

with a business model, they began investigating intellectual property and licensing options. It was a thorny space, especially for designs. Just what aspect of a design is copyrightable? What is patentable? How can allowing for digital sharing and distribution be balanced against the designer's desire to still hold ownership? In the end, they decided there was no need to reinvent the wheel and settled on using Creative Commons.

When designing the Opendesk system, they had two goals. They wanted anyone, anywhere in the world, to be able to download designs so that they could be made locally, and they wanted a viable model that benefited designers when their designs were sold. Coming up with a business model was going to be complex.

They gave a lot of thought to three angles—the potential for social sharing, allowing designers to choose their license, and the impact these choices would have on the business model.

In support of social sharing, Opendesk actively advocates for (but doesn't demand) open licensing. And Nick and Joni are agnostic about which Creative Commons license is used; it's up to the designer. They can be proprietary or choose from the full suite of Creative Commons licenses, deciding for themselves how open or closed they want to be.

For the most part, designers love the idea of sharing content. They understand that you get positive feedback when you're attributed, what Nick and Joni called "reputational glow." And Opendesk does an awesome job profiling the designers.¹

While designers are largely OK with personal sharing, there is a concern that someone will take the design and manufacture the furniture in bulk, with the designer not getting any benefits. So most Opendesk designers choose the Attribution-NonCommercial license (CC BY-NC).

Anyone can download a design and make it themselves, provided it's for noncommercial use—and there have been many, many downloads. Or users can buy the product

from Opendesk, or from a registered maker in Opendesk's network, for on-demand personal fabrication. The network of Opendesk makers currently is made up of those who do digital fabrication using a computer-controlled CNC (Computer Numeric Control) machining device that cuts shapes out of wooden sheets according to the specifications in the design file.

Makers benefit from being part of Opendesk's network. Making furniture for local customers is paid work, and Opendesk generates business for them. Joni said, "Finding a whole network and community of makers was pretty easy because we built a site where people could write in about their capabilities. Building the community by learning from the maker community is how we have moved forward." Opendesk now has relationships with hundreds of makers in countries all around the world.²

The makers are a critical part of the Opendesk business model. Their model builds off the makers' quotes. Here's how it's expressed on Opendesk's website:

When customers buy an Opendesk product directly from a registered maker, they pay:

- the manufacturing cost as set by the maker (this covers material and labour costs for the product to be manufactured and any extra assembly costs charged by the maker)
- a design fee for the designer (a design fee that is paid to the designer every time their design is used)
- a percentage fee to the Opendesk platform (this supports the infrastructure and ongoing development of the platform that helps us build out our marketplace)