If you’ve watched even one episode of “Project Runway,” you’ve noted that clothing designers use a “fit model” as the basis for creating their garments. That same method is used by clothing brands all over the world.

However, everyone’s body shape is different, and very few of us are built like a fit model, so how the outfit looks on the person modeling the clothes online and how it fits an individual person can also be radically different.

Startups and big retailers have jumped in with technology to help brands better manage returns, but they’re also attempting to tackle the root cause — the fit itself.

However, Bessemer Venture Partners partner Kent Bennett said not enough attention is being focused on fit technology.

“This is an area that people are not covering as closely as they should be,” he told TechCrunch. “It’s such a huge part of our lives, but one where I think the tech has gotten a little older and dusty, and I do think there’s potential for a revolution here.”
What makes it such a sizable problem today is that as e-commerce has grown in popularity in recent years, so have clothing returns. McKinsey data showed that $428 billion of goods were returned in 2020, while Industry Dive suggests about 20% of those returns belong to online apparel retailers.

With fashion being the huge industry it is, one of the top pain points when selling clothes online is dealing with that massive rate of return, Bennett said.

Most clothing returns — 72% — are driven by the item either not fitting correctly or the style not meeting consumers’ expectations, what Shopify described as “consumer preference-based returns.”

“We’re all familiar with the traditional method of buying it, putting it on and sending it back,” Bennett added. “Or even worse, buying three different sizes, putting all three on and sending them back. That’s just become an embedded consumer behavior. The attempts to solve it that we have today don’t really work.”

Some of those attempts are ones we know: busting out a tape measure to compare to a size chart to see where you fit, or confirming the size you wear in other brands to determine a comparable size. But as many of us know, those still often result in a package of ill-fitting T-shirts on our doorstep. That’s why Bennett led an $8 million Series A investment into Bold Metrics in May.

The company, used by brands like French Toast and Vuori, provides apparel brands and retailers with artificial intelligence-powered body modeling technology for better design of clothing. On the consumer side, the tech guides shoppers so they can better determine if an item will fit.

Bennett feels some companies are misaligned with consumers if their technology requires shoppers to do an enormous amount of work, such as a multistep process involving changing clothes, snapping a picture in front of a blue wall and utilizing virtual reality.

“That’s just not a realistic solution for today,” he added. “Look, I can see, five years from now when all of us have some version of glasses that can transport us seamlessly to something, and maybe when all of us have a body model, this could start to work, but we’re not there today.”

That’s why he liked Bold Metrics’ approach, which uses machine learning-driven models of what the human body looks like combined with data people already know, like height and approximate weight and maybe a waist measurement and shoe size — things you can rattle off without having to get out a tape measure, Bennett said.
Using that data, the company is able to figure out what you look like and what’s going to fit, as well as how it will fit using a 3D representation of clothing items from the retailer. It can, for instance, tell you a medium T-shirt may feel tight around your arms. Most of all, it is “zero additional friction on the consumer,” he added.

In addition to Bold Metrics, venture capital has made its way into other apparel technologies in the past year:

- Plus-sized brand Dia & Co. raised over $90 million in funding since 2015 and implemented a “Try Before You Buy” program in 2021 that enables customers to try on up to seven items at home before having a hold placed on their credit card. They can try on multiple sizes of a single garment or see how a few different options look in person and only pay for what they decide to keep.
- Sweden-based Looklet raised $1.5 million back in 2011. In May, it launched its Dressing Room software, where customers can upload an image of themselves and see how a style would look on them.
- Laws of Motion is also venture backed, raising $1.5 million in 2018. In May, it launched its body scan technology that the company said can predict a user’s measurements with over 99% accuracy from front and side photos, plus height and weight. And unlike others that require an app download, Laws of Motion’s tech is web-based.

Big retailers have embraced fit technology as well. Amazon enables customers to try on digital versions of shoes, while Snap made a big investment in augmented reality for shopping, even recently expanding that into Halloween costumes.

Another big player here is Walmart, which acquired Zeekit in 202. In September, the big-box behemoth unveiled its try-on technology, where customers can upload photos of themselves to model clothing. Similarly, Reactive Reality, an AR smart tech company, provides software for retailers to offer the PICTOFiT Mirror, a photorealistic digital dressing room offering body measurement via personalized avatars.

As clothing fit technology advances, Bennett said one software player may be able to take a large piece of the industry. He believes Bold Metrics has the potential to emerge victorious.

“Bold has a strong head start on what I think is the strongest value prop technology,” he added. “This is maybe not the sexiest space in the world for investors and tech people, but there are many areas where there could be a potential network effect that would drive even stronger dynamics. All of these products do need to stay on the cutting edge or they will be knocked off.”