



CONSUMER SURVEY:

**Eyewear is the #1  
virtual try-on item  
among consumers**



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Augmented reality (AR) for commerce has catapulted into the spotlight. After years of steady progress, 2020 saw 3D & AR shopping experiences skyrocket, as sellers connected with more shoppers than ever online and attempted to convince them to buy without touching and trying wares in person. According to research from Deloitte Digital and Snap, **more than 100 million consumers worldwide use AR when shopping online or in the store and nearly  $\frac{3}{4}$  of global consumers will use AR by 2025.<sup>1</sup>**

A crucial contributor to this growth was virtual try-on. Combining input from smartphone cameras with digital renderings of products such as glasses, hats, and handbags, virtual try-on enables shoppers to see how items look on their faces and bodies – providing an opportunity to gauge whether the fit, style, and color are a match prior to purchase.



**Try it on!**



Such capabilities have the potential to eliminate one of digital commerce's most persistent stumbling blocks: uncertainty over whether garments and accessories will fit as promised. As many as 1 in 3 online apparel purchases are returned<sup>2</sup> when items don't fit, and some 20% of online returns are due to shoppers having ordered multiple sizes of the same item to try on at home,<sup>3</sup> fully intending to return the rejects.

**Virtual try-on implementations from retailers have soared, but will the trend continue? What categories hold the most opportunity for AR and virtual try-on, and – most importantly – *what is the real impact on consumer buying behavior and brand preference?***



To answer these questions, Vertebrae surveyed hundreds of US consumers with an eye to drawing out actionable insights on consumer attitudes and expectations around AR and virtual try-on.



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**Virtual try-on  
is now mainstream –  
and drives sales**

Unlike virtual reality, AR doesn't require specialized headsets or other gear. **AR overlays virtual products onto images from smartphone or other device cameras, simulating with accurate scale and detail how products look in real-life context.** With virtual try-on, consumers use their front-facing cameras to gain a digital view of items like hats or sunglasses overlaid on their faces and heads.

Given that virtual try-on is no more complicated than taking a selfie, it's no surprise that consumers report using it widely already – and the trend is for continued growth. Nearly half of survey respondents (44%) said they'd already used virtual try-on, with 75% of those saying they'd first tried it in the past year.

Shoppers under the age of 45 account for  $\frac{2}{3}$  of those virtual try-on newbies, suggesting that blended virtual/real-world experiences are fast becoming the norm for younger consumers and the next generation of consumers.



**44%**

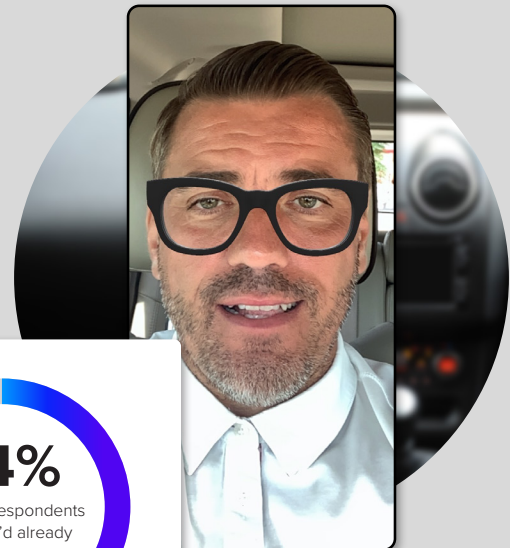
of survey respondents  
said they'd already  
used virtual try-on



2021

**75%**

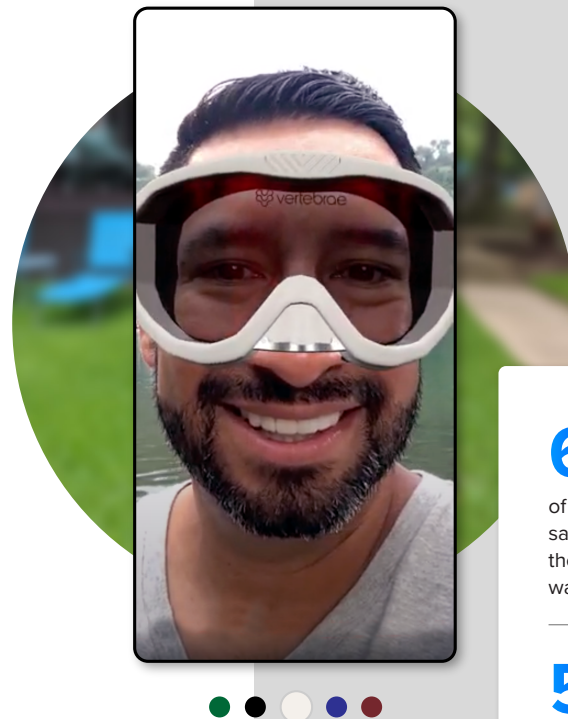
of those saying  
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in the past year



# Virtual try-on conveys vital purchase information

Whether or not they've tried virtual try-on already, consumers say that the experience can help resolve critical questions about whether items not only fit, but match their personal tastes.

In fact, product look and design is the most important factor addressed by virtual try-on, with 63% of respondents saying virtual try-on helped them determine whether an item's style was right for them and 51% saying the experience helped them assess whether the color was a match.



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of survey respondents said virtual try-on helped them determine if a style was right for them

**51%**

said the experience helped them assess if the color was a match

**Fit was the next most important consideration:** 46% said virtual try-on helped determine the size of the item and whether it was a fit for them. Respondents said judging fit was more than a matter of an image overlaid on a front-facing static image: 35% said they wanted to be able to move around while experiencing virtual try-on to see how products fit and look from multiple angles. For retailers, it's crucial that their virtual try-on experiences use the latest depth camera and LiDAR technologies to help accurately position and display renderings in relation to shoppers' features in real-time.

Other important functionality for the virtual try-on experience includes social sharing capabilities, as 26% of respondents said they wanted to be able to show their virtual try-on pictures to friends to receive feedback on whether to purchase.

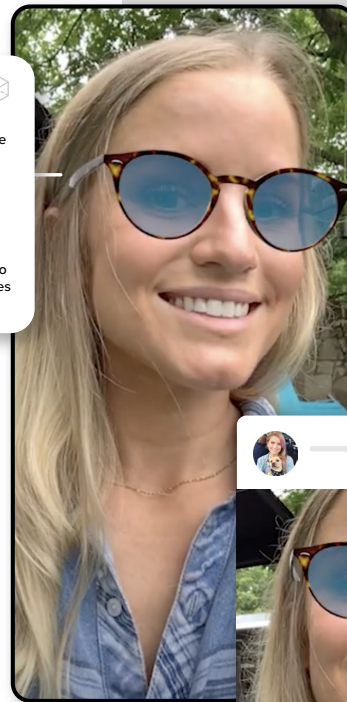
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What do you think about these glasses?  
#sunnies #tobuyornottobuy #virtualtry-on #VR

# Virtual try-on helps conquer purchase hesitation

The payoff for retailers willing to invest in a robust virtual try-on solution is increased purchase confidence for shoppers. Nearly 7 in 10 (69%) of those who've used virtual try-on said the end result of the experience was buying the product they tried from the same retailer; 40% did so online, while 29% completed their purchase in-store – a testament to the utility of virtual try-on for omnichannel selling.

Overall, 49% of respondents say they're likely or very likely to buy from a brand if they offer virtual try-on – a percentage that rises to 54% among those who've actually experienced it, again signaling the effectiveness of quality AR try-on when it comes to resolving product questions and boosting purchase confidence.



- **40%** PURCHASED THE ITEM ONLINE
- **29%** PURCHASED THE ITEM IN-STORE

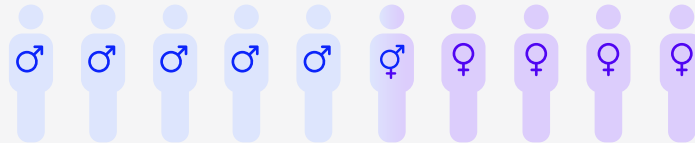


# Profile of a virtual try-on user



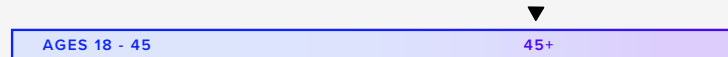
## The majority of those who've used AR to virtually try on items are male:

The gender is split at 55% men to 45% women

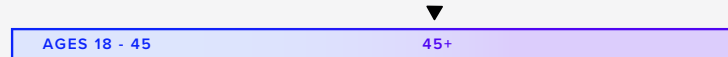


## Those who've used virtual try-on also tend to be younger:

72% of respondents who'd tried virtual try-on are between the ages of 18 and 45

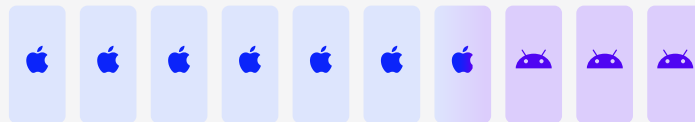


whereas 58% of respondents overall were under 45



## How respondents accessed AR for virtual try-on experiences:

Two-thirds using an iPhone or other iOS device



Compared with a third who use Android-powered smartphones



# The virtual try-on opportunity

## Items consumers said would be most useful to experience via virtual try-on

EYEWEAR

70%

CLOTHING

51%

HATS & CAPS

44%

FOOTWEAR

27%

COSMETICS

27%

Usage of AR for try-on is already well-established, but there's still substantial room to grow. **Fully 77% of survey respondents who hadn't yet experienced virtual try-on said they'd try it if it were easily accessible on a retail site.** And that percentage jumps to **85%** for higher earners with household incomes of \$75,000 or more, signaling that sellers can reach a desirable demographic by offering AR for virtual try-on.

These consumers are eager to see virtual try-on deployed across a range of categories – but the items they want to try on most may be surprising. Despite recent hype about virtual makeup counters, cosmetics ranks toward the bottom of the top 5 categories shoppers think would be helpful to try on virtually.

Instead, eyeglasses and sunglasses are the #1 item consumers said would be most useful to experience in virtual try-on, and by a commanding margin: 70% of respondents said they'd like to experience eyewear via virtual try-on, compared with 51% who selected clothing and 44% who want to virtually try hats and caps. Just over a quarter of respondents, 27%, said they wanted to try footwear and cosmetics.

# A key asset for eyewear brands

Consumers are eager to experience eyeglasses and sunglasses in virtual try-on. Fully 79% of survey respondents said they wanted to try virtual try-on for eyewear if the feature were easily available on web or mobile sites.

Indeed, respondents said that virtual try-on is the offering with the strongest potential to drive online eyewear orders: 60% said virtual try-on would boost their purchase confidence, topping even free returns, at 51%, as well as “try before you buy” programs such as Amazon Wardrobe (40%) and customer reviews (38%).

Moreover, eyewear brands — not big-box retailers or Amazon — are perceived as the trusted source for virtual try-on experiences, giving independent brand manufacturers the opportunity to boost their direct-to-consumer offerings. Nearly half (47%) of survey respondents said they trust eyewear brands to deliver the best virtual try-on experiences, more than double the percentage who selected Amazon (15%) and well ahead of big-box retailers, at 29%.

## Offerings with the strongest potential to drive online eyewear orders

VIRTUAL TRY-ON

60%

FREE RETURNS

51%

“TRY BEFORE YOU BUY”

40%

CUSTOMER REVIEWS

38%

Wealthier consumers are even more likely to trust brands. More than half of those earning \$75,000 or more said they would look to eyewear brands to provide the best virtual try-on, while 27% would seek out big box stores and 13% would rely on Amazon.

These results point to a big opportunity for direct-to-consumer eyewear manufacturers, who can cement their reputation as authoritative sources of product content by offering virtual try-on experiences. Consumers have long viewed brand manufacturers as the source of the most comprehensive, up-to-date information about products,<sup>4</sup> and offering virtual try-on adds another dimension to the product guides and specifications manufacturers can offer. A robust AR platform can also enable sharing virtual try-on experiences with retail partners, helping boost sales in multiple channels.

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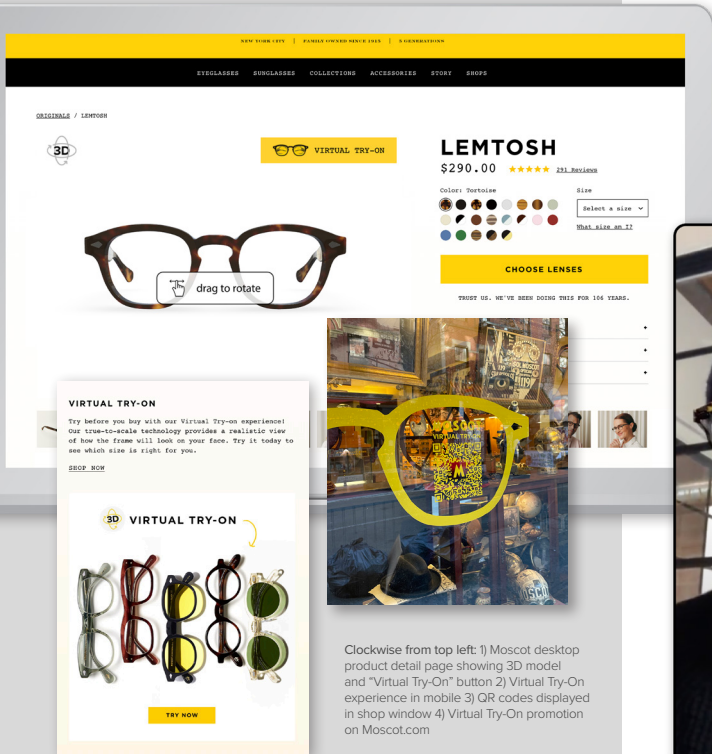
**27%**

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Clockwise from top left: 1) Moscot desktop product detail page showing 3D model and "Virtual Try-On" button 2) Virtual Try-On experience in mobile 3) QR codes displayed in shop window 4) Virtual Try-On promotion on Moscot.com

## CUSTOMER STORY:

# MOSCOT

MOSCOT is a five-generation family-owned New York City heritage eyewear brand renowned worldwide for its iconic eyewear. In early 2021 the company debuted virtual try-on experiences on its mobile and desktop websites, as well as via QR codes in the windows of its flagship New York store. Shoppers could access AR renderings that dynamically scales to their facial features, giving them the ability to view how styles fit from every angle with a high degree of accuracy. The virtual try-on experiences are available directly via the website and by scanning the display window QR codes, bringing shopping outdoors and onto the sidewalk.

The experiences are boosting shoppers' confidence in choosing the right frames. Conversion rates have increased up to **135% with revenue per visit lift upwards of 174% for shoppers who engage with the 3D & virtual try-on experiences.**

[Read more about MOSCOT + Vertebrae](#)

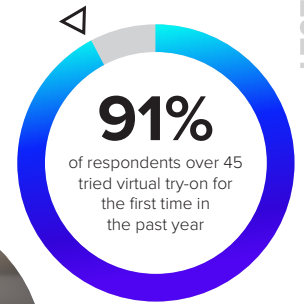


# The elements of a **successful** virtual try-on experience

**When asked whether they'd like to try virtual try-on if it was easily available, nearly 8 in 10 survey respondents who'd never encountered virtual try-on before said "yes" – but as it turns out, the keyword is "easily."**

More than 4 in 10 respondents (43%) said they were very unlikely or unlikely to use virtual try-on if it required extra steps such as uploading a photo or entering measurements. The percentage jumps to more than 1 in 2 for those respondents over the age of 45, who are more apt than average to be new to virtual try-on than the survey average, with 91% of those who've tried virtual try-on saying they first encountered it in the past year.

Currently, however, retailers aren't making it easy to access virtual try-on experiences. Among survey respondents who'd tried virtual try-on, 59% reported having to download an app to do so – taking them out of the eCommerce site shopping environment and disrupting the path to purchase. Not only does confining AR functionality to an app trip up shoppers; only a small percentage of a seller's potential audience is likely to use the app in the first place, dwindling the potential reach of virtual try-on offerings. 80% of all app usage is in social media, gaming, and streaming entertainment<sup>5</sup> – and within the remaining share, Amazon, Alibaba, and other giants dominate the retail space. Most individual retailers can expect just 1-2% of their audience to use their custom apps.



**To build an easily-accessible,  
seamless AR try-on experience  
and make the most of it,  
merchants should:**



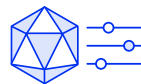
## Start with quality assets

Quality 3D assets form the foundation for AR, and can stand on their own as valuable shopping tools, enabling viewers to spin and flip products and zoom in on fine details. Plus, how 3D files are constructed determines how well virtual try-on renderings can scale to fit shoppers' dimensions to create full-fledged virtual renderings that can move with the shoppers' faces or bodies and display accurately from every angle.



## Build for the web first

Direct access to AR and virtual try-on features via the mobile web is crucial. The latest smartphone and laptop browsers enable consumers to view immersive assets without separate downloads, enabling sellers to place virtual try-on experiences directly on the product detail page and throughout the eCommerce site. This integration is crucial to driving sales from virtual try-on experiences.



## Test tools for scale

Virtual try-on offerings should scale, in multiple senses of the word. First and foremost, renderings should be built to adapt in real-time to shoppers' features and bodies to accurately display fit. But sellers should also consider whether virtual try-on tools will scale in terms of their product and business growth; full-fledged platforms with advanced content management capabilities are a must to enable merchants to batch upload assets, view and update individual files, and manage updates and publishing schedules from a single administrative console.



## Look for syndication opportunities

Merchants with web-based virtual try-on offerings are ideally positioned to syndicate their immersive content across online touchpoints as new opportunities become available. Already, social networks such as Instagram and Snapchat are piloting both paid and organic AR shopping experiences, while Google is slated to eventually integrate 3D & AR into search results.

## CONCLUSION:

# Consumers are ready for virtual try-on – *are you?*

Vertebrae's survey proves that momentum is surging for immersive virtual try-on experiences powered by AR — and when those experiences are seamlessly integrated into the eCommerce environment, they can be powerful selling tools. Merchants who act now to deploy robust virtual try-on tools will be well-positioned to capitalize on future opportunities surrounding AR, while meeting consumers' current expectations for accurate, engaging experiences.



# Resources:

THE NEXT INFLECTION POINT: MORE THAN 100 MILLION CONSUMERS ARE SHOPPING WITH AR

1. <https://forbusiness.snapchat.com/blog/the-next-inflection-point-more-than-100-million-consumers-are-shopping-with-ar>

SIZING MATTERS: HOW TECH, STANDARDS ARE WORKING TO SOLVE APPAREL RETURNS

2. <https://multichannelmerchant.com/operations/sizing-matters-tech-standards-working-solve-ecommerce-apparel-returns/>

UPS PULSE OF THE ONLINE SHOPPER™ REPORT

3. [https://solutions.ups.com/UPS-pulse-of-the-online-shopper-2019-LP.html?WT.mc\\_id=PRESSRELEASE\\_PRESSROOM\\_POTOS\\_STUDY\\_073019](https://solutions.ups.com/UPS-pulse-of-the-online-shopper-2019-LP.html?WT.mc_id=PRESSRELEASE_PRESSROOM_POTOS_STUDY_073019)

APP ANNIE | STATE OF MOBILE 2020

4. [https://go.appannie.com/rs/071-QED-284/images/2001\\_State\\_of\\_Mobile\\_2020\\_Main\\_EN.pdf](https://go.appannie.com/rs/071-QED-284/images/2001_State_of_Mobile_2020_Main_EN.pdf)

SURVEY: MORE CONSUMERS SEEKING TO BUY DIRECTLY FROM BRANDS VS. RETAILERS

5. <https://martech.org/survey-consumers-seeking-buy-directly-brands-vs-retailers/>

ABOUT



Vertebrae's technology enables web-based 3D & augmented reality (AR) product visualization and try-on experiences that drive engagement and sales; no headset to wear and no application to download. Founded with the vision of making the online shopping experience more like real life, Vertebrae knows AR is a truly transformative way to showcase digital products, leading to increased consumer confidence and trust.

The company's Axis platform enables rapid 3D & AR asset creation, management, and deployment across multiple channels and formats to reach consumers everywhere they browse and shop. The world's smartest brands and retailers use Vertebrae's technology to deliver 3D & AR shopping experiences that drive awareness, confidence, and purchases. Vertebrae, a part of Snap Inc., is headquartered in Los Angeles with offices in Austin.



Ready to get  
started with  
virtual try-on  
experiences?

Let's talk.