

Rapid prototyping with the Mayku FormBox.



Professional Case Study

Tangible prototypes on the day

Using the FormBox, Theo was able to go from CAD to a batch of physical prototypes in just a few hours, enabling his client to see his vision for the project on a tight budget.

Significant time savings

By combining 3D printing with vacuum forming, Theo was able to batch produce a range of prototypes within a day.

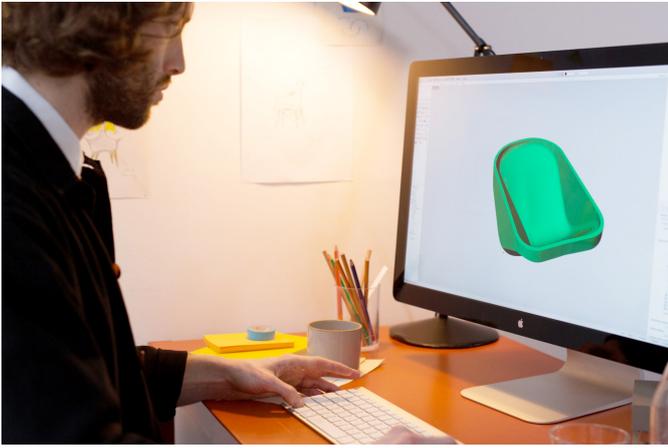
Massively reduced costs

Theo spent £1 for each chair prototype he created with the FormBox. On his client's budget, outsourcing production would have been prohibitively expensive.



"The FormBox is a powerful tool in my workshop. Partnered with my 3D printer I'm able to try out variations without committing to a long print or an expensive outsourced production run"

Theo Ford



Theo Ford is an award winning London based industrial designer. He creates products for clients and needs to move fast to keep up with their schedules. Theo runs a small workshop from his home office and needs to keep budgets low. He has a small model making set up with a 3D printer, a Mayku FormBox and other essential prototyping equipment.

The Challenge

Theo was briefed by a new co-working space to design a set of custom furniture for their new location in London. His first challenge was to create a set of chairs to match their Scandinavian inspired lounge. Budget was tight and the client was very particular. Theo wanted to mock-up his furniture to bring his vision to life for the client.



The Solution

First he established a colour scheme and a design language for the space and started sketching out variations. Theo wanted to mock up several ideas and material finishes for the client. Time and budget constraints meant that printing out 10 chair variations was not an option.

After sketching his ideas by hand he modeled the chair form in Solidworks. He then used his 3D printer to create a master template. After post-processing his print he was ready to use the FormBox to make multiple variations of his design.





Theo quickly formed 10 identical copies of the chair shell, cut them out with a scalpel and sprayed each a different color. He used a texturing base on a few of the pieces. He experimented with matte vs gloss finishes and tried out different shades of colours and thicknesses of material.

Theo printed one set of legs so he could showcase the chair shells in all their glory. The client came into the studio and was able to see how the different finishes worked in Theo's scale model of the space. Together they settled on a colour scheme and established a collective design direction for the set of chairs.



Cost Comparison

	External Vendor	Mayku FormBox
Setup cost	£2500+	£599
Part cost	£3	£1
Prototyping time	2-3 weeks	16 hours of 3D printing
Production time	2 weeks	2 hours

