A New Reality: AR and VR in CRE

The way the modern world interacts with physical space is changing. We've gone from "bricks and mortar" to "bricks and clicks" as the e-commerce revolution transforms retail and all our devices are now talking to us and to each other.

The increasing utility of virtual and augmented reality is another contender for our attention as their applications in the commercial real estate (CRE) space become more apparent. These technologies promise to revolutionize the way we do business and interact with both our clients and real estate itself.

Let's take a dive into some of the applications of these new tools and how they can be used to enhance CRE operations.

Reality Defined

For many of us, the difference between virtual reality (VR) and augmented reality (AR) is a little fuzzy, so let's start there. Augmented reality, according to the brains over at MIT: "superimposes virtual enhancements on real-world scenes in real-time."

In practice, this might mean you're walking around with an app that works through your phone camera and 'adds' images or information to the real world around you – like superimposing a dinosaur into your living room, or wayfinding markers and digital info onto the world around you.

Virtual reality is a little different in that it creates an entire world or scene that you can explore, usually with the assistance of techs like VR headsets and haptic gloves. So, think about viewing an entire virtual mall or building site, or the interior of a space you are leasing out.

The terms are often used interchangeably, and they do overlap to some degree, but they aren't synonyms. Fortunately, splitting them into neat little boxes is not a prerequisite for understanding how AR and VR can be used to enhance real-life CRE.

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Space that Virtually Sells Itself

One of the biggest advantages VR and AR offer is the ability to virtually show spaces, even before they're built. This means marketing efforts can kick off earlier in the development process and potential clients get a better, more immersive sense of what a property might look like before there's even a door to step through.

Existing spaces are also increasingly being digitized through the tech produced by companies like Matterport which specialize in 3D capture. Properties can be staged and shown as a digital, interactive experience that really gives potential buyers a sense of what a space looks like. Recent studies on residential properties using the tech showed that having a virtual tour meant that, on average, a property closed 31% faster and sold for 9% more.

Aside from the obvious financial upshot of those numbers, VR tours also mean less time spent physically traveling to and from sites. That can be a huge bonus for both CRE professionals and clients. Brokers can guide prospective tenants towards a higher number of property options and help those clients curate a shortlist of candidates they'd like to see in person, raising the likelihood of making a deal.

Built to (Digital) Spec

Other areas where VR is making an impact are in architecture and construction. Modeling buildings under development in VR means that any potential problems can be identified before they're, literally, cemented in place. Plans can also adapt and change easily and creative solutions can be "tried on for size" before committing to them. Having a digital model also serves as a point of truth that a team can return to during lengthy development projects. All of which translates into savings in time, money and materials.

Once construction is complete, buildings outfitted with appropriate sensors can also generate a digital twin – a virtual copy of the building and its systems. This is a real-time model of the building and can include information like power usage, air quality, temperature and occupancy, among other factors. Using this data, it's possible to streamline a building's operations to meet energy efficiency goals and once again, reduce costs.

Of course, this is much easier to include as part of a new development. One of the challenges to the wide-scale implementation of this tech is aging building stock, which is costlier to outfit or retrofit with the necessary hardware.

Real-World Enhancement

Meanwhile, returning to VR's more grounded cousin, augmented reality has some interesting applications of its own. Large furniture suppliers like IKEA are already using the tech to help buyers model furniture, or entire room designs, through an app. In CRE, this kind of functionality could see use when staging a space – along with the option to present multiple versions of the room or site to potential buyers.

As mentioned above, AR is also being used for wayfinding. Using digital sensors, a busy mall or office space can be outfitted with virtual markers that visitors can follow to their desired destinations. Retail, in particular, stands to benefit from the ability to guide shoppers to specific areas or products – all while providing additional information and support through a phone-based app.

Steady Growth in the Cards

As far back as 2016, Goldman Sachs predicted that the global AR and VR market would be worth $80 billion by 2025. While current estimates from Statista are a little tamer – with VR predicted at $12 billion and mobile AR at $26 billion – the trajectory of the industry is clear.

Consumer demand for AR and VR enhanced experiences is likely to climb as these technologies gain traction, and the value to CRE professionals is obvious. All of which makes this a curve well worth getting ahead of for the savvy broker.