Technological developments in commercial real estate are offering a dizzying range of operational benefits for investors willing to take the plunge, says Yardi’s Rob Teel

Q How much appetite is there for AI in commercial real estate?
When we look at the impact of AI today, it is undeniably at the proof-of-concept phase. To say that anybody has fully figured out AI would be premature; everyone is launching small projects to trial the new technology. Almost all our clients have either internal or skunkworks projects underway – with third parties – to test the capabilities of AI.

ChatGPT made a huge impact last year and vendors are now trying to figure out how they can monetize AI and what future budgets may look like. Firms are experimenting, but it is likely too early to expect much budgeting just yet. I think it will probably be 2024, or even 2025, before firms formally start to do so.

AI-aided digital assistance is set to grow substantially over the coming years, to mention one benefit. Microsoft has taken an interesting approach with the launch of its 365 Copilot icon to help assist their Office 365 customers. My bet is that enterprise-ready AI in the future will be embedded into each of our modules in a similar way: across accounting, performance management, fundraising and investor portals. AI will be blended into those modules, and each will have something specific to justify the cost. I see
Q What are the main operational benefits of AI?
Rob Teel: The first is chatbots. Real estate technology typically starts where you find the highest transaction volume, which is currently in multifamily or short-term rentals. Over the last three years, multifamily has embraced chatbots to help with prospect flow. The technology is valuable, particularly when leasing agents are not available and customers have questions. A prospective tenant may be surfing the web late at night after a long day at work; chatbots are a natural fit and speed up the process of finding a home.

Chatbots can also be applied to commercial properties. For example, a customer may have a leaky tap, or an investor might wish to call with questions about their returns over a weekend. Customer interaction and automation are a natural fit for AI and chatbots.

The recent focus has been on natural language processing and determining the intent of questions. Do you accept pets? What is the price? When can I move in? Chatbots are important because they can handle two-way communication. The caveat is that responses have typically been stilted, so the next stage is to improve the quality of these chatbot responses. We aim to make the answers appear less robotic and all with the same polite tone.

Generation of content is another

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important benefit. Firms are starting to use AI in pure content creation, particularly for marketing when creating videos with AI-generated voiceovers and engaging text. Floorplans are an obvious area where AI can be used to create more optimal visuals.

There is also a great opportunity to rethink transaction document ingestion. Machine learning can be used to convert an image of text into a machine-readable text format, for example with invoices from vendors. We are hopeful that ingesting and abstracting documents will be greatly pushed forward by new models of AI.

AI requires large amounts of power to crunch data. How are investors thinking about the ESG and sustainability implications?

Our large investment management clients continue to press us on solutions for ESG and sustainability. There is an industry responsibility to understand the impact of AI from an energy consumption standpoint, but also to think about how AI can help clients reduce their power usage and cut energy costs.

We have already been doing this for many years via machine learning algorithms. This technology can be used by managers to optimize heating, ventilation and air conditioning (HVAC) systems, one of the largest consumption sources of energy in commercial buildings for example. This can help form a feedback loop to keep improving HVAC systems, and AI can be trained on the best use of a high-power system like HVAC to compare commercial buildings. The benefits of delivering AI far exceed the cost from an energy and ESG standpoint.

What are the key challenges likely to impact future growth?

There have been plenty of exciting technologies that have come and gone in recent years. We thought extensively about whether to invest in various technologies, but many proved to be underwhelming.

In 2014, blockchain enjoyed the same level of buzz that AI is experiencing today. If we look back, it added some transaction and security validity that did not exist before, but it did not have the impact that everyone expected. Back then, it was discussed in every conference agenda and executive meeting however it did not particularly impact our clients’ growth and bottom line.

When we think about the impact of new technologies, whether it can make more money for our clients has to be the first consideration. While blockchain undoubtedly had a positive effect on many sectors, it simply did not do that at scale. AI is a completely different story; possibly the closest comparison in terms of global impact would be the launch of the web in the 1990s. We never dedicated a large portion of the company’s resources to building blockchain solutions, but our spending on AI is unlike any technology change I have seen during my career.

How might data quality and availability impact potential growth?

Access to data makes a huge difference in the effectiveness of AI. Our clients are sitting on a mountain of data, particularly if they have rolled out our property management solutions in addition to investment accounting.

They have data around every asset in the portfolio, every fund, every investor and most of our clients also have extensive data around their operations. With a fully deployed ERP stack, including operations, the benefits of AI around decision making and efficiency are limitless.

The bulk of private equity real estate organizations out there have a universe of data that goes beyond their fund and investor relationship; it goes right down into the properties and assets. This is crucial, as the AI response on any request is only going to be as good as the data.

The other way to operate a private equity real estate company is to be data light. A manager might only care about investor and fund information, outsourcing the property operations to several different third-party management firms. The problem with that approach, however, is that once you have given away your data you have less ability to analyze and act on your data points. For an investment manager, data is key to making better decisions, and this will become more acute as AI solutions mature.