## Master Class

## **User-Centered**

As the software industry develops, user-centered designers like Brad Orego '10, '11 (T5) are putting clunky products to the test.

Interview by Karen McCally '02 (PhD)

User-centered design, or UCD, is essentially about building products from the end-user perspective, instead of focusing on your own goals as a company. It's thinking about who is using this product and what they're trying to accomplish. And then asking, how do you build a solution to that problem?

Fifteen years ago, you would win as a business by getting your software to work. If it worked, that was good enough. You can make an analogy to cars. If you think about the original Model T, there was no design there. They built a car, and it ran, and that's all that mattered.

What's started to differentiate one product from the next is having that design, having that aesthetic, and really solving a problem. Nowadays, I can throw an app together in a weekend that will work for the most part, but it's really going to be a terrible experience.

I started out in a job in health care information technology. Health care IT is still very much in the "make it work" phase. They don't spend a lot of time and effort on designing good experiences. I think there's a huge opportunity in health care IT to provide a much better experience to patients, doctors, and nurses.

Brad Orego '10, '11 (T5)

Home: Madison, Wisconsin

Majors and degrees: BS, computer science;

BA, psychology

Occupation: User-centered design (UCD) consultant
On user-centeredness at Rochester: "I'm really
interested in the design of physical spaces. When I was a
freshman, I lived in Sue B. You have your sense of identity on
your hall, and on your floor. But there's also that hub in
the middle where everyone has to cross paths. We
set up a foursquare court in that hub, and people
would come by and join in. There was shared
space there. Everyone interacted in one way
or another."

Selling user-centered design can be hard at some companies because of a combination of priorities and market forces. If people are buying your product instead of the competitors'—if there are any—then there's no incentive to make your product any better. Companies will say, what's our return on investment if we spend an extra week to make this thing nicer? But finally people are starting to quantify that.

I work predominantly with tech start-ups building Web or smart-phone apps. Their needs are certainly different from those of a large corporation. The larger a company gets, the less they tend to pay attention to user-centered design. They can afford to provide a subpar experience. Also, if you have one designer and three developers working on a project, it's really easy to get everyone on the same page. If you have 300 designers and 1,000 engineers and you're working on 20 different products, that's a bit more difficult.

When you're assessing a design, there are a few factors to consider, such as learnability, efficiency, and flexibility. For a brand new user, is it easy to pick it up and figure it out? How quickly can someone who's an expert on this system do what they need to do? And are there multiple ways to do the same task, based on users' preferences or their contexts?

Everyone says simplicity is great. And then they strip out visual elements to make the product as minimal as possible. But you have to have enough there so that people still understand how to use it. I do think a lot of products today go too far toward minimalism. People will pick up a device or launch a program and think, "What is this? How do I use it? There's nothing about this that tells me what to do."

Things are going to be a lot different in the future. We're headed toward more wearable devices. If you have a Fitbit on that's monitoring your pulse and neuromuscular activity, it can detect when you're falling asleep and tell your car to blare your music to wake you up. That's a much more immersive experience than software as we know it. ①