

Riding the New Trends in Product Digitalization



Technology and business insiders have long predicted "true convergence" between the physical and the digital world. Many technology experts, engineers and scientists are more than willing to tell us what technology will be able to do, but can businesses make the experience compelling and accessible to consumers and are businesses ready to adapt as fast as consumers?

As physical and virtual borders dissolve, seamless transitions and self-defined boundaries in all areas of life will be the norm. Shopping and interaction with brands and retailers are some of the areas most impacted by this change.

Consumers already expect personalization and visual interaction. Businesses will need to evolve their offerings, creating customized experiences





that meet people's desires. At the same time, a new generation, raised on readily available technology, social media and sharing experiences, expects convenience alongside lower-cost products and interactive services.

Technology will continue to drive rapid innovation across business models in various industries, allowing new businesses to enter the market and disrupt incumbents in serious ways. In order to drive business growth, stay relevant in changing times, and differentiate from the competition, business leaders must be able to think creatively and embrace innovation to create break-through value for their customers.

Most consumers today still prioritize value, product, and convenience while making their purchasing decisions. They want to feel confident that they have found the right product, for the right price, and that it's not too hard to obtain.

What's more, these attitudes seem to have held steady for generations of consumers in the United States, no matter what technology or social trends we may be in the thick of.

This can provide a vital foundation as retailers look to integrate powerful and innovative new technology into their customer journey. In this paper we will analyze and offer a new powerful perspective on Product Digitalization and Personalization in the shopping experience. Based on the recent study we've conducted on the topic we are highlighting 5 trends relevant for both customers and businesses, as well as providing practical advice and recommendations for disruptors and innovators.

Virtual Shopping continues to rise. eCommerce is showing no signs of slowing down



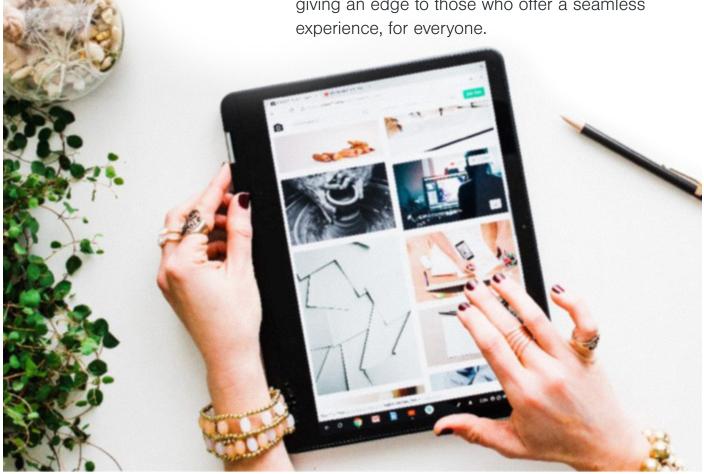
eCommerce is showing no signs of slowing down (nearly 50% of Americans have purchased something online in the last week alone), and AR/VR tools being used more broadly across all industries.

71% of US adults that have shopped online within the past year claim they've never used virtual try-on/AR features while online shopping. Younger people are more apt to use these kinds of features when shopping, as 67% of Americans between the ages of 35-54 compared to 85% in the 55+ age range have never used these tools.

Retailers need to figure out why people aren't utilizing AR/VR tools. In a recent Zakeke study of over 1,000 U.S. consumers, some noted that if they are going to buy something online, they go into the physical store to try it on/interact with it, and then go home to purchase online. Is the current state of virtual try-on/AR technology too challenging for most users to navigate? Is it not displayed correctly? Retailers must work to identify the root cause of these issues so that more consumers find the technology easy to use to make informed purchases.

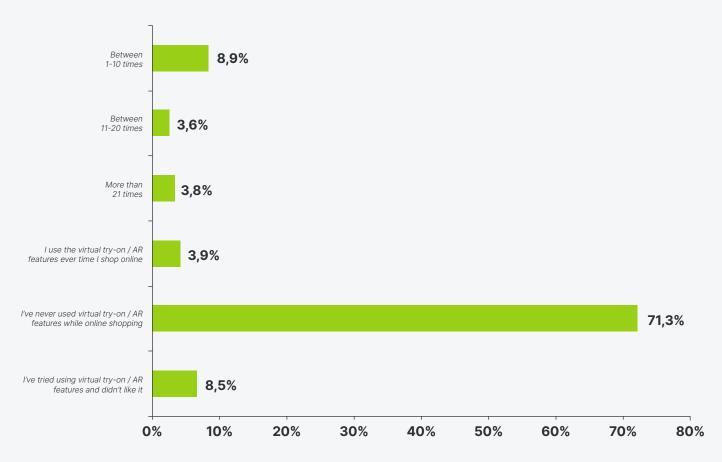
Today's shopping experiences occur within many different contexts: at-home, on-the-go, and in-store. Delivered effectively, virtual shopping can help customers feel more confident in their product selection whether through richer product information or interaction, the ability to personalize or configure unique product designs, or via deeper emotional connection from immersive brand storytelling.

The most successful experiences today tend to be delivered for retailers that have standardized products with many opportunities for customization. Virtual shopping provides a new opportunity for customers to see and interact with unique products like never before. The more customizable, the more valuable these experiences become to build trust and confidence through the shopping experience, giving an edge to those who offer a seamless experience, for everyone.



O1 Frequency in use of Virtual Reality Technology while Shopping Online

TDP_Q3. How often have you used virtual try-on/augmented reality technology while shopping online?



Unweighted base: US Adults who made an online purchase within the last year (1024)





Consumers demand personalization in their shopping experience



From newsletters and deals to 'sneak peeks' and more, retailers are always looking for ways to drive repeat visits and grow sales. 41% of Americans want a personalized shopping experience, but what kind of personalization matters most to consumers?

Brand loyalty is built by positive shopping experiences, but this notion of being loyal to one retailer or brand is something that has over the years started to slip away. With so many options to choose from, consumers – namely millennials and Gen Z – are less likely to stay loyal to a brand. However, 46% of Americans between the ages of 18-34 are the ones that want a personalized shopping experience, so there's a big opportunity here for retailers. It's also important to note that while women are often pegged for being the 'shoppers' in a family, more men want a more personalized shopping experience than women (38% compared to 35%).







So, how can brands build loyalty amongst customers using customization? According to Zakeke:

1 in 3 (36%) Americans want to see other products they might like based on items they've viewed

1 in 3 (32%) Americans want the option to customize their purchase

1 in 3 (29%) Americans want to view other items often purchased with the product they are currently viewing

Advances in technology, data, and analytics are allowing brands to create much more personal and "human" experiences across moments, channels, and buying stages. Physical spaces are being reconceived, and customer journeys are now supported far beyond a brand's front door.

Today's personalization leaders have found proven ways to drive 5 to 15 percent increases in revenue and 10 to 30 percent increases in marketing-spend efficiency—predominantly by deploying product recommendations and personalization and triggering

communications in every channel available Positioning a business to win requires understanding the main challenges in personalization and building up the necessary skills and capabilities to respond to them.

Physical spaces are being 'digitized', some retailers have started down this path to move beyond established, though still rudimentary, personalization practices. Think about, for example, an Al-powered program that directs customers to the right corner of a shop, where they can find exactly what they're looking for, while augmented-reality stations let customers "virtually try" products—by altering the customer's image as if the product has been applied. But this doesn't mean the end of the salesperson or stylist. These virtual experiences still need the human touch. AR stations still need customers to tell stylists what products they'd like to try. As Al evolves, systems can generate recommendations based on analyzing a customer's skin tone, facial features, and emotions in real time to tailor what to recommend or not.

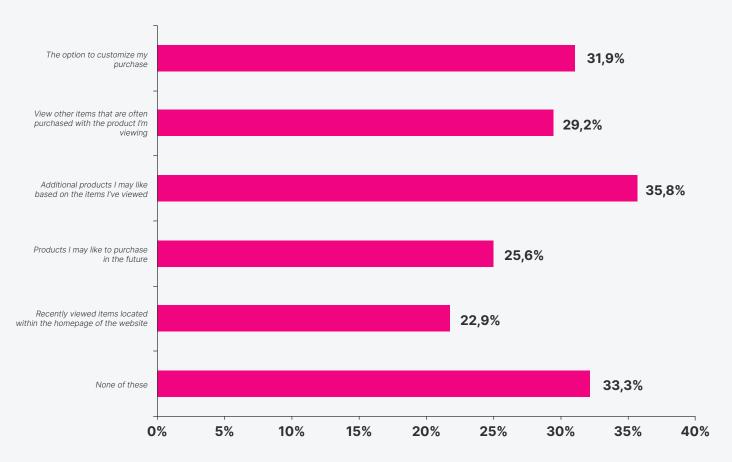
The next level of <u>in-store personalization</u> is likely to include providing these kinds of experiences to all customers as well as pulling in more advanced AR features to help customers experience products and services in different environments.

Personalization is becoming more pervasive and urgent. Only by acting today, however, can businesses hope to be in a position to deliver high value to both their customers and their own brands.



Options when Receiving Personalized Recommendations

TDP_Q7. What type of options do you want to have when receiving personalized recommendations? Please select all that apply.



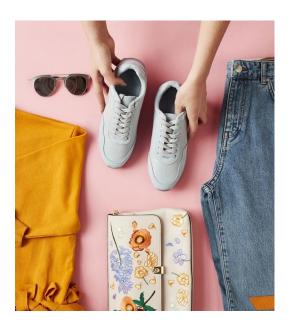
Unweighted base: US Adults who made an online purchase within the last year (1024)



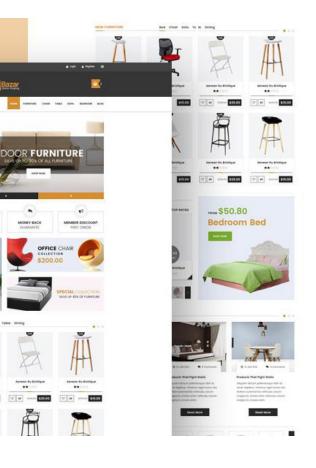


The products that consumers want to personalize today: apparel (30%) shoes (30%) home goods (25%)

Retailers have made strides in providing a more personalized shopping experience; however they need to double down on this notion. It's not just about the deals – consumers want to know the retailer actually knows them, and the only way to do this is to take steps to offer more personalization. It should come as no surprise that online shopping continues to be the preferred method for most Americans – within the past year, 91% of Americans made an online purchase, 70% within the last month – but what exactly are they shopping for? Overwhelmingly, data shows that people want options when it comes to shopping. Moreover, there are certain products and purchases that consumers need to interact with before buying.



Americans recently reported that apparel (35%), shoes (34%), and household furniture (29%) are the products they need to visualize/interact with before purchasing online.



While clothing and shoes aren't surprising, purchasing furniture continues to trend upwards, so retailers in this space should ensure they have the tools (2D, 3D, AR) necessary for customers to interact with that will better inform their purchase.

Moreover, 1 in 6 Americans 35+ and older listed furniture as something they need to interact with before making an online purchase.

So, what does this data mean? Simply put: specialty retailers, those that offer products like clothing and shoes, need to invest in technology that allows for consumers the opportunity to interact with and better visualize what their purchases will look like. This will foster an increase in sales, while reducing the number of returns.

Retailers have made strides in providing a more personalized shopping experience, but now is the time to elevate the ways to offer both personalization and customization. Consumers want retailers to understand their shopping habits and them, and the only way to do this is to offer more personalization options.

While it may be easy to imagine the benefits of virtual try-on for fashion, accurate fit and complex features, like the drape of varied fabrics, can be particularly difficult to render effectively right now. With a shorter shelf life of products and a



higher demand for realism from customers, it has been hard for many clothing retailers to create an affordable 3D asset pipeline for their product lines (learn more about 3D asset creation in the next section). And of course, there is the added complication of accurately and conveniently getting either a 3D model of the customer's body or a "good enough" approximation to deliver the information that the customer is looking for. This is why many clothing retailers have taken a variety of approaches to create augmented experiences for their customers—some choosing to avoid the more difficult technological challenges of virtual tryon, and some experimenting with workarounds or approximations.

Shoe companies are primarily using augmented shopping capabilities in two ways: personalization and virtual try-on. With the higher level of product standardization of shoes, both try-on and personalization tend to be simpler technical challenges than they are for other apparel items. However, the challenge of a try-on for shoes is more than just how it looks—it's about fit and comfort. Online and offline. Personalization is becoming more popular in general and a variety of shoe companies are now using 3D configurators to hand over part of the design process to their customers.

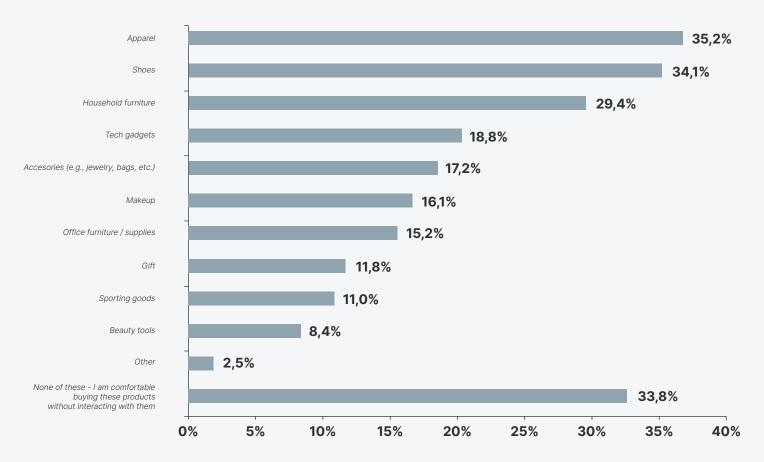
Home goods as a category will likely see significant disruption because of the plethora of choices and the large opportunity for personalizing various colors, patterns, and styles of products. Retailers in the <u>furniture space</u> were one of the first product categories to find widespread and measurable success with AR. Once retailers could accurately render the most important information about the

product—color, size, and fit within a given space—and allow customers to reliably visualize furniture in their room, customers will feel comfortable and adapt to those experiences, quickly. Returns on investment have been demonstrated with increased conversion and reduced returns. Now, it is rapidly becoming the furniture industry standard, where customers have begun to expect that retailers offer virtual product placement in their homes.



Products that Need Visualization

TDP_Q5. Which, if any, of the following products do you feel you need to visualize/interact with before purchasing online? Please select all that apply



Unweighted base: US Adults who made an online purchase within the last year (1024)





Shopping & viewing continue to move to mobile



When it comes to providing a positive experience across different channels, mobile customer service is expected to be the hero.

The reason is simple – a bad mobile experience can do serious damage to your brand!

For example, 57% of customers won't recommend a business with a poorly designed website on mobile. And if a website isn't mobile-friendly, 50% of customers will stop visiting it, even if they like the business.

By not providing a positive mobile experience, you're putting your business growth in jeopardy.

If asked to identify the indisputable breakout trend for consumers, no doubt it would be Mobile Visual

Commerce. The idea of retailers and brands creating visual shopping experiences has certainly taken off. Its staying power is undeniable for multiple reasons, including the exclusive feelings these opportunities create, the chance to build purchasing intent and the frictionless mobile payment process that gives new meaning to the word "seamless."

What does this mean for retailers? Looking for ways to monetize customer data is table stakes for retailers; the challenge is doing so in a true omnichannel ecosystem. The companies that get it right will be omnipresent for shoppers — connecting via mobile, in stores and over social commerce and making sure every touchpoint is frictionless from the visual standpoint.

A key enabler of all things digital is 5G. It may have been over-hyped a year ago, but 5G is vital as we rush headlong into 2022. If remote work, nonstop video conferencing and stepped-up digital collaboration have taught us anything, it's that reliable connectivity and greater mobile bandwidth are imperative. Consumers can't afford to be disconnected, so it goes without saying that neither can businesses.



Demand for more realistic modeling and personalized viewing is growing and will soon be mandatory

Digital shopping has soared, contactless payments have quickly become the norm, and augmented and virtual reality — technologies that have been dancing on the edge of more widespread acceptance for the last few years — are poised for growth.



Many retailers have found a surprise benefit to investing in 3D models of their products: significant cost reductions for product catalogs and prototyping, compared to using physical models and photography.

When creating a catalog using traditional methods, the photography, warehousing, and storing of products can be expensive, time-consuming, and labor-intensive. By experimenting with photo-realistic3D models to create 2D images, companies have found that they are able to both reduce the overhead associated with traditional catalog development

methods, while creating the models they need to deliver augmented shopping experiences for their customers.

Specialty retailers who offer products like clothing and shoes need to invest in technology that makes it easy for consumers to "see" what their possible purchases will look like, as it will foster increased sales and reduce the number of returns.



Case in point: virtual fitting rooms. Using AR to facilitate virtual try-ons is proving to reduce return rates and is a move that will provide a more interactive personalized experience, giving customers what they want, while enabling them to become creators, not just simple users.

Solutions to stay ahead of trends: 3D, AR & Augmented Shopping



Imagine a future where your customer no longer shops by perusing a catalog of products, but instead they select a product type—be it a pair of pants, a car, or a dining room table—and then interactively dial and swipe their way to achieve the perfect dimensions, color, and style of whatever they are looking for. They could then try on, try out, or interact with it in any environment they might want—all from the comfort of their own homes. This vision is what augmented reality (AR) and 3D technology are turning into reality.

Three augmented shopping experiences are common today: "Try On" for worn products; "Try Out" for products that can be placed in your environment; and "Interact" for interactive products, like electronics. All of this, while you're using your smartphone or other mobile device.

Augmented reality and virtual reality tech are increasingly being deployed to create digital experiences in stores and "in-store" experiences online, in 2 major areas

E-commerce: Increasing conversion by letting online/mobile shoppers see products in 3D in context in front of them

Physical retail: Using AR in-store to let shoppers





access digital media on in-stock merchandise *Marketing:* Creating virtual or augmented experiences that "delight consumers" — like an AR pop-up, interactive catalog, or VR recreation of a store or boutique

It's a revolution unfolding less like a bang and more like a slow but powerful shift in tectonic plates. However, that isn't cause for complacency. Today, more than 1 billion smartphones and tablet devices can deliver augmented experiences, and within the next year, 100 million consumers are expected to shop using AR either online or in-store. The consumer appetite is increasing—since 2018, the number of mobile AR users has nearly doubled, with usage and popularity driven largely through social media.

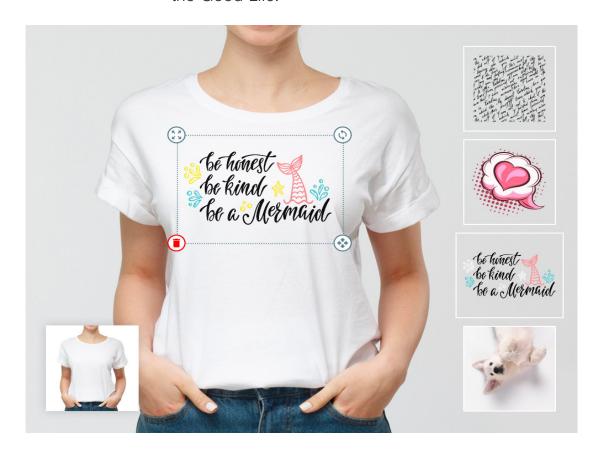
Augmented shopping depends on a mix of established and emerging technologies today, but the trends seem to demonstrate that 3D technologies are being adopted by industry and consumers alike.

Deriving value from augmented shopping today depends largely on how well the technology can represent the most meaningful product attributes for customers in context. Because those differ by retail category, we expect to see not one, but many tipping points as augmented shopping becomes the standard shopping experience.

Conclusions and key takeaways

While we often tend to talk about trends individually, it is important to understand that they are, in reality, all interconnected.

We are experiencing a paradigm shift where life priorities are already changing for many, with the rest following in the future. Increasingly, people are saying: Don't tell me, show me! Connecting with others requires empathy and, for businesses, it is about the ability to inspire, empower and facilitate the Good Life.





Understand that people — whether they work for you, use your services or buy your products — have higher standards and more complex decision-making processes than ever before. To deliver on meaningful consumption requires a holistic brand architecture that can deliver authentic goods, services and experiences in all areas of people's lives.

Personalization requires a commitment to agile management, including cross-functional teams dedicated to specific customer segments or journeys with the ability to execute rapidly. Performance measurement must evolve similarly and become more focused on testing velocity, success rates, and creative boldness. Annual budgeting and strategy processes must also become more flexible with frequent reviews to assess current initiatives, chart new ones, and realign funding and resources in support of key priorities.

Investing in Customer Experience & Personalized initiatives has the potential to double your revenue within 36 months. A good visual shopping experience means your customers will spend more. In fact, 86% of buyers are willing to pay more for a great customer experience.

But the most convincing reason why Customer Experience has become so important is this: customer experience will overtake price and product as the key brand differentiator.

For example, customers are willing to pay a price premium of up to 13% (and as high as 18%) for luxury and indulgence services, simply by receiving a great customer experience. Customer Experience also influences on-the-spot purchasing, too - as 49% of buyers have made impulse purchases after receiving a more personalized experience.



Developing a personalization capability is a journey to get to the full suite of capabilities needed for true dynamic personalization: always-on, real-time, one-to-one communication across the consumer ecosystem. Often, the hardest part is just getting started. The first step is to determine which use cases to focus on (converting new customers, increasing spend of loyal customers, reducing returns etc.) and put an agile team on each of them to rapidly test & learn which offers and interactions best deliver.

This hands-on approach helps people around the organization develop real experience and expertise. But keep in mind, it's vital to keep one eye on the end state so that you, as a manager, can effectively plan in order to make better decisions about people, technology, and investment for your company.





Practical advice



The future of virtual shopping begins now. While this technology is developing rapidly, it's not something you should wait for and then plug and play. As you get started on this path, it's important to consider some key principles:

1.

Decide the context (at home, in-store, or onthe-go) where your customer would find an augmented shopping experience most valuable. Understand which needs of your consumers you want to address, and your unique value proposition. Consider opportunities to use this technology to help with product customization.

2.

Start with a discrete, measurable use case. By focusing on one product or group in the beginning, you can assess the impact of this technology and build knowledge to help you scale.

3.

Choose your delivery platform wisely. For example, WebAR applications work from a browser with no download required, versus appbased experiences that may be an additional hurdle to customer adoption unless you already have a large app installed base.



Test the solution against your desired metrics. Did consumers regard the feature as innovative? Did they buy more? Return less?

5.

Develop a road map of the measured benefits, anticipated costs, and changes to workflows. Consider the intangibles (for example, speed to market) on both sides of the equation.

6.

With 9 out of 10 businesses competing mainly on customer experience, it's the organizations that take customer experience seriously that will stand out from the noise and win loyal customers over. One thing is for sure, in order to deliver a positive experience, you have to know your customers better than ever before. This means creating complete customer profiles that help you understand and measure your customers' behavior at every touch point, and across multiple channels.



Once you know your customers well enough, you can use that knowledge to personalize every interaction. Customers these days have more power and choices than ever before. Thus, you are responsible for understanding and acknowledging their needs. If you make sure their interaction with your company is smooth, pleasant and continuously improving, you will drive brand loyalty. If not, you'll give your competitors the best gift you can – your customers.

8.

The buildup of relevant tech talent will need to be matched by improved training so that people throughout the organization understand not just how to use new personalization tools but also how they can help them make better decisions.

Given the complexity of technologies behind augmented shopping, companies shouldn't delay exploring its benefits and building their knowledge in this area. If you are not discovering the many ways AR and 3D technology can change retail today, you may find yourself lagging before you know it.



