SHAPEWAYS

EVAN GANT INDUSTRIAL DESIGNER

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201877

NOTCOT.

EVAN GANT IS REINVENTING THE POSSIBILITIES OF HOUSEWARES.

Based in Boston, Evan Gant is an industrial designer who's been experimenting with the possibilities offered by different materials. His product, the Twist Light, started out as an exploration of how to use the flexible properties of the material in an interesting way. He started off with the twist light by making prototypes out of paper towel rolls, then moved into 3D printed materials. The Twist Light that you now see is the 4th iteration in the process.

"Twist" is a pendant light that transforms to adjust the brightness with a simple twist. It is a single part that functions as a manual dimer for a "LED Bright Stik" bulb. To transform the pendant, simply raise the bottom

ring until it is in contact with the top ring, and rotate the rings in opposite directions. Once it is in the desired configuration, separate the rings to lock into place.



HOW DID YOU BEGIN USING SHAPEWAYS?

I started out trying to find a way to get some of my ideas out of my sketchbook and into a physical form. My first project was a printed ring for my wife as an anniversary present. Then I made a few items to use around the house before I decided to start selling some of my projects.

WHAT IS THE BIGGEST BENEFIT TO YOUR BUSINESS OF USING SHAPEWAYS OVER TRADITIONAL MANUFACTURING METHODS SUCH AS INJECTION MOLDING?

It gives me to opportunity to try ideas out and get them in people's hands rather than committing to a larger scale production. I also love that I can test out people's interest in an idea and see what feedback I get from selling/sharing the ideas. It is very easy to make changes, or even scrap the idea and move on without feeling like I am too invested. My favorite part of the design process is iterating and seeing the reaction to ideas. In a traditional process (like injection molding), a large portion of your time is spent optimizing from a mold, finding a vender that will make you parts, doing quality control, etc. You often need to make a lot of compromises to your design in the end.

ON THE OTHER HAND, WHAT IS THE BENEFIT OF USING SHAPEWAYS OVER OTHER 3D PRINTING METHODS SUCH AS DESKTOP PRINTING?

I love having access to the variety of printing methods. I can switch between materials, colors build volumes, etc. If I had a home machine, I would have to stock the materials, maintain the machine and probably deal with a small build volume, or have a very expensive machine. Also, most of the affordable home machines are FDM, which is a great process but has limitations in terms of surface finish and level of detail.

I think that Shapeways is a very customer friendly service, easy to understand the costs and build limitations. The best part for me is the ease of which I can turn ideas around into something I can sell, which I can use to fund my next project. I have appreciated Shapeways sharing my projects in the past and driving more sales.

ARE THERE ANY MATERIALS WE DON'T OFFER AT SHAPEWAYS THAT YOU THINK COULD BE BENEFICIAL?

I was really interested in the ceramics in the past. I know it is a tricky

material, but I always found it intriguing. I have a really cool light project using a ceramic light shade, but the material went away before I could fully refine it.

WHAT IS THE MOST IMPORTANT TRAIT OF A 3D PRINT THAT IS CREATED FOR YOU BY SHAPEWAYS?

Dimensional accuracy is really important as a big reason for choosing 3D printing over making something by hand is the ability for the print to have a greater level of detail than I could make. The second would be aesthetics: Given that I would like to sell the ideas with no secondary finishes, I need the parts to look good when they come out of the printer, which is why I really like the durable and flexible plastics. It is cleaner than an FDM while being flexible and durable (obviously), and the cost per square inch is reasonable.

DO YOU UTILIZE SHAPEWAYS FOR EARLY STAGE PROTOTYPING? FINAL STAGE PROTOTYPING? END USE PRODUCTS?

I use Shapeways for everything. I will sometimes use the cheaper material for the early prototypes (if printable). I always look for ways to do really early prototyping with whatever is handy (cardboard, paper etc.), but as soon as I have some confidence in the idea, I move into 3D printing with Shapeways.

ANY ADDITIONAL THOUGHTS?

Something I would like to see: It would be great if there was some way to better understand the cost drivers and what aspects most influence the cost of a model. Sometimes a part of the challenge when trying to sell an item is driving the cost down.