

WINTER
2024

TRANSFORMING

The Real Estate Life Cycle With

AI



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Although artificial intelligence (AI) has been driving efficiency for years, generative AI has prompted discussion in boardrooms across the US about how this technology can transform organizations and drive competitive differentiation. A recent Deloitte Survey on the state of generative AI found that 31% of leaders expect substantial transformation within a year and 48% anticipate it within one to three years.

What Is AI?

Generative AI may seem complicated, but it can most simply be explained as machines and software that use an existing dataset to generate new content based on requests and prompts. The content can quickly deliver deep insights and aid in faster decision-making across organizations. Real estate is a data-driven industry that stands to greatly benefit from the uses of generative AI. By incorporating AI into work processes, real estate stakeholders, including investors, developers, and operators, can build more-efficient, sustainable operations that enhance asset values and improve tenant experience while making smarter investment decisions. AI has the potential to transform how the real estate sector operates across the entire real estate life cycle.



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Invest

Real estate investment is perhaps the most data-driven process of decision-making that occurs across the real estate life cycle. AI improves data analysis and modeling, thereby enabling better and faster investment decisions. When modeling, AI provides insightful, real-time feedback on issues and errors to coders building algorithms modeling investment outcomes. Franz Limoges of CBRE Econometric Advisors mentioned, “For investing, data scientists historically had to rely on building their own code from start to finish. The ability to write code in an expedited fashion allows for improved time efficiency and bandwidth to spend on more analytical work.” These sophisticated algorithms can now process massive amounts of data, uncovering hidden trends and generating forecasts that were previously time and labor intensive. For instance, AI can quickly analyze the data needed to assess and summarize public company earnings transcripts, leading to faster portfolio rebalancing and changes. This allows investors to make informed, data-driven decisions, pinpointing opportunities and optimizing their portfolios with an unprecedented level of insight.

“One cannot overestimate the importance of data quality when building, testing, and implementing AI models. Beyond the quality of the data, the proprietary nature of the data will be an even more important differentiator as the market continues to mature and AI models become more readily available.”

—Chris Reich, Head of Global Quantitative Research, CBRE Investment Management

Transact

Today, AI can help at all stages, from lease drafting to abstraction. Innovative companies providing lease administration services and/or technology have been leveraging machine-learning models in various steps of their processes for the past several years. These models are being used for lease abstraction, data management, and rent management processes. Adding generative AI to these steps has allowed companies to efficiently extract key information from documents. At CBRE, this evolution slashed processing time by a staggering 25%. Additionally, AI can help with content creation for routine requests to cut down on redundant tasks and enhance the efficiency of the entire transaction process. This improves data accuracy and frees up human resources and capital to focus on high-value activities such as business development and negotiation.



“ We have been using cognitive technology and machine-learning models to enhance our lease administration services for years. It is exciting to see the revolution of generative AI accelerate innovation based on those foundational elements. We are driving better client outcomes by gathering valuable insights on lease terms, increasing efficiency across the life cycle of a lease and reducing manual quality-assurance processes due to improved data quality. ”

—Bill Hayden, President, Enterprise Global Services, CBRE

Build

AI is even playing a role in the more creative trenches of the business, transforming how experts design and build, as well as blending innovation with practicality to meet both aesthetic dreams and functional demands. During the design stage, AI can generate multiple options that balance aesthetics, functionality, environmental considerations, and user needs. In the construction stage, AI can predict costs with greater accuracy and streamline procurement processes. This proactive approach not only optimizes resource allocation but also contributes to a more sustainable and efficient building life cycle. By managing supply chain spending and predicting project delays and cost overruns, AI allows builders to anticipate and address potential issues before they arise, further ensuring project success. AI is guiding the real estate

industry toward a future of smarter, more sustainable, and cost-effective buildings.



Operate

Using AI to improve operations and create a more efficient building offers tremendous opportunity. In a clear shift toward proactive as opposed to reactive operations, AI analyzes sensor data and building alarms, leading to a remarkable 98% reduction in

“ We’ve seen tremendous results using generative AI for feasibility studies, allowing us to make faster decisions on potential viable land opportunities. ”

—Dusti Wofford, Vice President of Digital & Technology, Trammell Crow Company

duplicated maintenance events and a 25% reduction in technician dispatches. Within facility management operations, AI can be used to optimize lighting, HVAC, and access controls, resulting in a significant reduction in false alarms and cost savings from less electricity use. Additionally, the ability to predict maintenance needs can help better prepare investors and operators for operating expenses. Tenant experience also stands to be improved by generative AI as occupants interacting with a building—such as changing the temperature or reserving a conference room—can have a more personalized experience that is easier to navigate, much as AI in retail real estate has made the retail experience more personalized and frictionless. Ultimately, AI transforms real estate operations from historically reactive to proactive, ensuring smooth functionality, better customer experience, optimized costs, and a more sustainable future for the built environment.

 Our clients are focused on efficient and sustainable operations and providing a great workplace experience. AI allows us to provide real-time data and actionable insights that support those goals. 

—Sandeep Davé, Chief Digital & Technology Officer, CBRE

Buy-In for AI in Real Estate

Revenues of generative AI technology offerings are forecast to expand to \$36 billion by 2028, with a compound annual growth rate of 58% from 2023 to 2028, according to a June 2023 S&P Global Market Intelligence report. Currently, real estate adoption remains a laggard, and the industry is missing out on potential efficiency gains and competitive edges. Recognizing this, forward-thinking players are formulating integration plans, understanding that the time is now to leverage AI's anticipated growth and bridge the adoption gap. At the same time, AI technology is still maturing, and adopters must remain cautious. Areas of improvement exist around hallucinations (incorrect or misleading results generated by AI), poor data quality, incorrect attribution, and biases. These are a few reasons having human judgment and expertise monitoring AI outputs is imperative.

Future of AI in Real Estate

The algorithms and predictive analytics of tomorrow hold the power to transform the industry and redefine best practices. Real estate companies that embrace AI and the power of data as a priority are set to stand out and achieve competitive differentiation. Generating higher returns, providing better tenant experiences, and achieving less energy-intensive operations are just some of these differentiators.

Yet simply chasing trends won't unlock AI's full potential. The true opportunity lies in strategically integrating AI into the core of business operations and practices at a holistic and integrated level.

By building long-term road maps for AI implementation, real estate companies can unlock immense competitive advantages and pave the way for a future defined by data-driven decision-making, streamlined processes, and lasting success. Embracing AI as a strategic imperative and not just a passing fad is the key to thriving in the real estate landscape of tomorrow. ■

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