Real Estate Capital USA

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NEWS & ANALYSIS

Analysis: How lenders and advisers are accelerating their use of AI

Though industry adoption is in its early stages, more managers are moving to embed AI into their business strategies.

The commercial real estate capital markets are increasing their use of artificial intelligence, with more lenders and advisers using AI to augment existing statistical analysis, according to market participants who have spoken with Real Estate Capital USA.

"The industry is [at] early stages learning what it all means, but there are some early indicators that AI is going to be a really important tool for investment decisions and asset management over time," said Doug Weill, founder and co-managing partner at the New York-based capital advisory firm Hodes Weill & Associates.

Commercial real estate managers are using AI to study demand trends, evaluate possible outcomes, analyze tenant credit while making investment decisions and more.

"Studying historical patterns, trying to predict future patterns, as well as trying to underwrite the credit of a tenant, and then pricing the space to reflect their credit – that's something that we're hearing more and more about," Weill added.

AI in application

Los Angeles-based commercial real estate lender TerraCotta Group applied the proprietary data analysis in the context of the economic principles for its investment decisions long before artificial intelligence gained popularity, said Tingting Zhang, founder and chief executive officer.

"AI itself is a robust algorithm. Mathematically, it's no different from statistics, but it's a lot more powerful, a lot more dynamic," Zhang said.

As a data-driven manager, exploring AI was a natural next step for TerraCotta Group and allowed the company to "look at how the outcome produced by an AI algorithm might differ from human judgment calls from the classical statistic model," Zhang added.

Zhang cited one example, noting that AI becomes exceptionally relevant when the firm is seeking to determine the strength of a potential investment's location. In this situation, TerraCotta's analysts input all relevant data into an AI model and use the optimal computing power of the model to discern correlations between variables.

"Because of the large number of observations, the AI model looks at every possible correlation, linear or nonlinear, between every single observation and every variable, which results in [processing] a compounding combination that could be millions or trillions of calculations," Zhang explained.

Most of the variables the firm's analysts use are aimed at breaking down a theme from an econometrics point of view. For example, to examine the quality of healthcare in a certain neighborhood, the AI model can analyze anything from ratings on Medscape to data about different insurance networks. In the past,

this analysis may have been more limited to inputting the number of hospitals and doctors.

TerraCotta supplements its analysis with human judgments to examine if the insights are accurate and applicable.

"In most situations, we know that the insights are accurate because we've been investing in the commercial real estate space for over 20 years. And then, we'll have quarterly checks to monitor whether a certain algorithm is still producing [predictive] insights," Zhang said.

Chicago-based brokerage Cushman & Wakefield started to embed artificial intelligence at scale to digitalize its commercial real estate transaction cycles last November.

Sal Companieh, chief digital and information officer at Cushman & Wakefield, said the firm's AI strategy will be critical for its advisory business, which mainly provides insights on capital markets, transaction management and lease administration to its clients. The firm aggregates its proprietary data, available market data and public data in its analysis.

"We're applying our AI models towards the aggregation of that dataset," she added.

In addition, Companieh believes that because commercial real estate investment decisions are increasingly nuanced, the advisory's ability to take proprietary data and pair it with external market data is proving to be a key differentiator with clients.

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"Our proprietary market-leading insights generated with nuanced information augmented by AI can help clients see alternative paths, forecast and the impact of their decisions," she added.

Similarly, Jeff Bolte, chief technology officer at Atlanta-based loan servicer Trimont, said AI plays different roles in at least two levels in Trimont's practices. For the company's loan servicing business, AI raised efficiency to automate the workflow in tasks such as data abstraction and building data repositories.

Additionally, AI has also been applied in creating a cashflow model or writing up market-related content, which ties more to the firm's advisory and underwriting side of the business.

"[The other] big opportunities are being able to mine a vast array of data sources that are well beyond what any person can do today. This will lead to newly discovered indicators and trends that will provide additional value to our clients as well," Bolte added.

Data at the core
Commercial real estate historically has been slow to adopt new technology. However, the industry itself is inherently data-rich, which presents the opportunity for managers to analyze what is already within their reach, market participants said.

"As of today, most commercial real estate firms' [data] processes include Excel spreadsheets, shared drives, shared folders and sometimes filing cabinets. What we're trying to deliver is more accessible data [these companies] can trust," said Kala Halbert, director of marketing at Prophia, a San Francisco-based AI-driven property tech platform developed for commercial real estate business.

Different from generative pre-trained transformers, known more popularly as GPT, or other public-facing generative AI solutions that are trained by public data, Prophia's AI models are trained on private, real contracts the company obtained from real estate owners and operators, which can extract asset information for their clients' reference.

Hannah Overhiser, content marketing manager at Prophia, explained that asset managers, property managers, leasing administration and senior executives can pull data from leases. "[They can] use that information to track tenant encumbrances, critical dates or anything that is crucial to their portfolio growth," she added.

In addition to third-party AI technology platforms, more private real estate managers also started to build their own AI-driven tools to empower data integration.

Peter Weiss, co-founder and managing partner of New York-based real estate private equity firm Alpaca Real Estate, said the opportunistic manager has applied artificial intelligence to some aspects of its activity.

Using AI, Alpaca built a pipeline and management tool that can aggregate over 180 deals in around $10 billion volume and analyze the data in an organized way to generate high-level metrics that lead to relative value.

"Instead of an analyst or an associate spending the time to extract the data into our format, and lay it out for the team to review, we're able to forward that to a system that scrapes all that information. Those data points are then automatically sent to our proprietary data lake and then mapped. When we want to review the deal, we can see it in a very organized, internal format and we can compare it to other similar deals," Weiss said.

The process allows the firm to efficiently decide on how and where to allocate resources based on the relative value. In addition, all the data points will remain as comps for future deals, and it also allows the firm to showcase its data-driven transaction decisions to its investors, he added.

Challenges in adopting AI
Embedding AI into commercial real estate transactions is still in the early changes, with multiple challenges ahead. First and foremost, when the overall market is experiencing headwinds and volatility, there are usually fewer resources and willingness to invest in technologies.

"The underlying question for us and the challenge that we have to overcome is which markets are going to generate enough strength, and therefore, capital for innovation," Prophia's Halbert said.

Halbert added that the company is focusing on providing third-party tools to sectors including office despite the asset class seeing more distress than others. Because ultimately, the sector has a fundamental demand for better technology to manage the complexities in its leases, she explained.

Jorge Aldecoa, chief product officer of ReAlpha, a property technology company, noted introducing AI may also help improve predictability for companies' operations and reduce costs during a volatile market environment.

"AI can help with the underwriting process in parsing and understanding documents that are coming through and being able to give quicker responses for things like pre-approvals, underwriting requirements and everything in between at a much faster pace," Aldecoa said.

While it is difficult to have consistent staffing and resource allocation in a fluctuating market, Aldecoa believes utilizing AI will allow commercial real estate market players to manage the resource allocation more flexibly, and thus, with lower costs.

Beyond the general market volatility, Cushman & Wakefield's Companieh noted there are other reasons why the commercial real estate industry has not yet adopted AI widely.

"Every company is still figuring out legal tendencies on how you interact with this type of capability, so [we're] being really transparent with our partners and clients around what we're doing with the data we're using," she said.

Other than that, the adoption of new technology can also mean recreating the workflow of managing data, Companieh said.

"Any time when you disrupt the supply chain of data, there is work to be done. Either there is education of why the sequence needs to change, or there's optimization of the data, or there's a language differentiation of the type of data while you capture it," she added.

Similarly, Alpaca's Weiss noted his company is in a unique position as a newly launched investment platform to be able to implement digital transition with AI easily.

"I haven't yet met a manager that's doing quite what we're doing. I think it's very hard to implement these strategies with an existing portfolio just on the basis of being backward-looking and trying to retrofit an existing asset management platform," Weiss said.

Enterprise impact

Before Chat GPT gained popularity among the general public and brought AI to the forefront of public discussions, AI-driven, property-geared technology was not well-received by the commercial real estate market immediately.

However, the perception has changed. More managers look at embedding AI for digital transformation in commercial real estate not only from the angle of pursuing efficiency but also from an enterprise impact perspective.

"I think AI has a lot of potential that has to be handled with care [since] a lot of risk is attached to it as well. We're playing with it, and we're putting guardrails around it while learning a ton in the process. So that's where we are as an industry – a very early stage," TerraCotta's Zhang said.

To further explore the potential of AI in the industry, Zhang believes there must be significant quantitative thinking and actual capital deployed to put the technology to use in practice, a methodology that the commercial real estate industry hasn't adopted historically.

"The adoption of AI, machine learning algorithms and quantitative methods were more widespread in quantitative public market strategies and global macros," Zhang said. She added that industries such as hedge funds and investment banks have been focused more on developing talent in quantitative analysis, and the data in public markets tends to be more open and clearer than the private data seen in the commercial real estate field as well – another advantage for these industries to apply AI from early on.

On keeping human capital to utilize AI, Cushman & Wakefield's Companieh noted the conversational layer of AI's large language models may play an important role in unlocking such potential.

With generative AI taking human inputs including text and images to produce responses, the platform may help pivot colleagues to "better prompt engineers," who can solve problems using AI at their own pace and for their own roles. "It will drive the maximum outcome versus us trying to do everything," Companieh added. Many other managers also noted they're developing AI-driven chat boxes that can help employees with their workflows internally.

Looking ahead, Zhang believes that AI will cause the commercial real estate industry to redefine itself. "I feel that especially with the onset of AI, firms that are doers without insight are not going to be differentiated in the future," said Zhang.

She continued that with AI, "You'll have an investment team that can act quickly, build relationships and make good investment decisions, but they will be complemented by a meaningful research and development platform with talent that has cutting-edge thoughts and an inclination to innovate. CRE investment firms will have to make sure the data platform is connected with the investment team on a day-to-day basis so that the innovation continues to be pragmatic."

"AI is a very powerful algorithm, and it's much better applied in understanding the complexity of the real world, which is the foundation of making an investment," Zhang added.