eBook

Exploring the Future of Retail in a Virtual World

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Introduction

Across the globe, the COVID-19 pandemic presented businesses with enormous obstacles throughout 2020.

Virtually overnight, many were forced to make the transition to an almost entirely digital operation. Everything from the overall customer experiences to logistics and facilities management had to be reinvented. Matterport, a leader in immersive 3D technology, is exploring the ramifications of these changes and the opportunities that lie ahead.

A heavy dependence on eCommerce and remote capabilities has become the standard for nearly all industries. But physical spaces still remain, and facilities managers are now taking on the challenge of designing roadmaps for spaces that align with the needs of employees, consumers and all other relevant stakeholders while also upholding necessary safety precautions.

Deloitte describes the critical next steps for enterprises,¹ as well as for small and medium-sized businesses. Facilities managers will step into a prominent new strategic role in working through the change in mobility, the layout of the spaces and contact with suppliers.

When COVID-19 hit, large enterprises were quick to recognize that emerging digital tools like Virtual Reality (VR) would prove essential not only for internal needs, but also for the needs of their consumers. In 2020, investments in building and supporting a digital presence helped businesses fulfill the needs of consumers suddenly restricted from visiting their favorite stores — recently, ST Engineering Antycip found that VR in retail is predicted to generate $1.6 billion by 2025.²

² steantycip.com/blogs/future-of-retail-is-virtual/
In a global survey, Matterport worked to determine whether the rise in digital spending indicates a permanent shift in consumer behavior or if physical locations should still hold a prominent role in business strategy. Matterport’s research reveals that, while consumers are energized by the ways in which online retail is evolving, they long for the experience of interacting with a brand through its physical locations.

As new technologies continue to evolve, the possibilities for transforming the customer experience are endless. There are a myriad of applications of such technologies being utilized in retail across online channels and brick-and-mortar facilities. From the art of chocolate-making at the French Broad Chocolate Factory3 in the U.S. to a holiday shopping experience with JouéClub Liban in Lebanon,4 there are endless opportunities for merchants to create new value.

Capturing immersive digital twins of stores is one such example of this - an innovative solution which is capable of preserving what consumers consider “the best parts of a retail experience” while still unlocking the possibilities offered by the retail of tomorrow. Can 3D experiences be the lifeline for struggling merchants trying to stay relevant in an increasingly digitized landscape, forming a new frontier for brick-and-mortar stores?

As a number of Matterport case studies show, 3D virtual stores are already driving a shift in culture - a movement which is being felt on an international scale.

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3 matterport.com/en-gb/media/3734
4 matterport.com/en-gb/blog/virtual-toy-shopping-open-lebanon
In the space of just 11 months, COVID-19 has managed to cause unprecedented disruption on a global scale. All sectors have been seriously impacted by the lockdowns and social distancing measures introduced to mitigate infection rates, and brick-and-mortar retail is no exception.

By Q2 2020, countless stores were forced to close their doors to the public for safety reasons. This prompted brands to migrate most of their business online, resulting in a sudden surge of eCommerce sales. Business Insider estimated that across the globe, eCommerce spending$5 reached a total of $3.914 trillion in 2020.

While a staggered approach to lockdown across different countries meant that brick-and-mortar stores were able to reopen at intervals throughout the year, business has yet to return to pre-pandemic levels.

Consumer confidence has been deeply affected, as Matterport’s research shows, with a strong reluctance to venture into stores. 66% of respondents in an international survey cited “crowded stores” as their top concern, while 36% were most concerned by “the fear of getting sick”.

However, Matterport research also found that 69% of respondents miss the experience of walking around a store and browsing the product displays.

*Business Insider, 2020: The Year That Made Us Long for the Brick-and-Mortar Store*
As Forbes contributors explain, retail stores provide an opportunity for connection\textsuperscript{6}: the traditional shopping experience is ingrained in cultures across the world. While consumers remain engaged with the evolving possibilities of online shopping, it is clear that physical stores still have a future in the world of retail.

Indeed, the Global Digital Shopping Index found that while there was a 60% increase in the share of purchases made with digital devices\textsuperscript{7} since the outbreak of the pandemic, there was a 28% increase in the share of consumers who are interested in cross-channel shopping experiences post-pandemic. Successful merchants will be those who achieve a seamless, omnichannel shopping experience across all touchpoints, regardless of whether they are digital or physical.

Consumers have come to expect the personalization eCommerce brings, including catered recommendations and promotional sales. Yet, this is only a piece of the potential: by marrying the convenience and frictionless elements of eCommerce with the emotional "connection" brick-and-mortar stores offer, organizations can achieve an even more compelling retail experience.

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\textsuperscript{6} \url{www.forbes.com/sites/forbesnonprofitcouncil/2018/09/04/the-advantage-brick-and-mortar-stores-will-always-have-over-online-retail/?sh=33f8909772d}

\textsuperscript{7} \url{www.pymnts.com/study/digital-shopping-payments-satisfaction-usa-cybersource/}
A common misconception is that any digital innovation in the retail sector will contribute to the demise of brick-and-mortar stores. However, 3D technology is more likely to form the connection between ecommerce and brick-and-mortar, ushering physical retail spaces into the shopping landscape of the future.

Now, anyone can scan a physical environment, collect data from it and then accurately reproduce it into a digital three-dimensional space. This means merchants can capture their stores with a 3D camera and recreate them on-screen — a 3D digital twin.

The ability to capture space using this ground-breaking technology allows users to visualize environments they are unable to experience in person. At a time when in-store browsing is not always possible, a 3D digital twin provides consumers with an immersive experience of a store, which they can explore freely and safely.

Humanscale, a company that designs and manufactures ergonomic products for everyday life, provides just one example of how this technology can be utilized to overcome the challenges of today’s world.

Humanscale needed to figure out a creative way to give visitors virtual access to their showroom in New York City when one of the largest trade shows in their industry faced cancellation as a result of COVID-19. Capturing a 3D digital twin provided the solution that would give their visitors high-quality access to their products in a safe way.

Using 3D capture technology, a user can scan a physical environment, collect data from it and then accurately reproduce it into a digital three-dimensional space.
Matterport’s research shows significant interest in 3D shopping. When asked whether they would be interested in shopping in a 3D virtual space compared to an online store, 73% of respondents answered affirmatively. Meanwhile, 63% of respondents felt that a 3D virtual store would provide a more exciting experience than traditional online shopping.

In this way, 3D virtual stores highlight how eCommerce and brick-and-mortar shopping complement rather than supplant one another. In the case of Winning Appliances, a century-old, fourth-generation family business from Australia, a Matterport Pro 2\(^{10}\) camera captured three Winning Appliances showrooms, and netted close to 20,000 visits to just one of them in a few months.

John Winning, CEO of Winning Group, explained: “The virtual showroom complements our in-store multi-sensory shopping experience, providing inspiration for customers to create their dream kitchen and laundry and allowing them to see what appliances look like in a home setting.” By enabling businesses to promote their physical spaces, 3D technology is playing a key role in future-proofing the retail sector.

“The virtual showroom complements our in-store multi-sensory shopping experience, providing inspiration for customers to create their dream kitchen and laundry and allowing them to see what appliances look like in a home setting.”

—John Winning, CEO of Winning Group
In a December 2020 Fast Company article, S.A. Applin discusses virtual shopping experiences powered by Matterport, including by Cost Plus World Market, Ralph Lauren, Lily Pulitzer, Andersen Windows and Doors, Micha-Paris, Herman Miller, and Ferguson Bath, Kitchen and Lighting Gallery.

“Replacing brick-and-mortar stores with virtual ones removes that critical aspect of community. With any luck, it will return after the pandemic. For now, I’m enthusiastic about walk-through virtual store shopping. Even with its limited floor plan and inventory (World of Joy), or ads taunting me about a world of human behavior that’s currently on hold (Ralph Lauren), wandering anywhere outside of the house during this ... lockdown push offers a bit of a desperately needed change of scenery. For the dark winter of 2020, being able to wander and connect with the marketplace outside the home in a somewhat familiar way is a ... shopping winner.”

— S.A. Applin
Planning and managing experiences at scale

Retailers can do more than create a new and exciting eCommerce experience. They can quickly capture 3D virtual tours of in-store equipment, inventory, product selection and placement, POS displays, and much more to create a consistent brand experience across locations. Using this visual data, stores can plan, implement, and manage floor layouts and merchandising more efficiently than ever before.

Merchants are able to provide a digital blueprint for other stores to follow and successfully replicate, so that each customer receives a high-quality, omnichannel experience regardless of store layout, location or design limitations.

“Visualizing a future in-store experience is the first step toward making it real, and Matterport solutions play a central role in helping Apex and its clients see what’s possible.”

—Dan Cardona, Chief Operating Officer at Apex Imaging Services

SPOTLIGHT | Apex Imaging Services

Bringing in-store experiences to life

Compelling in-store experiences are the key to attracting customers and earning repeat business. With increased competition across channels, creating an exceptional customer experience is more important than ever. That’s where Apex Imaging Services comes in.

Apex utilizes solutions including Matterport to visualize future in-store experiences with 3D digital twins of existing ones. From there, they work with their clients to reimagine the shopping experience. These interactive models are shared across departments, including facilities and real estate, to promote consistency and internal visibility across locations.

For Apex, the benefit of using Matterport is clear: Digital twins capture all the necessary data the first time, which translates to a more accurate scope of work from the outset and a smoother rollout.

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Enabling Safe Reopening During Covid-19 Restrictions

Whether for a quick order pick-up or a socially-distanced in-store visit, Matterport can provide customers peace of mind with visual assurance that the right safety measures and precautions have been taken on premises. Consumers can quickly and easily check out a store’s arrangement online to ensure that it is following physical distancing guidelines.

SPOTLIGHT | Herman Miller

From Your Sofa to Ours

When COVID-19 first closed Herman Miller’s London showroom last year, the furniture company needed an innovative way to provide people with access to its spaces regardless of physical proximity. Matterport 3D virtual tours were a perfect solution.

"We wanted a tool to help grow our audience beyond local proximity. It was essential to find creative ways to welcome customers and employees and make the physical space work harder for us."

—Rebecca Smith, Marketing Executive at Herman Miller

Since implementing, the company’s showroom now has a global audience. Not only can they host clients from around the world and across different time zones, but customers can safely experience the brand from the comfort of home. In an industry where a sense of scale and dimension is a leading purchase driver, virtual showrooms merge the benefits of in-person and online shopping.

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Matterport’s Role in Reshaping Retail

By utilizing Matterport’s innovative 3D technology, retailers can capture a digital twin of their stores and enjoy a wide array of benefits while providing consumers with an exciting, engaging new way to shop. Some of these benefits include:

**Faster Time to Market**
Acquiring, constructing, remodeling and rebranding retail sites are tasks that require accurate physical details and measurements to enable effective collaboration with architectural firms and third-party contractors. Matterport captures the data needed for more precise bids without time-consuming site visits, and helps to accelerate decision-making. Designers can generate accurate point cloud data directly from a Matterport 3D digital twin to quickly create CAD, Revit or SketchUp models. 3D design templates can be easily replicated for other stores.

**Improved Documentation & Stock Management**
Digital twins of retail spaces are a simple and cost-effective way to stay on top of maintenance issues and train employees on new processes. Matterport digital tags, known as Mattertags, are used to label equipment within the 3D space to document repairs, upkeep requests and training information.

**Consistent Shopping Experiences**
Matterport not only delivers an accurate 3D visual representation of stores, but the data behind it. Employees have easy and intuitive access to information that would have been impossible to find buried inside emails and spreadsheets, including accurate measurements of the entire store and dimensions of the aisles, equipment and anything else within it. Digital twins of stores can be used to plan merchandising, seasonal and promotional rollouts, too.
**Staff Training**
Employees also benefit from 3D walkthroughs of the stores they will be working in. New or visiting employees can gain access to a store from their own computer to quickly understand the flow of the space without the need of an in-person walkthrough. Helping new employees learn their way around means they can hit the ground running when they start, effectively minimizing the time required to train new recruits on-site.

**Data Insight**
When it comes to the role of data within the retail space and its relationship with immersive technology, there’s a wealth of information waiting to be unearthed that could be of vital importance to improving marketing efforts.

Similarly, spatial data capture can convey real-time analysis of how customers move around a retail space and interact with the products on offer. This information can then be harnessed to improve marketing, optimize stock and increase revenue.
How Can 3D Retail Evolve Further?

According to Goldman Sachs, the AR and VR market in retail is set to reach $1.6 billion by 2025. Two-thirds of internet users would be interested in a virtual reality shopping experience, and 63% believe that technology of this nature will have a strong influence on the way they shop.

Even though shoppers are starting to explore the benefits of shopping in 3D environments, the opportunities for further development are as real as they are exciting. There are a number of ways that AR, VR and immersive 3D digital technology could enhance the retail experience in the future:

More Immersive Employee Training and Onboarding
3D and VR technology could prove a vital tool in helping with staff training and onboarding. By utilizing immersive technology, merchants can place their staff in real-life situations to help them deal with a host of scenarios they are likely to encounter while on the job. This could include lessons on managing difficult customers, delivering first aid and even crowd management and crisis training.

Shop with a Friend
The effects of the global pandemic have caused a shift in the way we interact with the retail experience. Social distancing measures and reduced capacity have ushered in a new age of online-only, solo shopping that has left many consumers pining for the participatory shopping experience. By combining Matterport’s 3D technology with AR or VR, users can shop virtually with companions, and interact with one another as they browse.

Virtual Product Journeys
Consumers are becoming increasingly conscious of not only the products they are using, but also of their journey in terms of sourcing, manufacture and logistics. Complete transparency is fast becoming the new normal of consumerism, and the opportunity for VR to help facilitate this need is more apparent than ever. We’re already starting to see this with tools such as Vivino, which allows users to “choose wine with confidence” by scanning a bottle via their smartphones to instantly access ratings, reviews and prices.

Matterport technology can further expedite this experience by integrating product information into the 3D scan itself, from the inception of the product’s lifecycle right through to its final destination on the store shelf. Consumers looking to make more informed buying decisions would be able to access details about the lifecycle of any given product in the store.
Bringing Products to Life with VR and 3D Modelling

In much the same way that we foresee 3D technology making a huge impact on providing shoppers with complete transparency, we’re also excited to explore the possibilities of ‘bringing products to life’ with Matterport. This has already been demonstrated with digital in-store mirrors, such as the interactive experience in Ralph Lauren’s flagship New York store.¹⁴

Digital mirrors allow shoppers to scan any items they want to try, which are then displayed on the interactive dressing room mirror. Shoppers can also use the mirror to adjust the lighting in their fitting rooms or swap certain items for different sizes or colors. There’s even the option to call a sales assistant to the fitting room via the mirror and save items to the shopper’s smartphone so they can be purchased at a later date.
The Future of Spaces with Matterport

The traditional brick-and-mortar retail experience isn’t being phased out, it is simply evolving, and Matterport is leading that evolution. Leveraging Matterport, merchants can capture and preserve the traditional shopping experience to offer familiarity, while also enhancing business efficiency and driving growth.

The impact of COVID-19 on the retail industry has served as a catalyst for changes already underway in the sector. Consumer behavior is driving a digital shift; but successful retailers will be those whose omnichannel environment seamlessly unites their brick-and-mortar locations with their eCommerce platforms.

Platforms such as Matterport will prove to be essential in successfully catering to evolving consumer preferences, and also in empowering retailers of every size with new insights that will unlock further business growth.

About Matterport

Matterport is leading the digital transformation of the built world. The Company’s groundbreaking spatial computing platform turns buildings into data making every space more valuable and accessible. Millions of buildings in more than 150 countries have been transformed into immersive Matterport digital twins to improve every part of the building lifecycle from planning, construction, and operations to documentation, appraisal and marketing.

The company has been serving the real estate and photography industry since its inception and is also being adopted by major brands in architecture, engineering, construction, facilities management, insurance, restoration, retail, travel and hospitality.

Learn more at matterport.com. Or contact your regional office today at matterport.com/contact-us