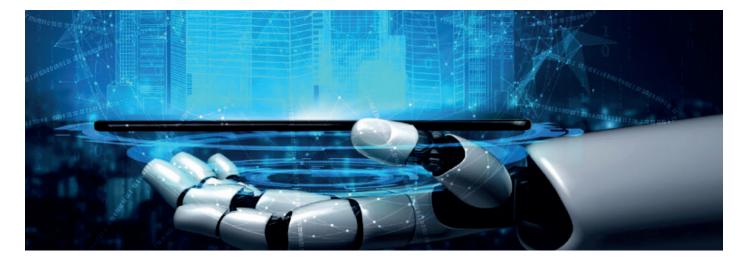


By: Aisha Kapoor PUBLISHED: 7 May, 2024

Al will give you your time back

Artificial intelligence tools are helping real estate managers reduce costs, optimize portfolio decisions and source better deals.



The commercial real estate industry is slowly but proactively increasing its adoption of data analytics and technology applications, particularly artificial intelligence, to create value. The use cases are wide-ranging: strategy, asset selection, due diligence and underwriting, valuation, asset management and longterm performance optimization.

More than 80 percent of real estate occupiers, investors and developers interviewed for real estate advisory JLL's Global Real Estate Technology Survey 2023 said they planned to increase their real estate technology budget within the next three years. Spurred by this growing demand, AI-powered proptech companies also saw \$630 million-worth of investment in 2023. JLL estimates that the growth of AI is translating into increased demand from the sector, reaching 1.9 million square meters (20.4 million square feet) at the end of 2023.

"At Amherst, we have a saying: tech ate the real estate," says Chris Avallone, head of investment management at Austin-based real estate development and investment firm Amherst. "What we mean by this is that technology has fundamentally changed everything about how real estate investment works."

At a broader level, automation can make the real estate decision-making process more efficient and streamlined, with added cost and time savings.

New York-based venture capital firm Alpaca Real Estate launched a real estate investing platform to capitalize on the opportunities arising out of the ongoing repricing across the industry. Peter Weiss, the firm's co-founder and managing partner, says the firm has built a bespoke data lake management platform that can scrape information from up to 250 unique data points per transaction. Using its automated database and valuation tools, the firm has been able to analyze \$11 billion worth of transaction volumes. "What AI can do is give you your time back," he says. "We can track all these transactions and decide which specific ones we want to focus on because we have a tool to organize data that the team can use in a more value-add way."

Amherst's underwriting process for deals, as Avallone explains, extensively uses data analytics that can automatically and algorithmically narrow down the investable universe into a buy box based on a range of factors such as asset price, physical attributes and neighborhood statistics.

"This buy box then gets passed to our human underwriters, who see the process through to transaction on each asset. Our data puts the dart on the dartboard, then our team puts it in the bullseye. As we

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evaluate and complete each transaction, machine learning enables us to incorporate live observations of our own portfolio into underwriting the next opportunity. By the time the world sees broad housing market data, it is already old news to us," he says.

Vast scope

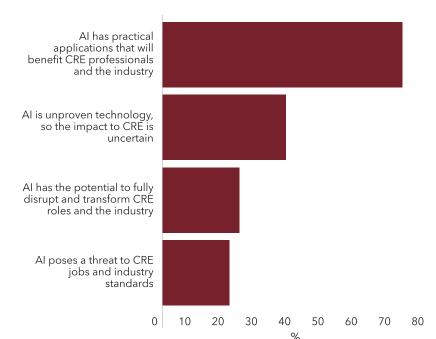
Within the world of value-add investing, in particular, many managers are still refining the use cases for various technological solutions. The scope is vast: managers can use analytics to identify the positioning of markets and sub-markets in their respective cycles, which can inform the timing of acquisitions and dispositions, explains TJ Parker, senior vice-president for analytics at multifamily asset management firm Bell Partners.

Parker says managers can also dig deeper and analyze the population of assets within a market by attributes such as vintage, class and style to help their deal teams proactively identify assets with value-add potential and present off-market bids. Post-acquisition, these tools can increase their understanding of the needs and preferences of residents, so that they can tailor the assets to create operational efficiency and tenant retention.

She says one of the key use cases for Bell Partners, for instance, involves identifying pockets of favorable renter demographics now and in the future within its target markets over the hold period, using proprietary and third-party data sources.

Indeed, when it comes to sectoral plays, big data and technology applications are currently used most prominently in multifamily, industrial and office sectors. As Avallone points out, technological shifts due to the pandemic have caused significant disruptions in office and retail sectors.

"In all these circumstances, residential ends up as the beneficiary of how consumers are engaging with traditional real estate sectors, and underscores the need to adopt a more user-first mindset



In what way do you think AI will affect the commercial real estate industry?

Source: Altus Group's US CRE Industry Conditions and Sentiment Survey, Q4 2023

when thinking about the best way to leverage technology to both drive returns and scale solutions."

Josh Kahn, COO of investments and partner at Austin-based multifamily investment management firm RPM Living, says he is observing several managers

> "Technology has fundamentally changed everything about how real estate investment works"

CHRIS AVALLONE Amherst develop models that provide predictive forecasting for future rent growth, which, in his view, appears to be the primary metric under development today. "Ultimately, these models will become more dynamic and start to incorporate asset-level characteristics likely to drive performance, such as unit count and floor plan diversification. In the future, we anticipate more data related to the idiosyncrasies of specific properties."

Across the real estate investment universe, technology will also be a critical differentiator to help companies achieve their ESG goals. In March, JLL announced a collaboration with a global climate risk analytics technology firm that will allow it to integrate climate-related risk and opportunity forecasts into its asset valuations and decarbonization strategies.

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Richard Bloxam, chief executive for capital markets at JLL, explains: "For organizations to meet their goals, the built environment they are acquiring, and the technology they plan to implement moving forward need to be efficient and green. In the office sector, there is three-times the demand for carbon-reduced office space as compared to the supply offering over the next five to six years. There's a similar picture in the industrial sector."

In the current phase of the real estate industry's digital transformation, managers are exploring and experimenting with technology solutions. However, with implementation still in early stages, the effectiveness of AI remains somewhat debatable.

Looking at limitations

Bell Partners' Parker notes that the use case for advanced analytics is "more pertinent, given the cradle-to-grave investing period is shorter. Value-add assets have a finite life, often five to seven years, compared to longer-term holds for core assets, which means advanced analytics strategies can be improvised based on a shorter feedback loop in the value-add case."

Parker also says that the flexibility with returns benchmarking that valueadd strategies provide can help construct a portfolio that is more "bottom-up in nature rather than top-down, as would be the case with traditional open-ended core portfolios that may benchmark to NCREIF geography and property-type exposures. This means asset selection through a deeper understanding of macro, micro, location characteristics, building attributes and proprietary data using advanced analytics becomes particularly "Ultimately, these models will become more dynamic and start to incorporate asset-level characteristics likely to drive performance"

JOSH KAHN RPM Living

important in the case of value-add strategies."

Moreover, while AI helps managers save time for otherwise onerous tasks such as data mining and analysis, validating the effectiveness of the AI models being developed or adopted becomes a timeconsuming process itself. According to RPM Living's Kahn, various groups have created predictive models forecasting submarket rent growth, but it will likely take several years to determine whether these are more accurate than traditional data reporting services.

Kahn also points to the increasing abundance of perspectives on rent growth and other factors. "Fifteen years ago, it was a handful of voices. Now, any firm can develop its own viewpoint, incorporating various factors into forecast models as they deem appropriate. For example, our submarket rent growth models often consider wage growth, whereas many other firms solely focus on job growth.

"Proprietary forecasts afford control over how one perceives the future, influencing sub-market scoring, predictive model outcomes, business decisions, and investment choices. This control becomes even more crucial during volatile and uncertain periods such as pandemics or recessions, where significant profits can be generated. Adjusting levers and updating assumptions can dynamically shape the narrative, akin to unraveling a story like DNA."

Data quality, particularly relating to the inconsistency of data generated by reporting services, also remains a challenge. Industry experts spoke about the issues with gathering real-time data on new construction statistics as well as rental rates, which fluctuate daily.

So, while managers might look to put technology at the center of their business and harness data to create more value from their investments, there is another key essential ingredient for long-term success. As JLL's Bloxam says, while data is the oil of digital transformation across industries, human experts are needed to refine that data.

While there is little doubt that technology has simplified data analyses, the bigger question relates to its impact on performance and returns.

"In the long run, the heterogenous and product-differentiated nature of private real estate data coupled with data inefficiencies at the local municipality and neighborhood level will enhance returns for the asset class at the aggregate, and more so for those investment firms who are at the forefront of the advanced analytics wave," says Parker. "These firms will have not only have invested in the right capabilities such as data and talent, but will have also shifted their organizational mindset toward authentic data-driven decision-making."

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