



Slowly Getting There

Proptech has a role to play in modernizing real estate investment management, but many firms remain behind in adopting new tools.

By **Jenn Elliot**

Recent years have featured an explosion in proptech investment, with seed and later stage capital fueling a whole new generation of startups aimed at the commercial real estate industry. That's come as some of the more established players continue to grow, as evidenced by the valuations in some recent proptech deals.

Since 2012, more than \$43 billion has been invested in roughly 8,000 proptech companies, according to CB Insights. Some of these companies are focused on tech enablement, helping incumbent industry participants do what they do better.

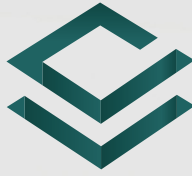
In 2020—in the midst of the pandemic—venture capital equity investment in U.S. proptech declined to \$4.6 billion, according to Keefe, Bruyette & Woods, a boutique investment bank and broker-dealer that specializes in the financial services sector. The firm also noted that funding had shifted to mid- and late-stage funding for proptech firms with seed and early-stage funding rounds declining 47 percent while

later stage funding only fell 4 percent. In 2021, through April, funding in proptech was up 259 percent year-over-year and funding activity in the first quarter of 2021 at \$2.8 billion was the highest on record.

Meanwhile, in one recent deal, MSCI Inc., a provider of support tools and services for the global investment community, completed its acquisition of proptech data stalwart Real Capital Analytics (RCA) for nearly \$1 billion.

Proptech tools also run the gamut, helping real estate firms with a variety of tasks including deal management, document management, investor relations, property and facilities management, lease administration among many other tasks. Meanwhile, other companies are focused on disruption—developing technology that will essentially blow up incumbents' entire businesses, according to Clelia Warburg Peters, partner at BainCapital Ventures and president of Warburg Realty.

The harder questions to figure out amid all of this is gaug-



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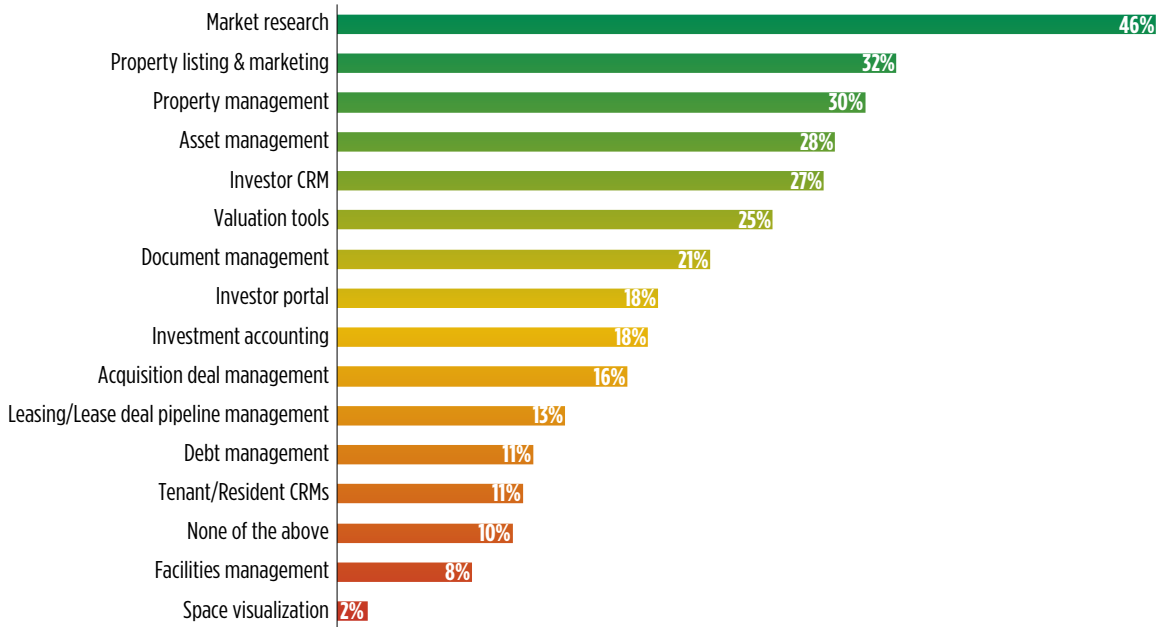
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What the Industry is Using

Respondents were asked to identify what types of proptech they use, revealing a diffuse pattern of tech adoption.



ing how much market penetration various tools have and where the opportunities lie both for proptech firms looking to build market share and for traditional real estate firms who may be missing out on ways to improve processes and create differentiators with competitors.

These are some of the questions we aimed to answer in a recent survey of *WMRE* readers and users.

The state of play

Investors increasingly expect real estate firms to leverage proptech to operate more efficiently and perceive that firms that use tech tools effectively as smarter, innovative, and more successful, contends Chris Barbier, industry principal—investment management for Yardi.

“Investor perceptions might change based on a company’s use of technology,” Barbier points out. “An investor might think, ‘Wait a minute, if they’re not on top of this, how well are they managing their investments?’”

Barbier says that by investing and using proptech, real estate firms are signaling a level of professionalism and sophistication to their partners and investors. The effective use of proptech could be the ultimate differentiator in an investor’s eyes. In fact, the lack of proptech could be a deterrent for many investors.

The survey found that while most real estate firms do use some proptech, the answers as to what type of proptech they used varied greatly. There are not certain categories of proptech that every firm is gravitating towards. According to the

WMRE survey, the most-used proptech is technology focused on market research. Next on the list is asset management proptech (29 percent) and investor CRM (28 percent).

One of the reasons for this may be that with so many different tools on offer, there is a lack of industry tools within the industry on many tools and data formats. That leaves it up to each firm’s discretion as to what proptech to invest in.

“A challenge for lenders is collaborating across all the different types of products (agency, banks, CMBS, Insurance, Credit Unions, Funds) and all their varied processes. Some initiatives are underway to address the need for standards across product types,” Andrew Foster, an associate vice president at the Mortgage Bankers Association wrote in a recent column for *WMRE*. Foster pointed to the Mortgage Industry Standards Management Organization, a standards development body for the mortgage industry, as helping drive this change.

With the state of play as it is, many smaller, nimbler, and more daring operators and sponsors are taking a swing at adopting technology, says Eric Roseman, vice president of innovation & technology partnerships for Lincoln Property Company. Larger real estate companies are exploring proptech, staying attuned to what’s happening, but because they have well-engrained and often highly successful ways of doing business, they aren’t often forced to make swift changes.

“Like anything else, there are tech-forward market participants and there are more analog market participants,” Roseman explains. “As a whole, I think real estate companies have adopted a lot of technologies but there’s always a new



flavor of the month, and it's important to remember that you can't always chase the shiny new object."

Now, with new proptech companies and solutions announced weekly, if not daily, CRE professionals are quickly becoming overwhelmed with options, according to Josh Wilcox, managing director in FTI Consulting's Real Estate Group.

The situation is further complicated by the fact that technology, by its very nature, is evolving constantly, making it hard for companies to keep up unless they have someone dedicated to innovation. Chief technology officers, once a rarity, are increasingly popping up at real estate firms.

"If you're trying to decide on which proptech tools, how do you pick the right one when there very well could be another solution a week from now or a month from now?" Wilcox says. "How do you avoid a serious case of FOMO (fear of missing out) when a better solution comes out, and you've just signed a contract with the provider that you thought was the best option?"

Without question, that fear of making the wrong choice is one the biggest obstacles that proptech providers face when trying to encourage usage. Another factor driving the varied adoption is a difference in how much firms spend annually on technology. In all,

62 percent of respondents to the *WMRE* survey say they spend less than \$50,000 annually. Nearly 75 percent spend less than \$100,000. On the high end, 8 percent of respondents said they spend more than \$500,000 on proptech annually.

"In my experience, it's more about mindset than size," Barbier says. "I know some very large companies that are very frugal with their technology. And then there are smaller

companies that are spending much more, if you look at it on a percentage basis, proportionate to earnings."

Indeed, there are plenty of smaller real estate companies that invest a significant chunk of money in proptech because one, they believe it will differentiate them from their competitors, and two, they believe it will positively impact their bottom line.

"When it comes to spending money on proptech, to this day, it still feels to me that it's driven by the CEO," says Aaron Block, co-founder and managing partner of MetaProp, a New York-based venture capital firm that focuses on real estate technology. "CEOs who are really committed to technology and innovation push that message and encourage people across their organization to invest both time and money in new technologies."

Relying on outdated processes to manage investments

When it comes to the way real estate investment firms manage key financial analysis processes, 27 percent of respondents said they use real estate investment management accounting software.

However, the vast majority of respondents still depend on Microsoft Excel to handle critical parts of their business. Six out of 10 respondents (62 percent) use Excel to track their loan and/or debt information. Likewise, nearly half of respondents (48 percent) use Excel to calculate their waterfall and promote structures.

"The processes that are still being managed in spreadsheets are very error prone and using spreadsheets creates a risk of calculation errors," Barbier points out. "I've seen it

happen so many times where someone makes an error in the formula, and the company ends up miscalculating the distribution for investors.”

Barbier says that real estate investment managers would benefit from using technology to streamline and automate these financial analysis processes, even if it’s a simple investment structure.

Given the risks associated with the ongoing use of Excel, why haven’t more organizations hopped on the proptech train? The answer is fairly simple, according to a number of experts: Excel is cheap, easy, and comfortable.

In many ways, Excel is a universal language for financial analysis because the spreadsheets can be transferred from person to person and organization to organization with very little effort. Moreover, people trust Excel because it’s transparent—users can see the formulas, numbers, and calculations.

But Excel spreadsheets are also very personalized, Barbier points out, which creates an additional layer of risk for organizations. “The way someone builds a spreadsheet is very specific to that person,” he explains. “When you’re tying key processes to one person, you’re exposing yourself to key person dependency.”

In other words, without the person who built and managed the spreadsheets, an organization’s entire financial analysis process is jeopardized. Barbier says proptech can solve that problem and mitigate the risk associated with key person dependencies.

According to the WMRE survey, 64 percent of respondents say their real estate investment accounting software integrates with their property management system. Forty-four percent say it automates financial consolidations, and 42 percent say it calculates asset investment and investor performance metrics.

Only 16 percent say the technology calculates waterfalls and promote structures. And 21 percent say it manages complex ownership structures.

For organizations that are looking to increase the speed of their financial analysis or leverage lots of data, Wagoner warns that Excel won’t be able to handle the job. “Moving faster and making smarter decisions requires technology,” he adds.

Shifting investor expectations

Investors have always been demanding, and that hasn’t changed. But they’re increasingly expecting investment managers to have sophisticated processes. They expect these firms to take advantage of existing proptech to streamline processes and make information more readily available.

“Right now, there’s the expectation that no matter what I’m investing in or who I’m investing with, I should be able to see my investments on my laptop, my tablet, and my mobile phone,” Barbier says.

According to the WMRE survey, only 44 percent of respondents use an investor CRM and only 39 percent have an investor portal.

As far as the functionality of the investor portals, 71 percent of respondents say their portals provide investor access to

documents and reports. Forty-three percent say it integrates with their investment management system, and the same percentage say it can track and update investor profile information. Other features includes document signature capabilities, an interactive dashboard for investment decisions, and a repository for new investment opportunities.

“There are a lot of organizations vying for capital, and from an investor’s perspective, if I’m looking at investing my money in two different groups that seem identical in terms of the type of assets they pursue and the returns they generate, but one is communicating with me regularly with a CRM and providing access to a portal and the other isn’t, the technology may sway my judgment,” Barbier says.

For a significant percentage of respondents, technology influences how management firms communicate with their investors. Forty-three percent say that they contact clients more frequently because of technology, likely because it makes it easier, while 13 percent say technology has made it possible or allows them to contact clients less frequently, perhaps because clients can access information at their convenience by using investor portals.

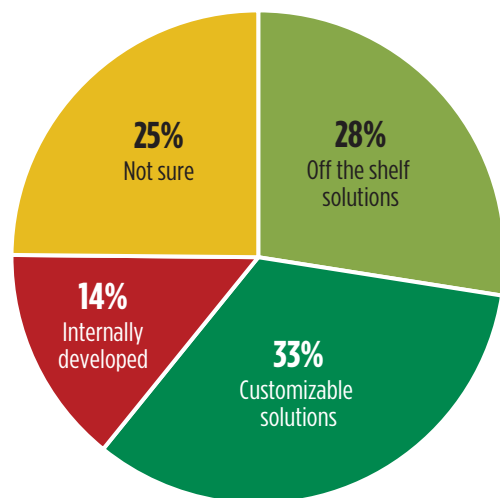
Customizable solutions preferred

When it comes to the types of proptech tools that organizations prefer, 33 percent of respondents said they prefer customizable solutions. Another 27 percent say they prefer off the shelf solutions and 14 percent are going at alone by developing technology and proptech tools internally. A quarter of respondents aren’t sure what kind of proptech tools they prefer, if any.

For real estate firms embarking on a proptech journey or for those that may be evaluating new tools, Roseman’s advice is

Not Much Clarity

There’s little consensus in the industry on whether off-the-shelf or customized solutions are preferred.



simple, regardless of the size of the firm: Don't build it yourself! He recommends that firms find best-in-class tools that solve the top five problems they're facing and make sure they all can "play nice with one-another and tie them together".

Developing technology internally can be extremely costly and always requires a lot of effort, according to MetaProp's Block. Even more concerning, it can distract organizations from their core business.

"If you're not doing it right, the road is fraught with potholes," Block cautions.

However, Block also acknowledges that many real estate experts increasingly feel that developing proprietary technology is core to the investment management business. "Ultimately, I think the folks who don't do will be left behind," he predicts. "Just because it's hard doesn't mean you shouldn't do it."

Completely integrating various types of proptech is also hard to do. That's why only 15 percent of survey respondents say their tech tools are fully integrated. The findings support the idea that most organizations have achieved minimal integration—28 percent say they're partially integrated and another 19 percent say they're slightly integrated.

Integration may be the ultimate goal for proptech providers and users, but it's "really tough to do, especially since technology is constantly changing," Wilcox says.

Similar to the roadblocks to technology adoption—fears of choosing poorly or something better coming along—real estate organizations are hesitant to commit to the resources necessary to integrate various tools.

Big opportunities in big data

Proptech experts see plenty of opportunity in data aggregation, data analytics, and machine learning. Warburg Peters stops short of saying that data offers the biggest opportunity in proptech but acknowledges that it's certainly one of the biggest.

"Aggregating data and then leveraging it is going to be one of the core sources of innovation in the real estate world," she says. "It's remarkable how much we do not do that at this time."

Data-driven proptech companies emphasize the benefits of understanding trends and taking advantage of current market conditions. Data, when used correctly, can help real estate organizations make smarter decisions, according to JLL's Wagoner. He points to the firm's recent acquisition of Skyline AI as an example of the industry's increasing interest in leveraging data.

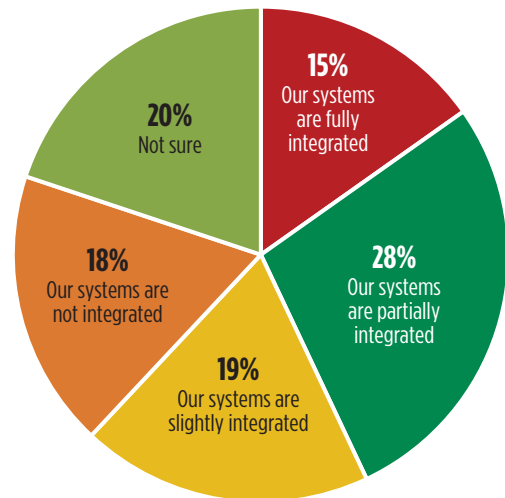
Investment management firms both small and large are leveraging data by layering external data over internal data to help asset managers and acquisitions teams not only make better decisions, but make them much faster.

For example, data-driven investment firm Archer recently launched AIM Automated Underwriting, which leverages machine learning to reduce the amount of time required to complete a first underwriting from days to minutes. The tool is built on the firm's proprietary technology platform, which aggregates traditional and non-traditional data.

"Quality underwriting is crucial to the successful execution of an investment strategy, but speed also matters because invest-

Working Together or Apart?

Answers on whether proptech systems are integrated were evenly split across the board.



tors that act quickly have an advantage over their competitors," says Thomas Foley, co-founder and CEO of Archer.

Looking forward, MetaProp's Block expects more investment managers to follow in Archer's footsteps by using data as a differentiator. In fact, if he were launching a real estate investment firm today, proptech would be one of his main priorities.

"I would bring in a technical co-founder and build technology from the ground up because I personally because that data is super valuable and delivers a huge competitive advantage over time," Block says.

Does user satisfaction correlate to low expectations?

The survey also attempted to gauge respondents' satisfaction with the proptech tools they use. And while the number of responses on each specific solutions are too low to draw conclusions on the individual categories, the broad theme was that respondents reported a high level of satisfaction across the board.

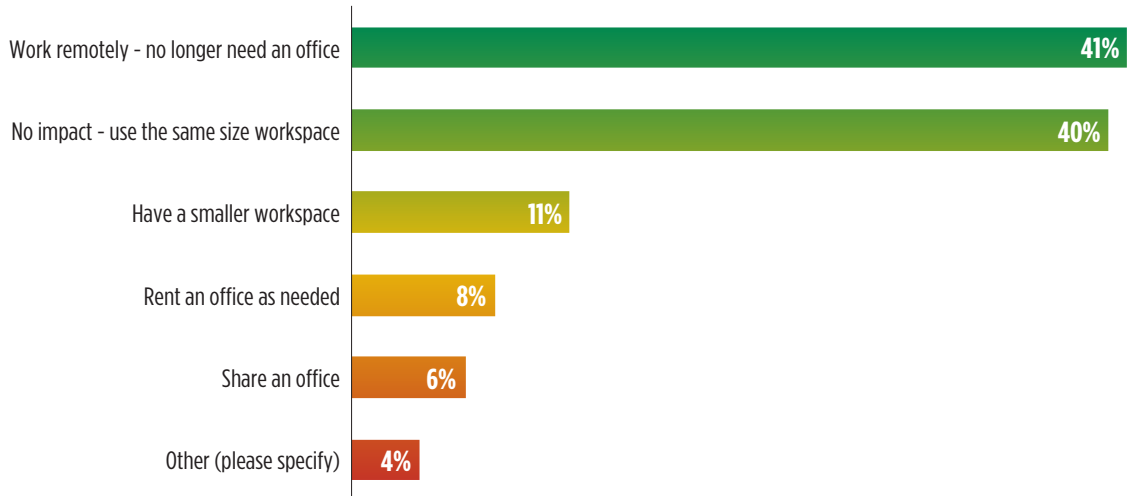
These results surprised some industry observers who see room for improvement. The numbers, in fact, could indicate that industry pros may not understand what they are missing out on.

"Life is all about expectations, and people in the commercial real estate industry are used to being far behind other industries when it comes to technology, so it's not all that surprising that they're going to feel a level of satisfaction when they go from nothing to something, even if that something isn't great," Wilcox notes. "There's a real desire in the industry for technology to improve automation in any way."

Some of the dissatisfaction that proptech experts have

Return to Office?

The use of proptech has had some impact on how much CRE professionals are working in offices.



witnessed relates to the expense of adopting new technology and the behavioral challenges of changing internal processes. Dissatisfaction around missed expectations also is common, Roseman says, with users being frustrated when proptech doesn't work like it's supposed to or doesn't deliver the anticipated outcome.

Though some CRE professionals might truly be satisfied with their technology solutions, it's equally likely that their satisfaction relates more to comfort and familiarity. It's also likely that tech users haven't explored or evaluated the wide world of proptech, which means they don't have a good understanding of the technology tools that exist. And, if they have heard of them, they still lack clarity on how different technologies can change their organizations.

"They don't know what they don't know," says Edward Wagoner, CIO, Digital of JLL.

Wagoner has seen this dynamic play out in real time at several webinars sponsored by JLL. Whenever the firm hosts a technology-related webinar, the firm surveys participants before and after the event to measure their satisfaction with their existing proptech. The pre- and post-survey results deviate significantly, after participants have been educated about new proptech.

"Once their eyes are open to the possibilities, their satisfaction with their existing proptech goes way down," Wagoner explains.

Pandemic accelerates proptech demand

Before COVID barged into our daily lexicon and masks became an essential part of everyone's wardrobe, employees were already working from home, renters were already touring apartments virtually, and families were already getting groceries delivered.

Technology made all of this possible. For example, 41 percent of respondents in the survey said they no longer need an office because technology has allowed them to work remotely.

"Real estate had almost an existential crisis when people went home and stayed there," Wagoner says. "It's probably the first time in history that everyone around the globe stopped using the same product at the same time. And what we saw was a massive acceleration of trends that had started pre-COVID."

COVID knocked down most barriers to proptech adoption, according to Chris Barbier, industry principal-investment management for Yardi. "The industry had to find ways to keep operations going," he points out.

More building owners have invested in facilities management proptech because they needed to create safe environments. More multifamily owners have embraced tenant/resident CRMs. And more real estate investment firms spent money on investor portals.

Without technology, many real estate owners and investors would have suffered even worse losses. More than likely, many would've gone under.

No one knows which pandemic-related changes will be temporary or which ones will be permanent.

But Barbier says one thing is certain: COVID created even more opportunity for proptech. ■

Survey methodology: The WMRE research report on the proptech industry was conducted via online surveys distributed to WMRE readers in August 2021. The survey yielded 343 qualified respondents with nearly half (49 percent) at the executive level of vice president or higher. Forty-four percent are active in the West/Mountain West/Pacific Northwest, while 43 percent do business in the South/Southeast/Southwest, 41 percent operate in the East and 33 percent are active in the Midwest.