

CRE Terms: Delving into Digital Space



One of the biggest technology-based shifts that commercial real estate (CRE) has undergone in recent years is the change in how physical space is viewed, shown, and analyzed.

The overlap between physical and digital space is becoming broader, with terms like virtual tour, digital twin, and Building Information Modeling (BIM) increasingly becoming part of real estate terminology.

Depending on which side of the CRE equation you fall on, those terms may be more, or less, familiar to you. What's true across the board, however, is that as they become a larger part of the industry, it's vocabulary worth having at the tip of your tongue.

With that in mind, we're diving into the "bricks and bits" of how digital space intersects with the real-world assets of CRE.

Virtual Tours

The most obvious application of virtual space for real estate is as a way of showing off real space. With virtual tours, prospective tenants or buyers can explore a property online, fast-tracking the process of finding the ideal property, without them needing to physically visit each site.

There are several strategies for getting the most out of the virtual experience, including:

- Pre-recorded tours that highlight a property's unique features,
- Live streams (where an agent or broker takes the client through the property on camera),
- A 360° photographic virtual tour, which allows prospects to explore a listing as though they were walking through in person, and
- Drone videos, which can offer a unique perspective, both outside and inside a property.

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While these approaches differ in terms of which might be used for different asset types (drones, for example, are a great way of showing off industrial space), they all create additional opportunities to get the right eye on real estate assets and close deals as a result.

“Digital Twins” and BIMs

Two additional terms that are likely to be very familiar to those working on the development and property management side of CRE are Digital Twin and BIM.

Urban Land Institute defines digital twins as: “real-time virtual models of objects, ranging from a building to an entire city.”

Importantly, the information provided by a building’s digital twin can be updated in real-time if the building is fitted with sensors and other tech that collects data on operations. This makes it possible for building managers to monitor systems like HVAC (Heating, Ventilation, and Air Conditioning), to ensure optimal performance, efficiency, and cost-effectiveness. This “live” functionality is also part of what distinguishes a digital twin from the similar Building Information Model or BIM.

Just like digital twins, BIMs are digital representations of physical buildings. Where BIMs differ is that they are a model of buildings before and during development, rather than an operational model like a digital twin.

Digitization experts Matterport note: “Central to the BIM process is the use of 3D models represented by the core disciplines of architectural, structural, civil/infrastructure, mechanical, electrical, and plumbing trades... Once it comes time to break ground on a new building, BIM 3D models give teams an overview of its constructability. The model is a handy resource as they work to turn their virtual model into a built reality.”

Planning and Optimizing Space

The growing trend towards generative AI (Artificial Intelligence) offers up some additional ways that physical and digital space can interact. For example, AI can be used to quickly figure out the optimal layout for a space based on specific criteria.

That information can then be translated into 3D renderings that provide a precise view of what proposed changes will look like. This can be especially valuable when trying to help clients visualize options for how to arrange a new space or even outfit shell space.

Going Digital

For CRE professionals, digital representations of physical space provide another way to add value to prospective deals. Staying on top of the latest trends as these technologies develop is another way to ensure that clients are getting the most out of their space.