YEAR-END 2022

GLOBAL PROPTECH CONFIDENCE INDEX

metaprop.

GLOBAL PROPTECH CONFIDENCE INDEX

SPONSORED BY: pwc

PRESENTED BY: mipim | REBNY | RICS

Table of Contents

Executive Summary

Dear PropTech community,

The Year-End 2022 Global PropTech Confidence Index suggests that **sentiment has begun to stabilize**, albeit well below recent highs.

The Mid-Year 2022 edition of the Confidence Index marked a sharp break from recent years' record high sentiment. Investor and founder outlooks fell sharply, reflecting the uncertain and corrective climate that prevailed across markets in 2022.

The Year-End 2022 Global PropTech **Investor Confidence Index is 5.4 out of 10**, down slightly from 5.8 in Mid-Year 2022, which was a sharp decline from 9.3 at Year-End 2021. Year-End 2022 investor and startup sentiment suggests a continuing **flight to quality** and rising incentives for the market to find **equilibrium and consolidation** in the year ahead. Over the next 12 months,

- 71% of investors expect to make more or the same number of investments, down from 88% in Mid-Year 2022. Notably, today's investor outlook is in line with the pullback we saw at the outset of the COVID-19 crisis in Mid-Year 2020.
- 38% of investors expect to see an increase in deal flow in 2023. Rebounding deal flow expectations–only 19% of investors expected deal flow to accelerate at Mid-Year 2022–come as startups continue to report tightening runways.
- Investors continue to anticipate an uptick in industry consolidation, with 74% of investors expecting more M&A activity over the next 12 months.

The Year-End 2022 Global PropTech **Startup Confidence Index is 4.4 out of 10**. This represents a minor increase from 4.2 at Mid-Year 2022 and marks a significant drop from the record high of 8.3 at Mid-Year 2021. Reflecting the investor sentiment, over the next 12 months,

- Startup founders are modestly more optimistic about the fundraising climate than they were six months ago. 57% of startup founders anticipate that it will be more difficult to raise capital in the coming 12 months, which is down from 71% at Mid-Year 2022, but up from 20% at Year-End 2021.
- 38% of founders surveyed believe there is a high probability their company will have a liquidity event in the next three years, holding fairly steady from 35% at Mid-Year 2022.
- While widespread tech layoffs dominate the headlines, 47% of startup respondents report that they plan to hire between one to five full-time employees over the next 12 months.
- Both founders and investors continue to focus on solutions to address real estate's foremost challenges, including decarbonization, the affordability crisis, and the construction labor shortage. One notable finding was that investor appetite for ESG solutions significantly outpaced startups focused on providing such potential solutions, with 41% of investors interested in investing in startups in the ESG category, while only 5% of startups surveyed explicitly focused on this sector.

We look forward to continuing to follow and report on these themes and the evolution of industry sentiment in future editions of the Global PropTech Confidence Index.

Sincerely,

Maureen Waters
Partner, MetaProp

Year-End 2022 Investor Confidence

Investor sentiment modestly declines while startup sentiment slightly recovers

The Investor Confidence Index is

5.4 out of 10

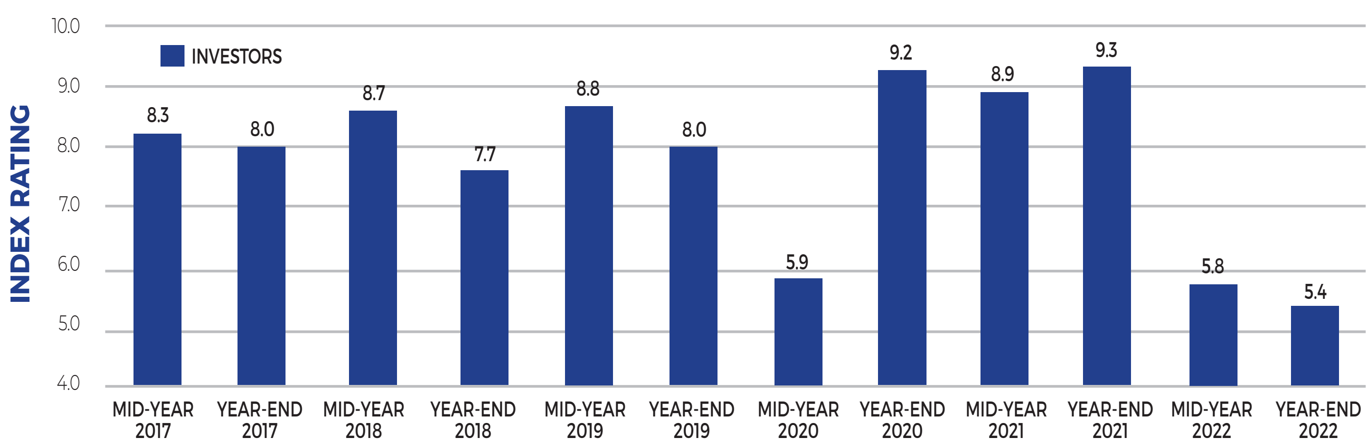
At Year-End 2022, investor confidence was 5.4, a modest decline from 5.8 at Mid-Year 2022.

Muted investor confidence reflects continued macroeconomic uncertainty, pronounced with investors monitoring rate stabilization, recession indicators, and inflation levels as the pace of decline begins to moderate slightly. The survey results point to this sentiment, with 71% of investors expecting to make more or the same number of PropTech investments in 2023, down from 88% in Mid-Year 2022. This pullback is in line with Mid-Year 2020, when the initial COVID-19 crisis impacted economic markets and drove investor hesitancy.

The longer this market uncertainty continues, the more startups will near funding rounds and exhaust insider capital. As startups report tightening runways, investors expect an uptick in deal flow activity. Of the investors surveyed, 38% expect to see more deal flow over the next 12 months, up from 19% in Mid-Year 2022. Additionally, investors continue to report anticipated consolidation activity, with 74% of investors expecting more mergers and acquisitions in 2023. Notably, several of the investors surveyed described the current capital constrained environment as a driver of a long-awaited wave of consolidation anticipated by investors and startups alike.

In regard to verticals of investor interest, there has been a pullback from more speculative areas such as Web3 and Blockchain that received heightened investor attention in the second half of 2021 into the first half of 2022. Alternatively, ESG and Climate Tech remain strong focus areas as regulation timelines tighten and investor pressures continue to rise. Finally, globalization of PropTech has become a high priority for investors across the board.

MID-YEAR 2017 - YEAR-END 2022 INVESTOR CONFIDENCE INDEX



Year-End 2022 Highlights

Investors

38% of investors expect to see more deal flow over the next 12 months, an increase from the all-time low of 19% at Mid-Year 2022.

74% of investors expect to see more mergers and acquisitions over the next 12 months.

21% of investors are interested in investing in startups that impact the office sector, trending downwards from 30% in Mid-Year 2021.

33% & 21%

multi-family and single-family residential

Innovation in multi-family and single-family residential continues to hold significant investor interest, with 33% and 21% of investors interested in investing in startups that impact these two asset types, respectively.

71% of investors expect to make more or the same number of PropTech investments, down from 88% in Mid-Year 2022.

Year-End 2022 Startup Confidence

Startup confidence represents a market stabilization.

The Startup Confidence Index is

4.4 out of 10

The increase in startup confidence of 4.4 represents a signal that the market is stabilizing, but at a much lower level. This is a departure from the record drop from 7.4 to 4.2, recorded in Year-End 2021 to Mid-Year 2022, respectively.

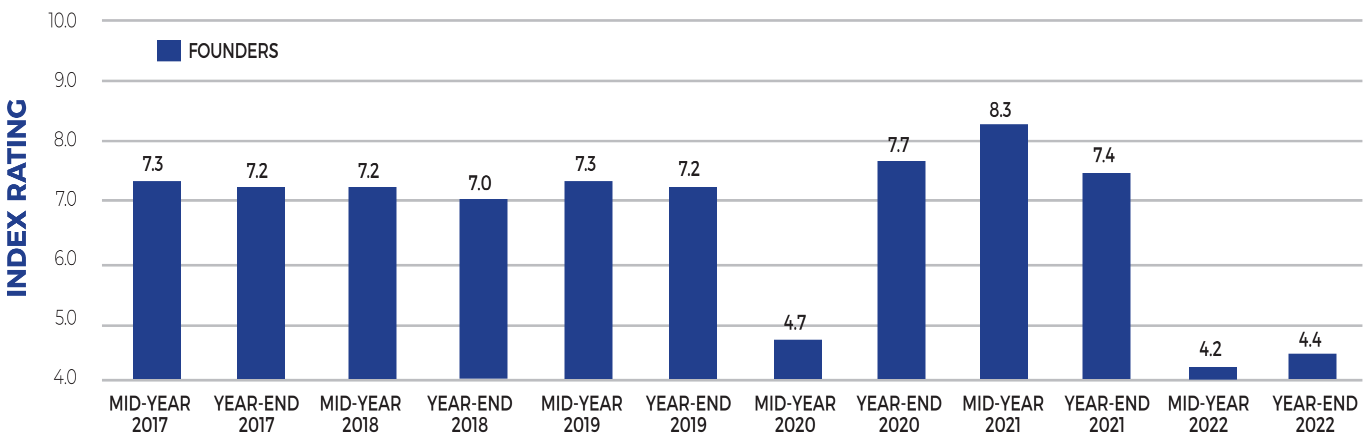
The investor sentiment is broadly shared by the startups. Market conditions have created a challenging fundraising landscape for startup CEOs, with 57% of startup founders surveyed stating it will be more challenging to raise capital in 2023 than it was in 2022. This percentage has declined slightly from 71%, recorded just six months ago. A challenging fundraising environment for startups paired with lengthening sales cycles places an emphasis on retrenching, and a shifting of priorities from top-line growth at all costs to profitability.

Similar to investors, there is a continued broad sentiment across startups of significant consolidation activity in the next 12 months, with 38% of the startups surveyed anticipating a high probability of a liquidity event over the next 3 years, in line with 35% at Mid-Year 2022.

A positive byproduct of tightening cost structures and increased M&A activity is the inevitable loosening of the talent pool across PropTech as well as the tech sector overall. Therefore, it is anticipated that well-capitalized, promising startups looking to target category dominance will have access to more high-quality talent to help accelerate their growth. Notably, nearly 50% of startups anticipated a modest amount of hiring amidst a barrage of headlines addressing layoffs across the tech sector. We will continue to monitor this trend in the coming months.

Thematically, we note an uptick in startups focused on building solutions to address real estate's preeminent challenges, including addressing the affordability crisis and the construction labor shortage. Emerging advancements in machine learning and generative AI are capturing startup founders' interest as promising technologies.

MID-YEAR 2017 - YEAR-END 2022
STARTUP FOUNDER CONFIDENCE INDEX



Year-End 2022 Highlights

Startups

57% of startup founders believe that it will be more difficult to raise capital over the next 12 months, down from 71% six months ago, but up from 20% at Year-End 2021.

41% of investors are interested in investing in startups in the ESG category while only 5% of startups surveyed are focused on building ESG solutions.

47% of startups plan to hire between 1-5 full-time employees over the next 12 months, consistent with Mid-Year 2022, and an increase from 34% at Year-End 2021.

38% of founders believe they could have a high probability of a liquidity event in the next three years.

Investor Sentiment Quotes

We asked PropTech investors one critical question:

What is the biggest change you expect to see in the PropTech space in the next 12 months?

HERE'S WHAT THEY HAD TO SAY:

> *We'll see a period of consolidation and renewal - consolidation, as companies that are 'features' get scooped up by companies that are 'platforms'; and renewal, as talented people and teams find their equity compensation underwater and are driven to create new businesses.*

Expect more capital discipline from early stage companies, more emphasis on financial ROI for real estate landlords,and continued growth of new market entrants as well as market consolidation.

Well-capitalized companies will ingest low-growth, poorly capitalized companies. It will take considerable effort to operationalize acquisitions, while focusing on prolonging runway.

There will be less growth amongst companies that are nice-to-haves and don't directly affect NOI. We will still see growth in adoption of technology, but they need to solve meaningful problems that impact the bottom line and help solve regulatory challenges.

We expect to see bigger deals as fewer companies will fundraise in the first half of 2023 and the number of attractive deals decreases.

I expect more interest in "one-stop-shop" offerings geared towards the consolidation of solutions/offerings to property managers, owners, developers, architects, etc."

We have seen a lot of insider bridge rounds with fewer outside priced rounds. In the next twelve months insiders might stop bridging portfolio companies at these elevated prices. You will see more flat/down rounds priced with new investor participation.

We will see an even stronger focus on cash conservation to weather the recessionary market.

Companies with constrained balance sheets will have to face harsh realities, and those with liquidity will take advantage of the dislocation."

Investor Insights

Hayato Tsuji,
Managing Director of Real Estate, Development Bank of Japan

What are the biggest changes you expect to see in the PropTech space in coming 12 months?

The biggest concern about the PropTech market is declining capital flow into this space, which may affect exit activities, growth of start-up companies, etc. On the flip side, investors could have a longer time frame to consider investment opportunities. Also, real estate companies may be able to make strategic acquisitions with more favorable terms than the previous years.

Do you expect to make more or less PropTech investments over the next 12 months compared to the previous 12 months? Why?

We would like to make more PropTech investments this year because I believe digitalization will continue to be the key to improving the real estate industry. In particular, Japan is lagging behind in introducing PropTech, but companies in the industry are beginning to adopt new technologies. I think now is the time to change the industry.

What is the hottest area of PropTech innovation in which you are most interested?

We are very interested in innovation in ESG, Sustainability, and Climate Tech. Asset managers are struggling to cope with regulations and reporting standards are getting stricter year by year. Also, tenants ask for their workspace to be more energy efficient, and ideally, carbon neutral. So, I think there are a lot of opportunities in this area, and our property portfolio will benefit from such innovations.

Investor Insights

Stephanie Vega Ziegler,

Director, Environmental Product Strategy, Ferguson Strategic Development

What are the biggest changes you expect to see in the PropTech space in the coming 12 months?

As strategic investors, our mission is to encourage the adoption of sustainable products and solutions that benefit our portfolio into the marketplace. We expect that the trend of PropTech startups helping property owners meet their ESG goals will continue to gain traction and grow throughout the year. Additionally, we expect to see an advancement in startups that focus on a "one-stop-shop" offering geared towards the consolidation of solutions for not only the property managers, but the owners, developers, and architects alike.

Do you expect to make more or less PropTech investments over the next 12 months compared to the previous 12 months? Why?

We believe that activity in the PropTech space benefiting Ferguson's portfolio will remain the same over the coming 12 months. However, we do expect to see an uptick in the amount of deal flow in the broader PropTech ecosystem in the coming year.

What is the hottest area of PropTech innovation in which you are most interested?

We are excited about the following topics:

1. Technology that increases productivity in the pre-construction process
2. Startups that focus on driving efficiencies for contractors by helping them run a more efficient and profitable business.
3. Solutions that help reduce water and energy consumption in the built environment.

Investors: Full Findings

Investors expect to make the following number of PropTech Investments in the next 12 months:

26% MORE INVESTMENTS
45% ABOUT THE SAME
29% FEWER INVESTMENTS

45% SAME

What investors expect to see in PropTech deal flow in the next 12 months:

38% MORE PITCHES
41% ABOUT THE SAME
21% FEWER PITCHES

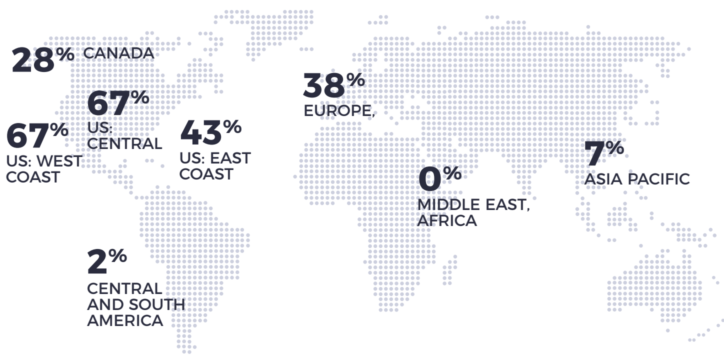
41% SAME

How investors think the M&A market for PropTech startups will change in the next 12 months:

74% MORE M&As
10% ABOUT THE SAME
16% FEWER M&As

74% MORE

GEOGRAPHY INVESTORS: Where are you most interested in deploying capital?



RESPONDENTS: Geographic breakdown of investor respondents?

43% EASTERN U.S.
17% WESTERN U.S.
17% CENTRAL U.S.
14% EUROPE
0% MIDDLE EAST, AFRICA
7% ASIA-PACIFIC
2% CENTRAL / SOUTH AMERICA

The fundraising stage in which investors plan to make PropTechinvestments in the next 12 months:

29% PRE-SEED
74% SEED
69% SERIES A
43% SERIES B
14% SERIES C
12% SERIES D+

74% SEED

Areas of PropTech innovation in which investors are most interested:

12% SMART BUILDINGS
21% FINANCE AND INVESTMENT
12% AEC
12% SPACE MANAGEMENT
2% CONSUMER / BROKER TECH
41% ESG

41% ESG

The asset types that investors are most interested:

21% SINGLE FAMILY
21% OFFICE
5% INDUSTRIAL
33% MULTIFAMILY
7% MIXED-USE
5% RETAIL
0% SENIOR HOUSING
8% HOSPITALITY

33% MUTIFAMILY

How investors think PropTech companies are performing in terms of customer growth:

10% ABOVE EXPECTATIONS
55% MEETING EXPECTATIONS
33% BELOW EXPECTATIONS
2% N/A

Statistics are rounded to the nearest whole number.

Startup Sentiment Quotes

We asked PropTech startup Founders one critical question:

What is the biggest change you expect to see in the PropTech space in the next 12 months?

HERE'S WHAT THEY HAD TO SAY:

A race to quality will stratify the exit activity largely between two types of acquisitions: a) economically-driven M&A events vs. b) strategic acquisition for underlying IP, talent or market positioning advantages.

Tech adoption in the real estate industry will continue to happen at a rapid pace, but will prioritize fully built-out solutions.

Smaller, less developed products will be superseded by larger existing organizations moving into their space.

I expect companies to spend a lot more resources on bifurcating the talent market between high-performers instead of reserve "bench" talent with moderate relative capabilities to skilled tech positions. A race to quality will affect both job seekers' screening for potential new startups, and employers looking to skim the best available talent as part of the influx of new supply.

We'll see a stronger focus on NOI improvement, which will in turn drive growth in climate tech and affordability solutions.

More CRE CVC's will take VC-style positions in strategic acquisitions to spur innovation that can bolster ESG capabilities across asset classes.

PropTech companies specializing in short term rental and property management will struggle. In turn, construction and consumer PropTech companies will see increases as stakeholders look to cut costs.

If money was too easy before, it's now too hard to get.

Startup Insights

Ryan Waliany,

Co-Founder and CEO, Doorstead

What are the biggest changes you expect to see in the PropTech space in the upcoming 12 months?

In the short-run, home valuations are a function of supply-and-demand. In the long-run, home valuations are a function of discounted rental cash flow. With a decade of near zero interest rates and cap rates being low relative to the risk-free rate of return, we expect to see a reversion to the mean on home valuations. Ultimately, I think this makes it nearly impossible for all PropTech businesses that leverage creative fintech models with debt.

Similarly, we expect that the rental market will continue to see large migration where workers concentrate in edge cities where they can get more space for less. This will only amplify as companies adjust their local real-estate footprint and city centers become less desirable from a work-live standpoint. As companies re-adjust their economic footprint, I would bet that WeWork makes a large recovery with the success of its All Access Pass.

What is the biggest challenge that PropTech startups will face over the next 12 months?

Unlike traditional software businesses, PropTech startups generally do not have zero marginal cost. This means that the cost of capital is much higher relative to other venture-backed companies, and this may make it harder to create sustainable businesses. For startups to succeed, they will really need to think through their operating system and how they can create operational leverage.

Brian Hardecker,

CEO, Truehold

What are the biggest changes you expect to see in the PropTech space in the upcoming 12 months?

Unlike years past, PropTech founders are finding themselves playing defense. I think that businesses are focused on figuring out ways to make every dollar count in an always-changing market. This means an end to aggressive marketing budgets to gain leads, and instead spending smarter, such as building value through partnerships and localization.

What is the biggest challenge that PropTech startups will face over the next 12 months?

Likely one of the biggest challenges PropTech companies will face this year is access to capital on both the OpCo and PropCo sides of their businesses. While this is an obvious hurdle, I expect it will present opportunities for younger startups to find their niche and thrive.

Startup CEOs: Full Findings

Level of difficulty startups are expecting to raise venture capital in the next 12 months:

10% EASIER TO RAISE
33% ABOUT THE SAME
57% HARDER TO RAISE

57% HARDER

Level of competition startups are expecting their space to be in the next 12 months:

43% MORE COMPETITIVE
36% ABOUT THE SAME
21% LESS COMPETITIRTIVE

43% COMPETITIVE

Percentage of startup teams that will continue to work remotely versus returning to the office in the next 12 months:

67 TO 100%	46%
34 TO 66%	28%
0 TO 33%	26%

NUMBER OF MONTHS OF RUNWAY STARTUPS HAVE WITHOUT NEEDING TO TAKE ON ADDITIONAL INVESTMENT:

0-6 MONTHS	6-12 MONTHS	12-18 MONTHS	18 + MONTHS
27%	28%	19%	26%

NUMBER OF FULL-TIME EMPLOYEES THAT STARTUPS PLAN TO HIRE IN THE NEXT 12 MONTHS:

0	1-5	6-20	21-50	50+
7%	47%	35%	9%	2%

What is the latest round of funding that your startup has received?

19% PRE-SEED
47% SEED
14% SERIES A
8% SERIES B
2% SERIES C
2% SERIES D+
8% HAVEN'T RAISED FUNDING

47% SEED

Likelihood the company will be acquired, go public or have a major liquidity event in the next three years:

16% VERY UNLIKELY
13% UNLIKELY
33% NEUTRAL
25% LIKELY
13% VERY LIKELY

Sales growth target for the next 12 months, compared to the previous 12 months:

13% INITIAL-REVENUE
22% 1-2X
27% 2-3X
21% 3-5X
17% 5X+

27% 2-3X

MARKETS (BY ASSET TYPE) BEING TARGETED FOR COMMERCIAL DEPLOYMENT:

SINGLE FAMILY	MULTI FAMILY	OFFICE	RETAIL	INDUSTRIAL	HOSPITALITY	SENIOR HOUSING	MIXED-USE	OTHER (STORAGE, PARKING, ETC.)
42%	57%	50%	32%	32%	39%	26%	41%	27%

**Note: Startup CEOs could choose more than one answer.
Statistics are rounded to the nearest whole number.

Respondent Profiles

STARTUP SAMPLE DEMOGRAPHICS

HEADCOUNT: How many people does your company employ today?

38%
6-20 PEOPLE

10%	JUST FOUNDERS
10%	<6 PEOPLE
38%	6-20 PEOPLE
21%	21-50 PEOPLE
11%	51-100 PEOPLE
10%	100+ PEOPLE

YEARS OPERATING: How many years has your company been operating?

31%
1-3 YEARS

6%	LESS THAN 1
31%	1-3
30%	3-5
19%	5-7
6%	7+

REVENUE: What is your total revenue over the past 12 months?

24%
$3M+

12%	PRE-REVENUE
16%	UNDER $100K
11%	$100K - $250K
18%	$250K - $1M
19%	$1M - $3M
24%	$3M+

SECTOR: Which of these sectors best describes your company?

26%
CONSUMER/ BROKER TECH

21%	FINANCE AND INVESTMENT
26%	CONSUMER/ BROKER TECH
16%	AEC
16%	SPACE MANAGEMENT
16%	SMART BUIULDING
5%	ESG

How do you describe yourself?

- 87% MALE
- 6% FEMALE
- 5% I PREFER NOT TO ANSWER
- 0% TRANS MALE / TRANS MAN
- 0% TRANS FEMALE / TRANS WOMEN
- 1% GENDERQUEER / NON-CONFORMING
- 1% DIFFERENT IDENTITY

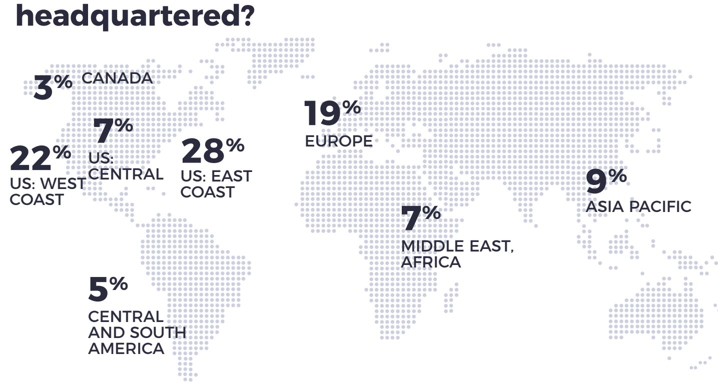
Geographies startups are targeting for commercial deployment.
(Could select more than one)

64%	EASTERN U.S.
57%	WESTERN U.S.
55%	CENTRAL U.S.
28%	CANADA
36%	EUROPE
17%	MIDDLE EAST, AFRICA
22%	ASIA-PACIFIC
12%	CENTRAL / SOUTH AMERICA

ETHNICITY: Which of the following best represents your racial or ethnic heritage?

54%	WHITE OR EURO-AMERICAN
11%	LATINO OR HISPANIC AMERICAN
5%	EAST ASIAN OR ASIAN AMERICAN
5%	SOUTH ASIAN OR INDIAN AMERICAN
2%	AFRICAN AMERICAN
3%	MIDDLE EASTERN OR ARAB AMERICAN
3%	AFRICAN
1%	ISRAELI
1%	SOUTH AFRICAN INDIAN
0%	PERSIAN
1%	MIXTURE OF TWO ABOVE
14%	I'D RATHER NOT ANSWER
0%	OTHER

LOCATION: Where is your company headquartered?



Statistics are rounded to the nearest whole number.

**Note: Startup CEOs could choose more than one answer.

Methodology

This survey was designed in collaboration with the Real Estate Board of New York (REBNY) and the Royal Institution of Chartered Surveyors (RICS) based on industry leading standards for sentiment analysis. We used a purposive sample of active investors and startups in real estate technology and post stratification to ensure quality data.

The Confidence Index is based on responses to 4 sentiment questions about future market expectations. The Index has a range of zero to ten.

An Index above 5

indicates that respondents are confident in the market; more responded positive than negative to the survey question

An Index below 5

indicates that respondents are not confident in the market; more responded negative than positive to the survey question

An Index of 5

indicates that the positive and negative responses were equal

Partners

Sponsored by:

At PwC, our purpose is to build trust in society and solve important problems. PwC is a network of firms in 155 countries with over 327,000 people who are committed to delivering quality in assurance, advisory and tax services. Find out more and tell us what matters to you by visiting us at www.pwc.com/US."

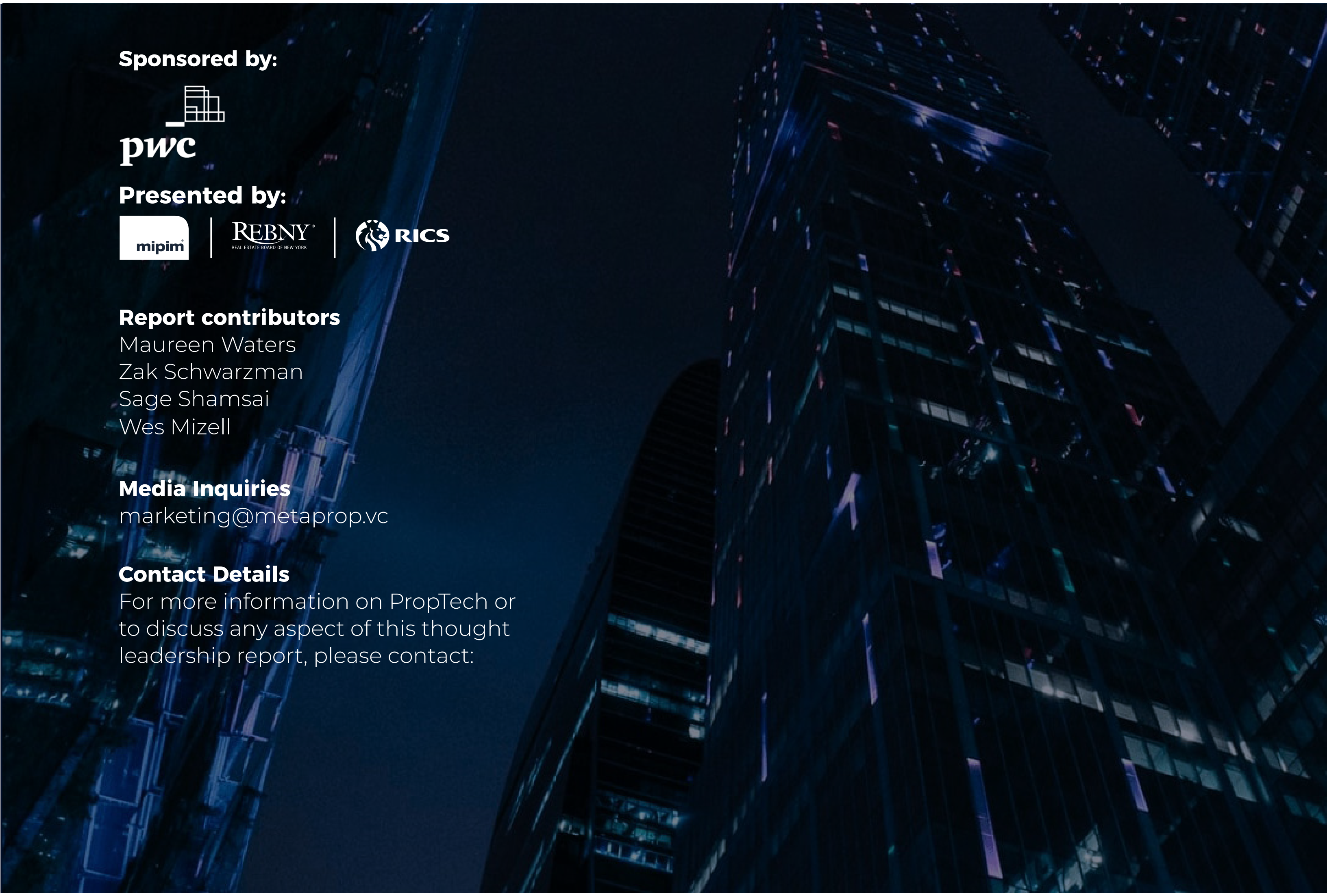
PwC has not independently verified, validated, or audited the data to verify the accuracy or completeness of the information. PwC gives no express or implied warranties, including but not limited to any warranties of merchantability or fitness for a particular purpose or use and shall not be liable to any entity or person using this document or have any liability with respect to this document. This report is for general purposes only, and is not a substitute for consultation with professional advisors.

Established in 1990, MIPIM is the real estate event to meet the most influential players from all sectors of the international real estate industry. It brings the entire value chain together and gives unrivalled access to the greatest number of development projects and sources of capital worldwide. The most influential players from all international property sectors: office, residential, retail, healthcare, sport, logistics, and industrial are brought together at MIPIM, the world's leading property market. Offering unrivalled access to the greatest number of development projects and sources of capital worldwide, MIPIM gathers all players from the commercial property value chain for a year's worth of business in four intensive days.

The Real Estate Board of New York (REBNY) is the City's leading real estate trade association. REBNY represents commercial, residential, and institutional property owners, builders, managers, investors, brokers, and salespeople; banks, financial service companies, utilities, attorneys, architects, and contractors; corporations, co-partnerships, and individuals professionally interested in New York City real estate. REBNY conducts research on various civic matters including tax policy, city planning and zoning, rental conditions, land use policy, building codes, and other city, state, and federal legislation. REBNY regularly publishes market data, policy reports, and broker surveys. In addition, REBNY provides for its members: informational, technical, and technological resources; networking and charitable service opportunities; qualifying and continuing education courses; professional education programs, seminars, and designations; career-changing awards; legal advice; and a wide range of additional member benefits.

The Royal Institution of Chartered Surveyors (RICS) promotes and enforces the highest professional qualifications and standards in the development and management of land, real estate, construction and infrastructure. RICS promises the consistent delivery of standards–bringing confidence to the markets they serve. RICS's expertise covers property, asset valuation and real estate management; the costing and leadership of construction projects; the development of infrastructure; and the management of natural resources such as mining, farms, and woodland. With offices covering the major political and financial centers of the world, their market presence ensures they are ideally placed to influence policy and embed professional standards. RICS guards its reputation fiercely, clients who work with a RICS professional can have confidence in the quality and ethics of the services they receive. Learn more at www.rics.org.

Acknowledgments



Sponsored by:

pwc

Presented by:

mipim | REBNY | RICS

Report contributors
Maureen Waters
Zak Schwarzman
Sage Shamsai
Wes Mizell

Media Inquiries
marketing@metaprop.vc

Contact Details
For more information on PropTech or to discuss any aspect of this thought leadership report, please contact:

metaprop.

MetaProp
214 West 39th Street, Suite 705
New York, NY 10018

www.metaprop.vc
info@metaprop.vc

MetaProp is a New York-based venture capital firm focused on the real estate technology ("PropTech") industry. Founded in 2015, MetaProp's investment team has invested in 135+ technology companies across the real estate value chain. The firm manages multiple funds for financial and strategic real estate investors that represent a pilot- and test-ready sandbox of 20+ billion square feet across every real estate asset type and global market. The firm's investment activities are complemented by its pioneering community leadership, including the PropTech Place innovation hub; MetaProp Accelerator at Columbia University programs; global events NYC Real Estate Tech Week and Propel by MIPIM NYC; and publications Global PropTech Confidence Index and PropTech 101.


metaprop.