

## A CASE STUDY ON PROTOTYPE DESIGN FOR BABY BOTTLE WARMER



Flatworld Solutions was contacted by an entrepreneur and inventor with an idea for a safe and effective baby bottle warmer (for feeding bottles). He had a concept that had potential, but in practice, he found that he needed help with the design, especially if he intended to prepare it for large-scale manufacturing.

The client was interested in finding a partner who could understand the product design, and guarantee confidentiality. He chose Flatworld Solutions because of our previous experience with the prototype design, our good brand reputation, and our extensive client history.

### The Challenge

The client as well as our team at Flatworld had several challenges ahead of us. The concept was in its early stages, and some of the conceptualizations were not yet ready for large-scale manufacturing. The final product was to be integrated with Canadian standard food grade plastic, and be capable of low-cost manufacturing to ensure profitability.

Prototyping itself is a unique process, where product designs have to be sent in for approvals, and modifications often require reworking on the entire design. Due to the details and expertise necessary for this type of the project, it can only be handled by those with a clear understanding of product design, so at Flatworld we had to assemble the right team for this job.

### The Solution

Flatworld Solutions placed 5 full-time resources in charge of this project, in order to ensure accuracy and timely creation of re-designs, as needed. The team at Flatworld Solutions started the process with an in-depth analysis of the client's concept, their current status in design, and the need for the prototype.

Once our team had a thorough understanding of the concept design, they crafted some detailed ideas to turn that concept into a product, and sent it over to the client. The team at Flatworld Solutions remained in contact with the client every 3 days. The client would regularly provide the feedback, as well as preferences and requirements for the design, and the team at Flatworld would recreate the design from scratch to match those specifications.

This process was repeated until the final design was approved. All redesigns were created using CATIA - V5, so that it was ready for large-scale manufacturing.

### The Results

The project was successfully delivered with 99% accuracy, matching the benchmark set by the client. Upon completion, the client was able to send the design to the manufacturing plant. It was successfully manufactured on a large-scale, which lowered client costs and increased the client's profit.

At Flatworld Solutions, we have over 16 years of [mechanical engineering experience](#), and can help you with customized prototype design. [Contact us](#) to outsource your custom requirements.