

## RISE TO THE CHALLENGE: THE FOOT SOLDIERS AND FOUNDRY



Augmented reality used to be a difficult technology for footwear designers to use, but a new software program, developed jointly by technology provider Foundry and specialist footwear design consultancy The Footsoldiers, could change that with the added promise of an enhanced experience for online shoppers.

## Smarter online sales for shoe brands

Footwear design consultancy The Footsoldiers has worked in partnership with software developer Foundry to try to bring augmented reality into footwear development. Foundry has developed a software application called ColorwayAR, which it says will allow design teams to view objects in augmented reality before, and often instead of, moving on to make physical prototypes. The idea has caught the imagination of The Footsoldiers because it will speed up the process of converting a concept for a new product into real shoes that consumers can buy (in bricks-and-mortar shops or online), helping footwear brands cut the amount of time, money and effort they have to expend on updating their shoe collections.

One of the founders of The Footsoldiers, Tom Astrella, explains that the consultancy, which has offices in London and in Taiwan, supports

footwear brands, "from start-ups to heavyweights" with services such as help in designing new shoe styles or support in sourcing the materials they need to make their new collections. It also provides a trend forecasting service, and not just for brands; it has helped retail group Amazon determine footwear trends and has worked with membrane technology provider Gore-Tex to help it look into footwear's future, too. Brands it has worked with in recent times include New Balance and Asics.

### Where shoe design meets Pokémon Go

Thanks to its partnership with Foundry, future projects in which the consultancy engages with footwear companies could include augmented reality. Product manager at the software company, Brendon Marczan, says this will be a bit like turning the process of designing a new

*Foundry's ColowayAR incorporates visualisation technology that can bring merchandising meetings to life and, further down the line, enhance the experience of online shoe shoppers.*

 Foundry

shoe into a game of Pokémon Go, in which players use their mobile devices to track down Pokémon creatures that, although virtual, appear as if they are in real-world locations. He explains: "Augmented reality is an overlay of content on the real world, even though that content is not anchored to, or part of, the real world. Real-world content and computer-generated content are not able to respond to each other. Pokémon Go is a good example because, in the game, computer-generated imagery is placed over real-life footage to be consumed at the same time."

There are already plenty of software applications in use among the footwear design community and it's not unusual for commentators to say many designers and brands have been slow to invest in the technology, especially 3D applications, and reluctant to make the best possible use of new tools in developing new styles. In that context, it is hard not to wonder if the shoe industry is really ready for augmented reality and if ColorwayAR can make an immediate impression on the market.

### Quicker decisions

According to Mr Marczan, one advantage of the Foundry application in particular and of augmented reality in general is the ability to impress decision makers quickly and easily. "Currently with any 3D solutions," he says, "if you want to make an augmented reality-ready 3D model, you need to reduce the quality of the materials and shapes, but then they won't look as realistic as the customer would expect. Once you've reduced that quality, you then need to understand how to put the 3D model into a game-engine and that level of technical skill is out of reach for most footwear designers. It's a visual effects-heavy process that is unfamiliar to a traditional product designer."

He explains that ColorwayAR, which is the result of a research project that lasted almost two years (and for which Foundry had the backing of government-run innovation agency Innovate UK), aims to make adding this augmented reality component to the shoe design process a simple, one-click solution. "Imagine you had created a presentation for your merchandising team," he continues, "and the members of the team wanted to see what the shoe looked like on the desk in front of them. Pressing one button will pop that shoe into a 3D model and the merchandising team will be able to move around it. They will also be able to use Colorway's existing features to change materials and colour options on the fly."

### Return on investment

Many footwear collections are still being developed in the old-fashioned way because design teams and brands are often set in their ways. Part of their reluctance to embrace new

technology is cost. For ColorwayAR, Foundry has developed a return on investment calculator to help brands understand what the software developer calls "the true cost saving" that footwear brands can gain by investing in digital technology and creating 3D visuals instead of physical prototypes.

According to Brendon Marczan, there is still plenty of excess in the world of physical prototypes that can be trimmed down. He says: "In the footwear industry, we know that more than 50% of a brand's collection is only a simple material or colour change away from last season's styles. Despite this, most brands still produce physical prototypes for every colour, not only for their designers but also for photography, merchandising, store mock-ups and sales samples. For a large brand, the number of samples can easily push costs into the millions, so removing even one of those sample stages can provide an immediate saving."

### Online shoe sales

His insistence is that 3D digital assets, such as those the new software can generate, can also replace photography on e-commerce sites and "enhance the online experience" of shoppers who, in increasing numbers, are using the internet to buy their new shoes. "With a 3D shoe online, the consumer can easily spin it around, look inside it, pull it apart and customise it," he says. "The brand can provide a truly intimate and exploratory experience for the consumer, giving the company a competitive advantage. The same photo-realistic 3D shoe that replaces the prototype can generate a virtual bill of materials, add to the merchandiser's reports and then sit pretty in the virtual shopping basket of a happy customer."

Online customers matter more than ever. Puma is one of a number of major footwear brands to highlight the growth of e-commerce sales in the first half of 2018. It said its own retail sales (including online sales) increased by 23.7% compared to the first six months of 2017 and reached €490 million. It said specifically that "continued strong growth of our e-commerce business" was a crucial component of that increase. In its report for the same period, VF Corporation said Timberland's direct-to-consumer online sales were up by more than 20%, but that it had, by contrast, experienced a decline in sales through its more traditional network of bricks-and-mortar retail partners. Retail sales suffered in Asia in spite of a 30% growth in online direct-to-consumer sales there. For Vans, revenues were up by 35% overall and online direct-to-consumer sales increased by more than 60% in the first six months of this year. That's the reality; footwear brands can now augment it at the touch of a button.



*New Balance is one of the brands to have worked with consultancy The Footsoldiers on new product development.*

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