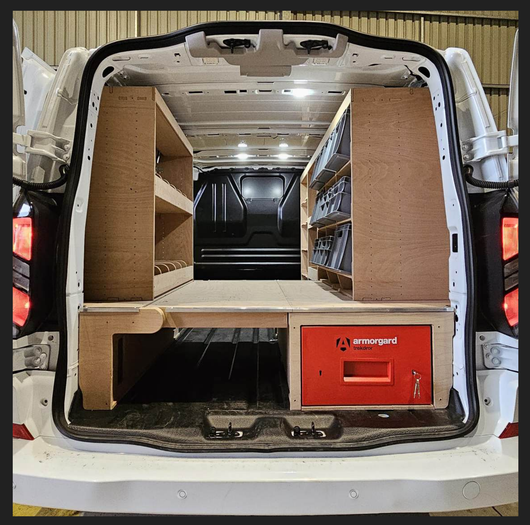
CAD & CAM | BESPOKE CLIENT DESIGN | PRODUCT DEVELOPMENT

YOKE VANS

Yoke Vans is a fast-paced commercial vehicle racking business delivering systems for both individual customers and large fleets. In my role, I developed both individual components and full layouts. I worked on projects throughout the development process from from initial requirements through CAD detailing, technical drawing, and design iteration based on customer feedback.

A core consideration was design for manufacture and assembly. I created designs that accounted for the manufacturing tolerances we could achieve, were quick to build and install, and offered the required robustness for daily use by tradespeople.

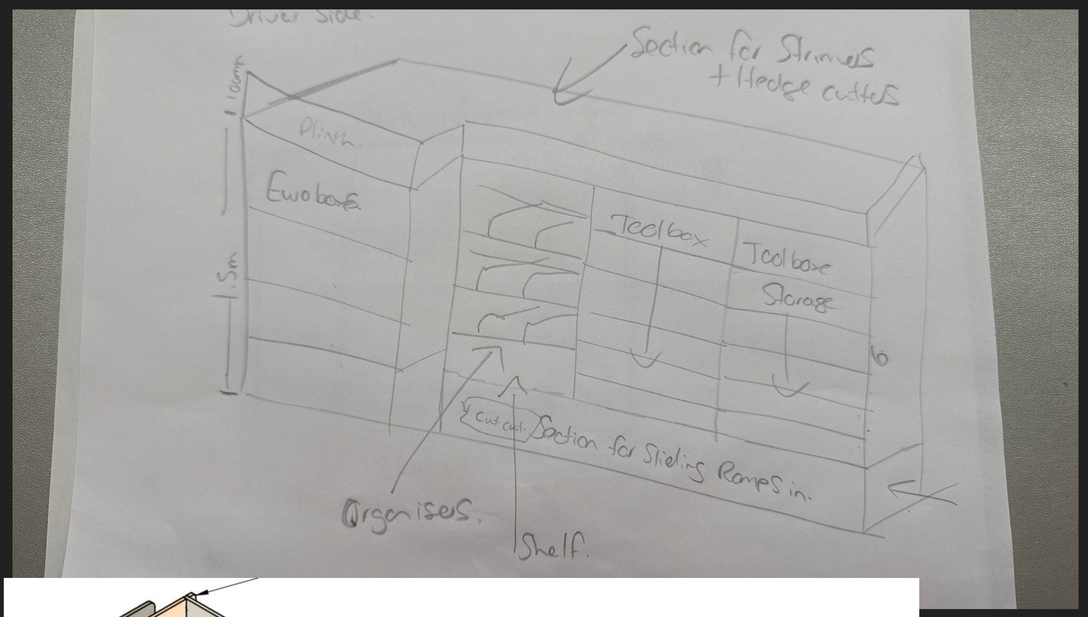
I also supported the CAM setup for CNC machining and worked closely with the workshop team to address issues that occurred during assembly or fitting. Taking the learnings from those issues allowed the development of both improved products and manufacturing strategies.

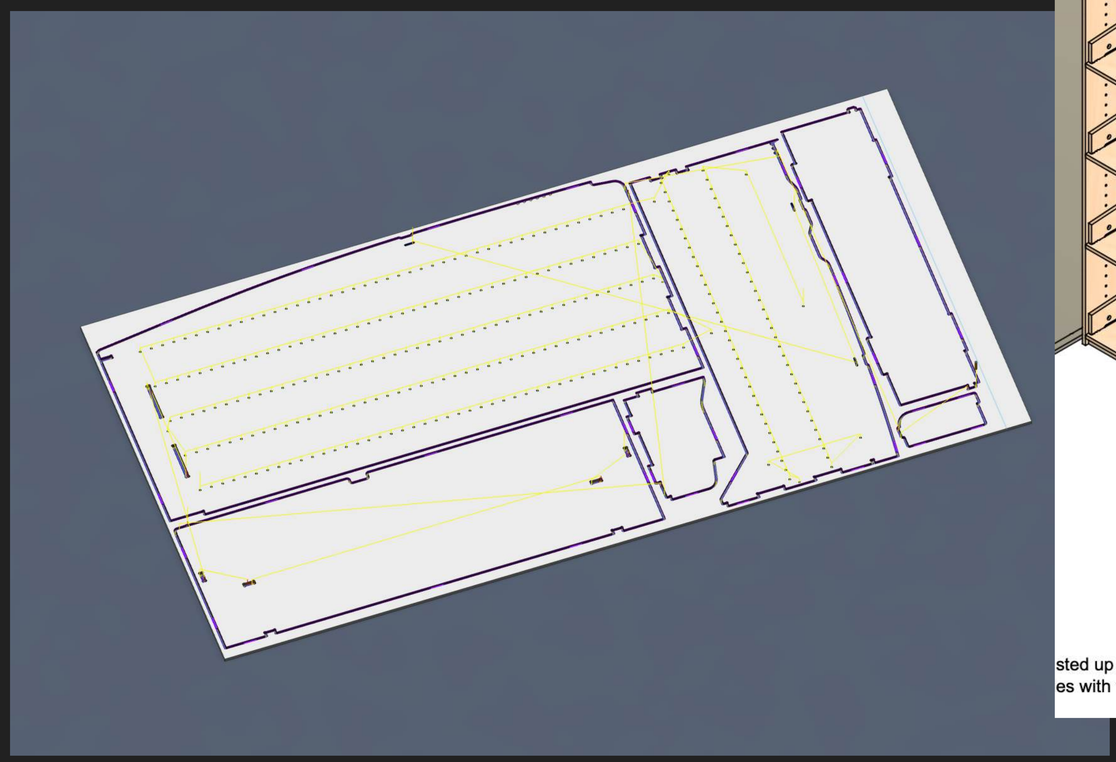


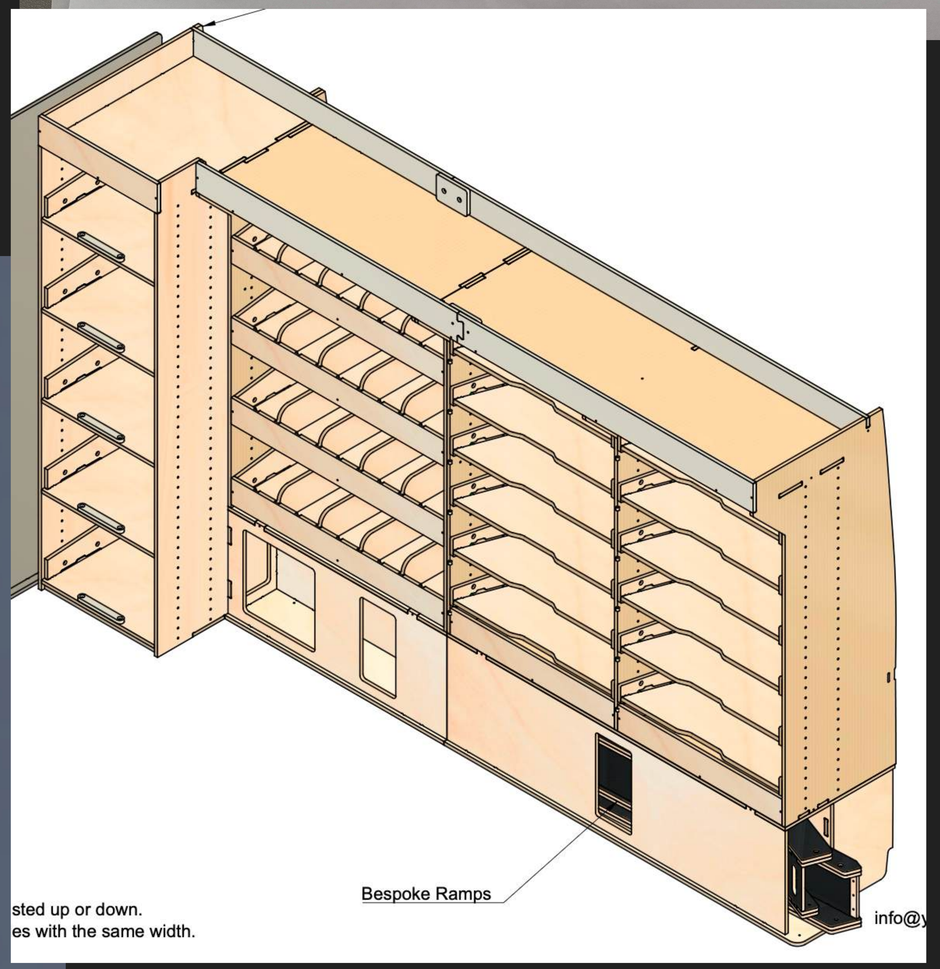
YOKE VANS

My role expanded to include Design Team Lead responsibilities: running design team meetings, improving internal tools and documentation, and supporting the team with practical guidance in the face of technical challenges. Alongside this, I worked directly with sales and customers to assess feasibility, support accurate quoting, and propose alternative design ideas.

This page shows a typical workflow example: a customer's initial sketch, the CAD drawings after some revisions, and a snapshot of some of the CNC machining from a sheet used in the build.

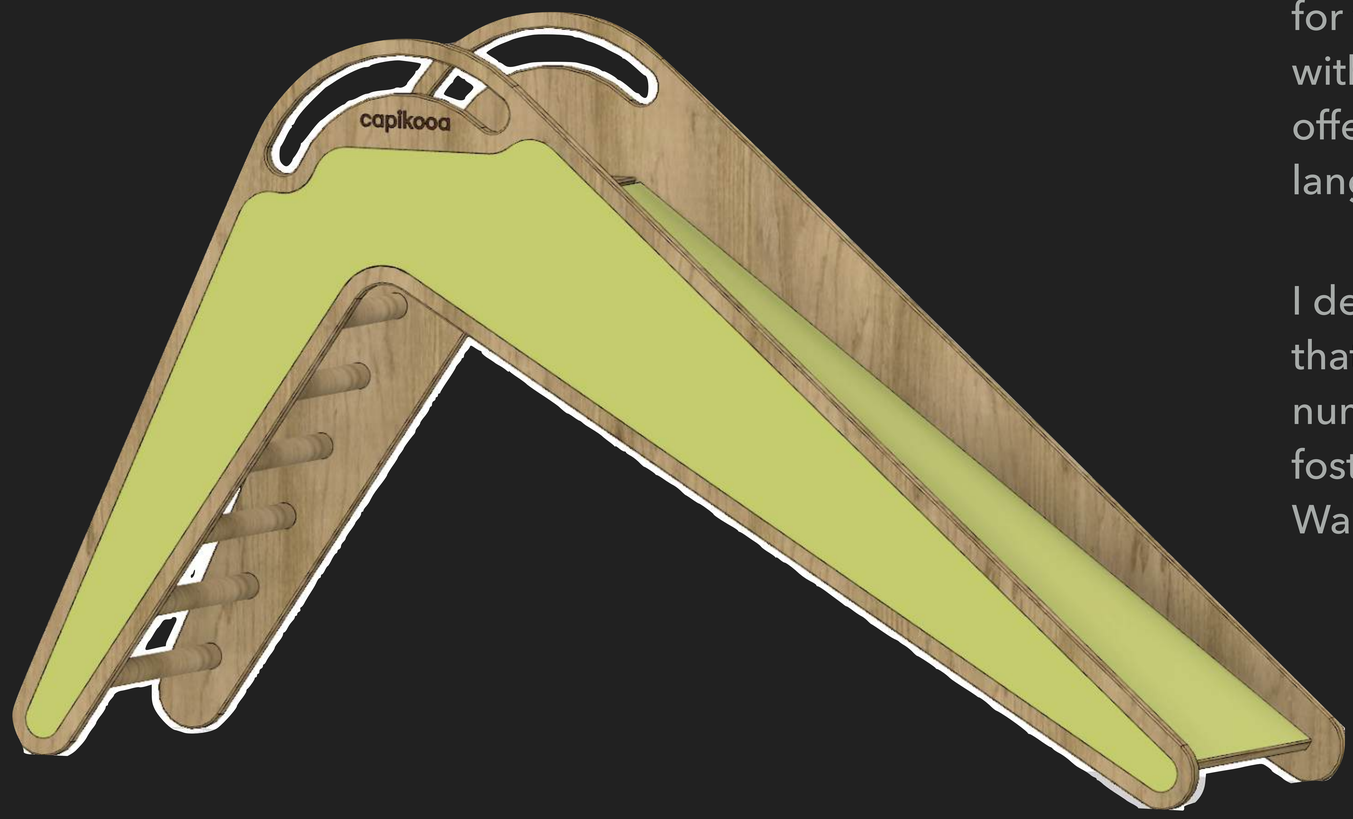






PRODUCT DESIGN | RAPID PROTOTYPING | CAD

CAPIKOOA

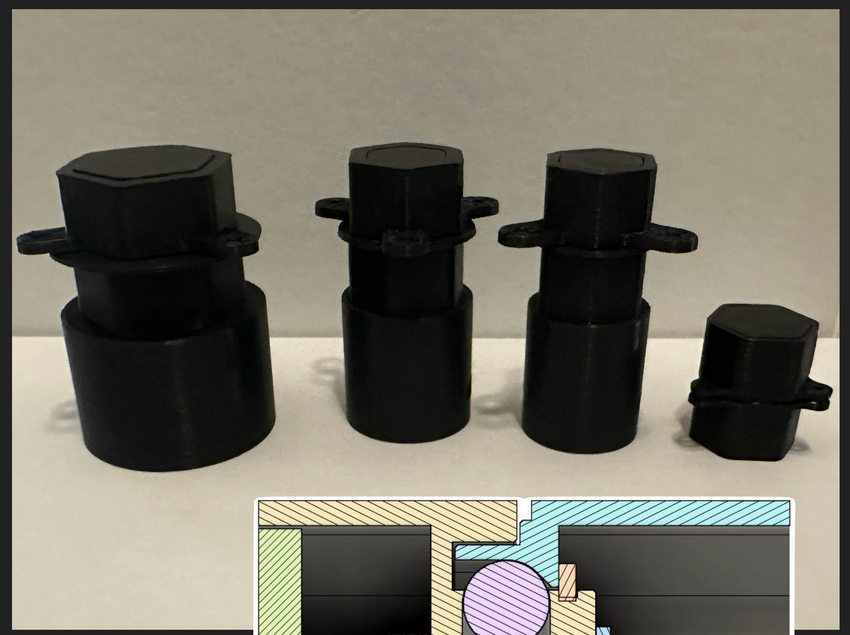


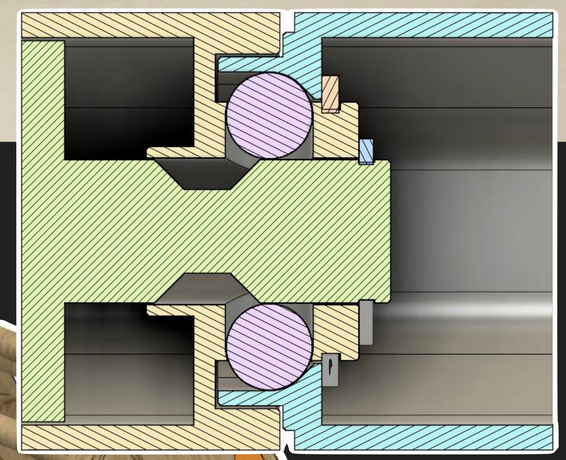
Capikooa was a social enterprise that focused on sustainable wooden toys that fostered movement and open ended play for young children. During my time there, I worked closely with the founders to standardise their current product offering and expand their brand image into a design language that formed the basis of a cohesive product line.

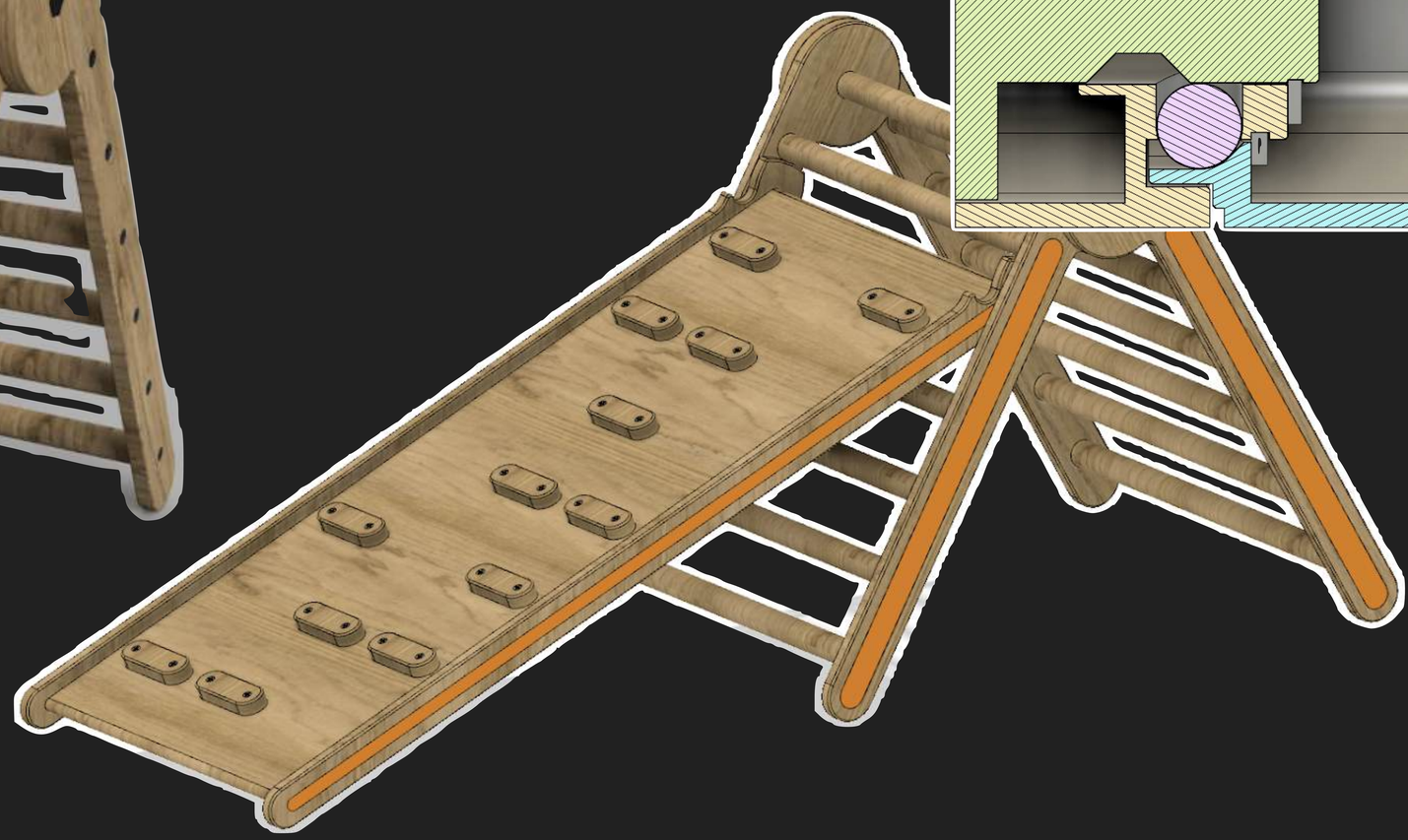
I developed a range of concepts and CAD designs that took that design language and created unique versions of a number of products that are common in various brands that foster child development practices such as Montessori, Waldorf, and Pikler.

CAPIKOOA

Whilst most of my work with Capikooa was CAD based. I also did some rapid prototyping using 3D printing to create prototypes for custom mechanisms. This revision process resulted in a very compact hinge with a push button design. It had multiple locking positions and the solution eliminated the pinch points and other safety concerns presented by other locking solutions.





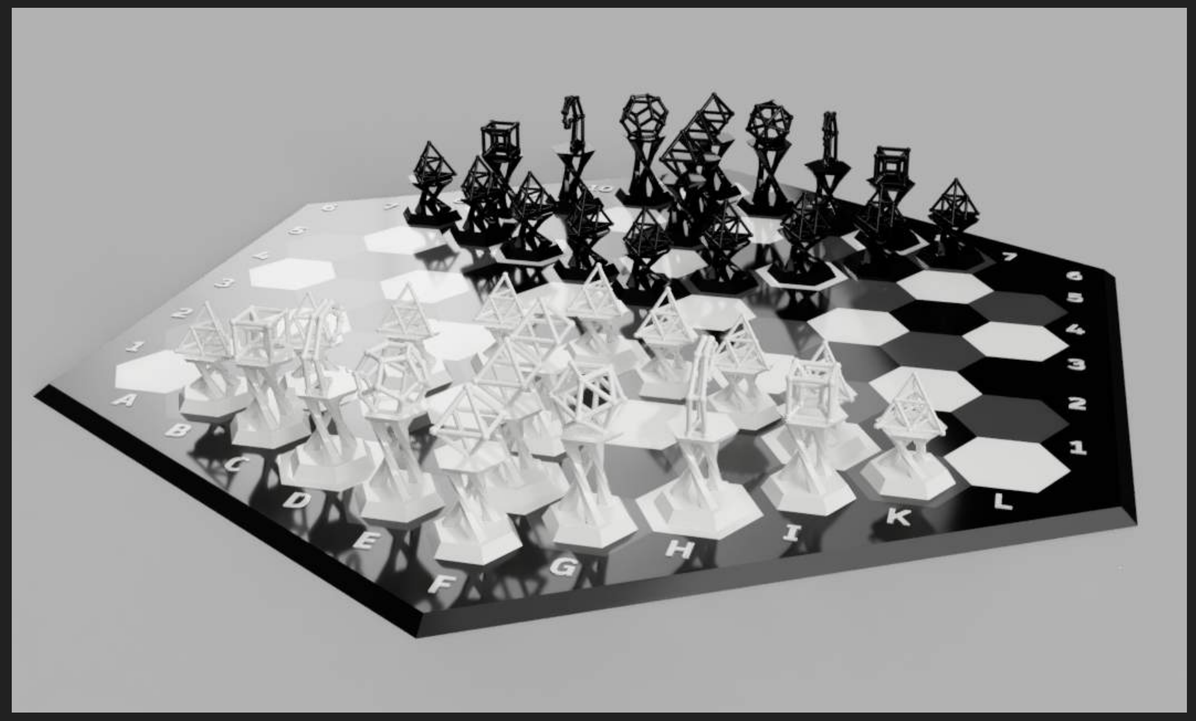


PERSONAL PROJECT | CAD | 3D PRINTING

HEX CHESS

As a exercise to develop my CAD skills and experiment with 3D printing, I decided to design and print a chess set. I had come across a variant called Glinski Chess which is played on a hexagonal grid that I wanted to try.

Inspired by the work of Buckminster Fuller, and drawing on geometric ideas such as platonic solids and the golden ratio, I wanted to create something sculptural that took advantage of some of the novel forms that could be achieved with 3D printing.



PERSONAL PROJECT | CAD | 3D PRINTING

HEX CHESS