



Augmented Reality in Action

Womenswear brand Maggy London digitizes product samples

by FIONA SOLTES

In business — as in dresses — sometimes it takes a while to find just the right fit.

Back in 2009, Jonathan Lefkowitz joined Maggy London as CIO. He brought a fresh focus on technology to the then 30-year-old women's dress company, immediately pursuing initiatives to address inefficiencies, improve processes and move the company forward. The launch of a full ecommerce infrastructure was on that list — as was the addition of Gwan Yip to the team.

The two became friends in addition to colleagues, so when Yip left Maggy London a few years back to co-found Code & Craft — a New York-based technology company focused on producing photorealistic content that can be rendered in virtual reality, augmented reality and web 3D experiences — he kept Lefkowitz up to date. Yip was exploring ways technology being used in the gaming industry might translate to fashion and retail.

“I was constantly grabbing Jon for a beer, and saying, ‘Hey, this is something I’ve just figured out,’ or ‘This is something I’ve just discovered,’” says Yip, now Code & Craft CEO. “Jon gave me feedback from an actual brand perspective.”

A variety of potential applications were on the table, but it wasn't until Apple introduced its ARKit framework for creating augmented reality experiences on iPhones and iPads that the pieces began falling into place.

ATTENTION TO DETAIL

With Code & Craft's ongoing and fast iteration of its scanning services, what previously could have been a substantial investment became a more palatable option. And what previously was considered an idea for a customer-facing application morphed into something else altogether: an innovative way for

Maggy London to produce non-physical samples of its line that still conveyed fabric, movement, drape, texture and color. The company offers “on-trend but not trendy” dresses, including timeless silhouettes, workwear, daytime pieces, desk-to-dinner and special occasion.

“Generally speaking, the needs of our distribution endpoints for physical samples have increased over the years,” says Lefkowitz, now Maggy London's chief operating officer. Samples might be needed for road shows, marts, specialty stores, department stores, ecommerce and international commerce — often at the same time.

While it's important, “the need to duplicate the line has gotten out of control,” he says. It's also inefficient and environmentally wasteful, as so many designs won't end up being adopted.

side, from where things were a year ago, to six months ago, to three months ago, it's been fascinating to watch."

Also fascinating, he says, is the response from internal staff about what's possible — in addition to external reps.

"People can't believe how real it is," he says. "You can see the fibers in the textiles, and you can gain appreciation for what that silhouette does for the body. It's very interesting for us at this time. We still don't really know what the home run is going to be in terms of applications, but there are so many different ways to make this work, and each one offers a pretty substantial cost benefit."

'DELIGHTED' BY THE EXPERIENCE

With Maggy London as a case study, Code & Craft is continuing to hone its offerings. Yip foresees a day that there will absolutely be an off-the-shelf solution featuring its photo-realistic scanning capabilities, as well as custom solutions for individual companies.

Between now and then, however, the industry might need to do some catching up. There is still confusion about the difference between augmented reality and virtual reality, and there is still the thought that working with augmented reality is going to be "complicated, and a very tech-heavy experience," Lefkowitz says. "And it's not. Most people are surprised by how simple it is, and sort of delighted by the experience."

The scanning process used by Code & Craft is based on photogrammetry, a longstanding technique that creates depth by cross-referencing similar points on images; it has been used in surveying and mapping. As for the gaming industry connection, Yip says, there's been a lot of interest in scanning people's faces and clothing so they can appear more realistically. Code & Craft photographs assets and uses gaming best practices to optimize them for mobile applications.

There is movement, too, related to how such applications could be used in product lifecycle management. Part of the challenge there, Yip says, is discovering the cost effectiveness of multiple scans with different iterations;

potential solutions will come with digitizing materials such as fabric swatches, he says, and being able to render them onto a base model.

For now, however, when Yip gives a demonstration of what's possible in fashion, the number one question he gets in return is, "Can I try it on?"

"My response to that is, 'No. But what is it you're actually trying to do?'" Yip says. "That is a great backdrop for a conversation about understanding the ultimate potential of this type of technology. Obviously, fit is important. But fit isn't a complete barrier to somebody buying something. Otherwise, ecommerce wouldn't exist. That's not to say we can't get a better sense of fit. But this is also about giving the consumer or the audience better information to make a better decision. A lot of it is about education, and a lot of it is around realigning expectations."

Yip and Lefkowitz both speak of enjoying the process, and exploring just what the future might be. As a startup, Yip is grateful for the partnership Maggy London has provided, as well as excited about his company's ability to be flexible with clients overall. Lefkowitz notes how early the two companies are on the timeline; it's his hope that, when the industry is ready to exchange augmented reality samples for physical ones, Maggy London and Code & Craft will be "at the front of the line."

"Being a startup, our advantage is the ability to iterate and change very quickly," Yip says. "It also requires a certain amount of trust in the relationship, and knowing that it's not just about getting it right today, but about getting it right tomorrow. That's a large part of the relationship we're in with Maggy London. We're in the feedback loop stage now, so we can get it right and then release it in a broader sense."

That, however, make take another beer or two — all in the name of the ideal fit. **STORES**

Fiona Soltes, a freelancer based near Nashville, Tenn., loves a good bargain almost as much as she loves a good story.

The use of augmented reality, however, changes the picture completely.

"If things are just humming along and status quo, it's very difficult to get people to even have an open mind to making changes," Lefkowitz says. "But when things are tough, there's more opportunity to bring new things to the table We're probably early, but within the next year or two, I believe we'll see a lot of different AR applications. Seeing the rate of iteration on the Code & Craft