KPMG

# Is your digital future in the right hands?

**An annual review of the real estate industry's journey into the digital age**

KPMG Global PropTech Survey

October 2019

kpmg.com/realestate


LABI
AKIHABARA
パソコン館
LAOX
SLOT
千代田区内は
路上喫煙禁止です。
Duty free

# Introduction

**The real estate industry is still making progress with its digital transformation. Challenges remain, however, with full-scale adoption of digital technology still some way off.**

In its third year, the annual KPMG Global PropTech survey looks at the progress made in the real estate industry's relationship with technology over the past year. We examine the differences between regions, industry sub-sectors and stages of the property cycle, and we explore the areas in which attitudes and practices may need to change. We also focus on the crucial questions of who has responsibility for advancing the digital agenda and whether companies have the talent in place to deliver the job.

All in all, the developments of the past year are encouraging. Property companies are increasing their engagement with digital, and many companies are taking digital developments in their stride. Brokers and advisors, in particular, are at the forefront of the technological revolution, with automation and digitalization playing a growing part in their day-to-day operations.

At the same time as they embrace digital transformation, companies are putting more emphasis on data. They are increasingly keen to explore the ways in which it can revolutionize their operations and – importantly – improve the experience of their customers.

The digital revolution brings challenges, of course. Cyber security is an issue of rapidly growing importance – an issue that real estate companies are increasingly acknowledging. In the survey findings, we detect a new realism about cyber-security readiness. Unsurprisingly, the companies that are most advanced in their digital strategies are also the companies that are putting the most effort into their cyber defences. That underscores a crucial point: like the other aspects of digital transformation, cyber security provides an opportunity for forward-thinking companies to differentiate themselves from their peers.

That differentiation will only grow in importance. So, while the findings of our 2019 survey offer considerable encouragement, they also throw down challenges for those companies that are not yet prioritising digital engagement.

Leadership is of the utmost importance here. Although the companies surveyed now have a specific person leading their digital transformation, many have no formal training in digital technology. That raises the question of whether they have the capabilities to perform effectively in their role.

The greatest challenge for real estate companies is to undertake the cultural shift required to attract and retain the tech talent that will allow them to keep their digital transformation on track. In this way, the 2019 KPMG survey provides both a snapshot of today and a blueprint for the future.

**Andrew Weir**

Global Chair, Real Estate & Construction

**Andy Pyle**

UK Head of Real Estate

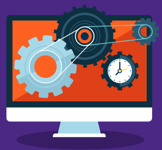
**Sander Grunewald**

Global Lead, Real Estate Advisory

This paper is informed by a survey KPMG member firms ran between July and August 2019. In its third year and known as the PropTech Survey, it sought opinions on digital transformation and technology innovation from 188 real estate companies.
This covered companies from across the globe, predominantly in the UK, continental Europe, the Americas and Asia, and spanned a broad range of subsectors and company sizes. The canvassing of property firms was accompanied by a parallel survey of 92 PropTech companies.

# Key survey findings

Real estate companies are increasingly embracing digital: **58%** of respondents have a digital strategy in place, up from **52%** in both 2018 and 2017.



**95%** of real estate companies have someone responsible for leading digital transformation and innovation.

In **62%** of cases this is a senior employee at a C-suite level or equivalent.

Investment in digital, IT and PropTech collaboration is driven by a need for improved efficiencies (**65%**), cost-reduction (**47%**) and enhanced decision-making (**44%**), rather than increased revenues.

Barriers to further digitalisation include unclear ROI (**40%**); digital not a priority (**40%**); lack of a designated person to drive the strategy (**34%**); and lack of appropriate in-house talent (**27%**)

More likely than not (**65%** of cases), it isn't a digital or technology specialist leading digital transformation. **40%** of digital leaders come from a real estate, construction or finance background.

**7** in **10** respondents are confident in the cyber security readiness of their organisation.

Digital strategies rarely incorporate data management or a data strategy. Only **25%** of respondents have a well-established data strategy that enables the capture and analysis of the right datasets. A third have no data strategy at all.

Levels of system integration are low – overall, respondents rate themselves as average,

**5.4** out of **10**

64%

of real estate companies have some form of Property as a Service across their portfolio and **13%** are considering it. Property as a Service still a small proportion of overall space.

Asset management is the area most likely (**64%** of respondents) to benefit from investment in IT, digital technology or PropTech collaboration over the next 12 months.

# Growing engagement with digital

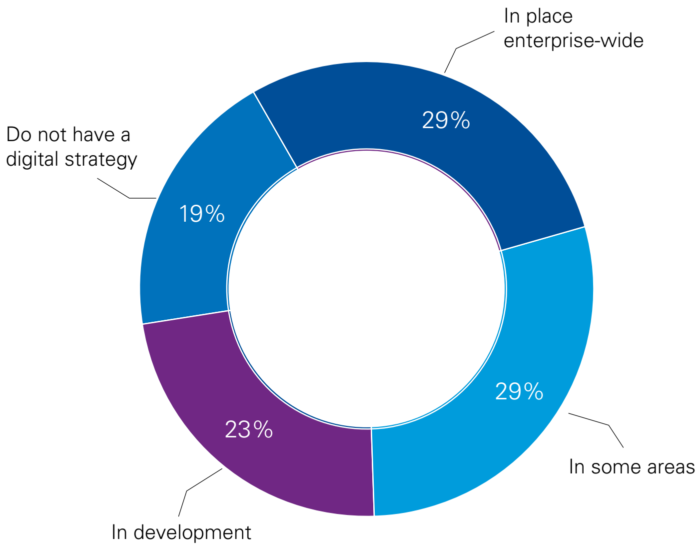
**Real estate companies are increasing their engagement with digital, and most now have a specific person leading their digital transformation. This is usually a senior employee. Enterprise-wide digital strategies are not yet the norm, however, and a significant proportion of companies still have no digital strategy at all.**

The survey data indicates that adoption of digital strategies is growing steadily. In this year's survey, 58% of respondents stated that they had a digital strategy in place, either enterprise-wide or within pockets (Fig 1.), up from 52% in both 2018 and 2017.

Less than a third of respondents claim to have an enterprise-wide digital strategy, however. This might indicate that companies are increasingly aware of the difficulties involved in implementing an end-to-end strategy and are therefore being more realistic in their assessments than in previous years.

That finding is mirrored in the views of PropTech respondents, who perceive that half of property companies have a digital strategy in some parts of the business, with 14% having complete coverage and 28% with a strategy in development. A fifth lack a strategy altogether. What real estate companies say and what PropTech respondents perceive are consistent.

**Extent to which property companies have a digital strategy**



# 95%

of respondents have a specific person leading digital transformation

# 62%

of these are usually a senior employee, often at C-suite level

> **"More and more real estate professionals are contacting us about implementing technology, and we are also seeing increased interest in creating a data strategy."**
>
> Wouter Truffino – Founder, Global PropTech

# 89%

this employee reports directly to the owner, CEO, president or board member

The growing engagement with digital has been accompanied by the appointment of people to lead it. The vast majority of 2019 respondents (95%) have a specific person leading digital transformation. Usually (62%), this is a senior employee, often at C-suite level. And in most cases (89%), this employee reports directly to the owner, CEO, president or board member. This shows that companies are taking digital transformation seriously.

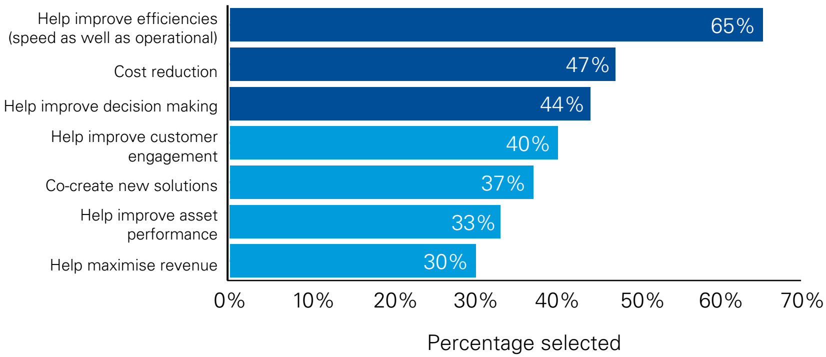
Only 10 of the 188 respondents do not have someone responsible for technology innovation and digital transformation in their organisation. The main reason given is that digital transformation is not a business priority for these companies. Unsurprisingly, these companies tend not to have a company-wide digital strategy.

# Why companies look to digital – and where they differ

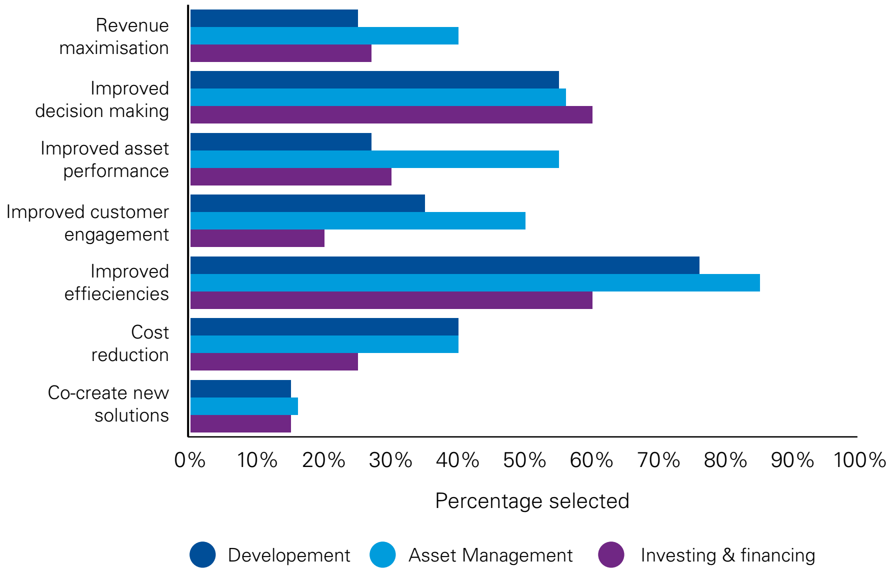
**Real estate companies are pursuing digital investment and collaborating with PropTechs for a variety of reasons. For now, however, the focus is on improved efficiencies and enhanced decision-making rather than revenue generation or customer engagement.**

Companies' main objective in adopting digital is to improve efficiencies and decision-making. This is confirmed by PropTech respondents, who claim they're normally brought in to do the following: improve efficiencies (65% of the time), reduce costs (47%) and improve decision-making (44%).

**Business improvements PropTechs have been hired to deliver in the last two years**



### Objectives of past investments in IT, digital or Prop Tech collaboration




Past investment in IT, digital or PropTech collaboration was also intended to improve efficiencies and decision-making (Fig 3). This is consistent across three of the property life cycles we've explored in more detail: development (by which we mean design and planning; construction; demolition and remediation), asset/property management (fit-out and refurbishment; sales and leasing; property management) and investment & financing (asset acquisition and disposal; valuations; financing).

## Brokers and advisors in the lead

The differences between types of organisation are significant. Brokers and advisors seem to be leading the way over owner or developers and property investors in almost all aspects of digital transformation. These include employing digital experts to lead their transformation, having an enterprise-wide digital strategy in place, using PropTech solutions and adopting data strategies.

Again, this result was backed up by the PropTech responses. When PropTechs were asked which companies they saw as the most innovative in the market, two of the largest global brokers received the highest number of unprompted mentions. These were closely followed by companies such as VTS and WeWork.

This lead is most likely explained by the highly competitive nature of the real estate advisory industry. To maintain their competitive edge, companies are increasingly using technology to differentiate themselves. They have started to invest in integrated systems, cloud-based solutions, smart-building technology and the automation of the more manual aspects of their businesses to free up their teams to focus on value creation and client service.

## Size matters too

Larger companies (those with more than US$5 billion in assets) are more likely to have an enterprise-wide digital strategy in place. And at larger companies, this strategy is more likely to be led by someone with a background in technology. This is true of 44% of companies with more than US$5 billion in assets, compared with 21% of those with US$1 billion to US$5 billion and a quarter of those with less than US$1 billion. This may be because the larger companies have the resources to bring in skilled personnel to own and lead digital transformation.

Larger companies are also more likely to have PropTech and digital solutions seamlessly integrated into their core IT systems.

Meanwhile, a full quarter of companies under US$5 billion do not have a digital and or technology innovation strategy at all. This compared with just 6% of those with assets over US$5 billion.

This trend also applies to data strategies and cyber security. As detailed in further chapters, companies with larger portfolios have more resource to allocate to these functions.

## Barriers to further engagement

What might be impeding further engagement with digital? The survey suggests that the main factors are the skills gap and the real estate industry's culture of caution and conservatism.

**"Property companies need to be educated on the benefits of using technology. They can often get overwhelmed if they don't have a technical or digital role in house which can take the lead on these projects."**

Survey respondent

### 1. Skills

The skills gap was identified by several of the PropTech companies that responded to the survey. One respondent put it thus:

"Property companies need to be educated on the benefits of using technology. They can often get overwhelmed if they don't have a technical or digital role in house which can take the lead on these projects."

Another respondent said that real estate companies should "hire experts who can take the business forward. Run lots of different pilots to experiment and learn. These companies have to understand that disruption in the industry will follow and they should be better prepared to survive the next decade".

### 2. Culture

Culture is important here. Currently, there is a cultural mismatch between real estate – an industry that is reluctant to let go of its traditional practices – and the innovative, "move fast and break things" culture favoured by experts in digital technology. The 'dinosaur' aspects of the real estate industry may present a considerable barrier to progress.

PropTech companies noted the need for real estate's culture to change. Companies should aim to create and sustain a culture of innovation that attracts people with the right skills and enables them to thrive. Employees need to feel empowered to try out new ideas, challenge the status quo and broker new partnerships and collaborations with PropTechs.

Employees also need to feel they have the freedom to fail when trying to innovate. One of the most common themes in survey responses from both property companies and PropTechs was the importance of experimenting more. And that sentiment is echoed by other industries, as uncovered in KPMG's CEO Outlook survey ran earlier this year. Some 84% of CEOs said that they wanted a culture in which errors were accepted as part of the process of innovation.

Of particular interest in the 2019 PropTech survey were the perceived barriers to closer collaboration between PropTech and property companies, and the suggestions that PropTech companies had for how property companies could improve their engagement with PropTech.

The barriers identified by the PropTech companies included unclear returns on investment (40%); not being a business priority (40%); the lack of a designated person to drive the strategy (34%); and – importantly – the lack of the appropriate talent at property companies (27%).

Another barrier to collaboration is the retention of talent at property companies. According to the PropTech companies, this leads to regular re-treading of ground with new hires.

40%
unclear returns on investment

40%
not being a business priority

34%
the lack of a designated person to drive the strategy

27%
the lack of the appropriate talent at property companies

**"Developing a technology system is something everyone tries to do internally at first, believing if they build it in house, they'll have more control. This is a mistake – the fact of the matter is we are all running the same business systems, slightly differently with different people. Unless you are willing (and can afford) to set up a dedicated team to maintain the system, you should develop your proof of concepts internally, then go out and find best-of-breed solutions."**

Shen Chiu – Development Director – Investa

### 3. Absence of digital strategy

The lack of digital strategy in a fifth of the companies engaging with PropTech is another key finding. Are these companies relying on PropTech companies to guide them through their digital transformation? There is an opportunity here to encourage companies to adopt a strategy before engaging with PropTechs, so that they can reap greater benefits from the process. Most respondents said that the main business sponsor of PropTech initiatives at real estate companies is usually the owner, CEO or a board member, or another non-digital person.

### Recommendations to increase PropTech collaboration

Many PropTech respondents suggested changes that property companies should consider to increase engagement and collaboration. These were the main suggestions – which together provide a roadmap for property companies' digital journey:

- Creating new boards or committees related to digital transformation.
- Educating themselves on the benefits and value of technology.
- Hiring experts who can take the business forward; running pilots, experimenting and learning.
- Ingraining digital transformation into the culture of the business.
- Allocating budgets for digital and PropTech collaboration; seeing these as investments, not costs.
- Co-creating solutions. Cooperating with peers on digital roadmaps for property companies. Providing sandbox locations for PropTechs to test solutions.
- Distinguishing between genuine PropTech companies and those that are not; and assembling a stable of providers accordingly.
- Streamlining the procurement process for technology companies to allow fast trials.
- Investing in start-ups or setting up presences in incubators or accelerator centres, to seek out and fund PropTechs.
- Using fit-for-purpose applications and staying away from spreadsheets.
- Being more open about business problems and challenges.

**Main driver for future investment in IT, digital and PropTech collaboration**


As discussed above, real estate companies' main reasons for investing in IT, digital and PropTech collaboration have been to improve efficiencies and decision-making rather than to maximise revenue or increase customer engagement. This attitude has not yet shifted. As Fig. 4 above shows, the main drivers of future investment in these areas are still very much along the same lines, along with prioritisation by the board or senior management.

This suggests that real estate companies are still missing at least a couple of tricks. There's a telling contrast with the PropTech companies, whose respondents put heavy emphasis on their customer engagement. And the disruptive potential of digital is such that a narrow focus on efficiencies rather than opportunities is unlikely to be helpful.

# Bridging the skills gap

**The survey shows that most of the people leading digital transformation at real estate companies (65%) do not have a background in digital technology from outside the industry. A significant number (40%) come from a real estate, construction or finance background. This suggests that they may need additional professional development to ensure they have the necessary capabilities to perform effectively in this role. In general, we observe that talent and skills across the industry have evolved to serve the market as it was, not as it might be in the future.**

As discussed in the previous section, the skills gap was widely identified by PropTech respondents as a problem for real estate companies. Given the cross-industry 'war for talent' – and the white-hot competition for digital, technology and data skills – real estate companies need to up their game to attract the necessary capabilities. They can do this by investing in upskilling their workforce or by fostering a culture of innovation that acts as a magnet for talent. Or they could do both.

### Professional specialism

27% Real estate or construction

4% Brokerage or sales and marketing

10% Strategy

30% Technology

11% Professional services

5% Data analytics

13% Other (mainly accounting & finance)

**"In the UK a number of property companies have been recruiting from outside the industry to bring in the skills that are needed in the future, whether data scientists, innovation specialists or customer experience. As well as this, industry bodies and universities will need to adapt their courses and professional training so that the surveyors of the future are equipped to deal with a digital future. Talent and skills is one of the key workstreams for the British Property Federation's Technology & Innovation Working Group"**

Andy Pyle – KPMG in the UK and Chair, British Property Federation Technology & Innovation Working Group

Upskilling the workforce appears to be ranking higher in companies' priorities. Of the CEOs who responded to KPMG's CEO Outlook survey, 44% said that they were intending to upskill more than half of their current workforce in new digital capabilities over the next three years. But less than a third were prioritising workforce investment over technology investment. There is a danger in real estate, as in other industries, that companies will improve their technology before ensuring that their employees have the necessary skills to employ it effectively.

Regional variation is considerable. UK respondents are more likely than those from the rest of Europe and the Americas to have a technology person in charge of leading and managing innovation and digital transformation. Of UK respondents, 43% had a digital expert here, compared with almost a third in the rest of Europe and the Americas and 20% in Asia and the rest of the world.

In the Americas, the digital leader is likely to be more senior, with 68% being members of the C-suite. This compares with 57% in the UK and 54% in the rest of Europe.

Also, Europe (excluding the UK) is behind the curve when it comes to hiring chief information officers, chief digital officers and chief technology officers to lead digital engagement. Only 10% of European respondents had done this, compared with almost a fifth in the UK, the Americas and Asia.

Clear patterns were also apparent by sub-sector. Of brokers and advisors, half have a digital expert leading their technological innovation and transformation, compared with 27% of owners or developers and 39% of property investors.

There is also a correlation between having a digital strategy and having a digital expert in charge of innovation and digital transformation. Of the companies with a company-wide strategy, half had a digital expert in charge of these areas, compared with only a third of those with a strategy in some areas of the company and just 11% of those with no strategy.

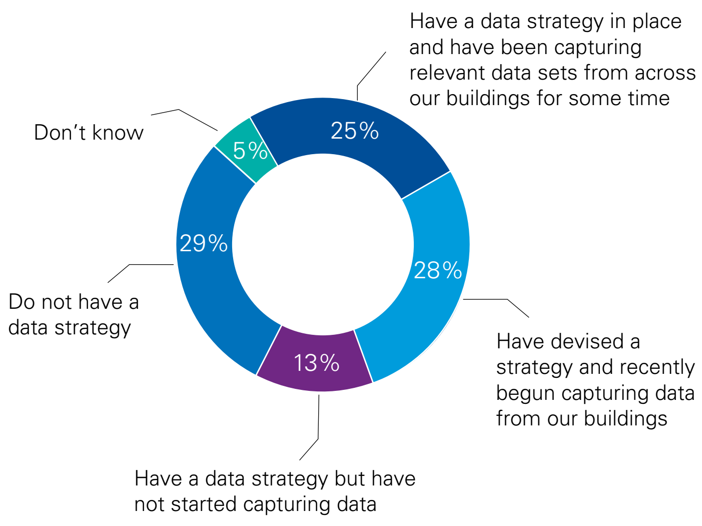
# Data strategy and data protection

**Companies have made relatively little progress in developing integrated digital strategies that incorporate data management or a data strategy. Only a quarter of survey respondents have a well-established data strategy that has enabled them to capture and analyse the right datasets from across their portfolio of buildings for some time. And almost a third have no data strategy at all. The conclusion must be that many companies think they can have a digital strategy without a clear data strategy. KPMG member firms' experience, however, is that data has to be at the heart of a broader digital strategy. Meanwhile, data protection and cyber security are pressing issues that have yet to be fully addressed by many companies.**

This underscores the property industry's overall digital immaturity. Companies need to spend more time identifying the problems they can tackle through data, as well as the data sets they need to capture and analyse to deliver better customer outcomes.

The rise of 'big data' presents significant challenges. The bulk of data available today has been created very recently, and most of it is ignored by companies. Today, all businesses are faced with a situation in which they may not be able to process all the available data – or even identify the data that would be most useful when processed. For real estate companies, the first step must be to capture the most valuable data to produce insight and support decision-making.

**Statements that best describes companies' data strategy**



**“Digital and data strategies are of no value if they are not driven by clear customer (or operational) outcomes. The term strategy can be frequently misinterpreted as something broad and abstract that applies to everything and everyone. Industries that are embracing the digital and data age more often tend to consider strategies in this way. Clients will often say they have a strategy, but when we dig a bit deeper they struggle to articulate or substantiate what it will deliver for their customers. The best strategies are the ones that start small, are customer-focused, are repeatable and are scalable.”**

Brendon Ambersley, KPMG in the UK

The effective capture of data requires a data strategy. Of the 152 survey respondents with a digital strategy in at least some areas or in development, 76% had a data strategy to some extent (Fig. 5). This demonstrates a high crossover. In cases where there isn’t a data strategy, it’s typically because the digital strategy is still in development. This suggests that there is still a long way to go in the process for many organisations.

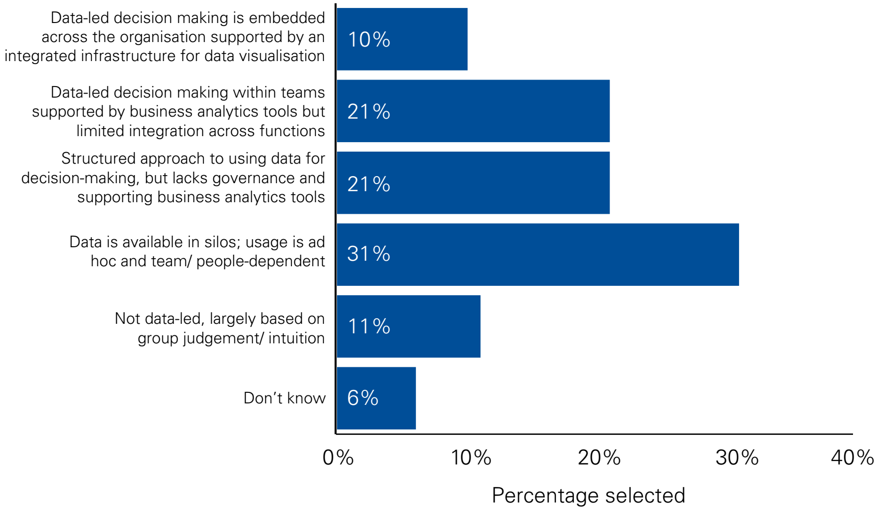
After data capture, the next challenge is interpretation. At present, the industry is confronted with a ‘data chasm’, whereby the ability to make use of data trails far behind the amount of data available. Despite predictions of greater investment in future, just 10% of respondents have data-led decision-making embedded across the organisation and supported by integrated infrastructure for data visualisation (Fig. 6).

To cross the data chasm, companies need the appropriate tools and training, support (read data ownership) from senior management and improved production and organisation of the data itself.

There are some positive signs, however. The industry has started looking at providing appropriate data standards and mechanism for sharing and managing data across the whole lifecycle of a building. And there are growing requests for standard-setters, regulators, governments, property companies and PropTechs to come together to provide an understanding of both current data standards and the road ahead.

For many property companies, the solution will come through cooperation with companies specialising in data. A senior executive from Altera, a Dutch provider of institutional real estate funds, commented: "We clearly see opportunities in partnering with outsourced parties in order to leverage all data gathered collectively".

## Extent to which decision-making is led by data




**"I see companies being more open source and willing to engage with others in the community than they have ever been. This is a welcome development because we go further when we work collectively to create mutual success. […] What I am really impressed about is that the industry in Australia works together to develop frameworks for how we will monitor and respond to Cyber-security incidents"**

Sheridan Ware – CIO – Charter Hall

Two industry-specific challenges are relevant here. The first is the industry's current lack of digital leadership (as discussed earlier). According to the KPMG/Harvey Nash CIO survey, digital leaders view data differently from their peers. They are more likely to maximise the value of the data they hold (35% vs 9%), and they are more likely to maintain an enterprise-wide data management strategy (36% vs 10%).

So digital leaders in the property industry should be aiming to get data-driven insights that they can trust and use to inform their decision-making. They should also aim to drive enterprise-wide data-management strategies that focus on the consumer.

The second industry-specific challenge is cultural. Companies often overlook that data strategies are more about cultural practices than technology change. This means influencing and changing behaviour from being 'system led' to 'data driven'.

How? By systematically identifying opportunities where better outcomes can be effected through better data. Once the C-suite see and believe the improved outcomes, the behavioural changes will follow from the top. Executive, operational and digital leaders will be more willing to subscribe to their new roles and responsibilities with regard to data. They will continue to drive the improvements they have seen and will replicate them across the organisation. This should lead to the dawn of a new culture.

With greater data capture comes the need for greater data protection. This is just one aspect of the broader issuer of **cyber security.**

Over two-thirds (67%) of respondents are either “quite confident” or “very confident” of their cyber security. This is in line with the sentiment across other industries – 68% of CEOs globally say that their organisation is prepared for a future cyber-attack (KPMG CEO Outlook 2019).

Some of this confidence may be misplaced. As Altera observes, “You can never be ‘very confident’ on the area of cyber security.”

Somewhat surprisingly, more than a fifth of respondents had undertaken none of the five cyber-security assessments we asked about in the survey: cyber maturity assessment; system/building penetration testing; business continuity management in case of breach; supplier security risk management and data protection under the European Union’s General Data Protection Regulation.

Besides these assessments, companies’ employees are also a key line of defence and will require investment in education and training if data is to be as secure as possible.

Companies with digital strategies, whether in place or in development, were more confident of their cyber-security readiness. So there is a clear opportunity to show the benefits of a digital strategy by linking it to cyber security.

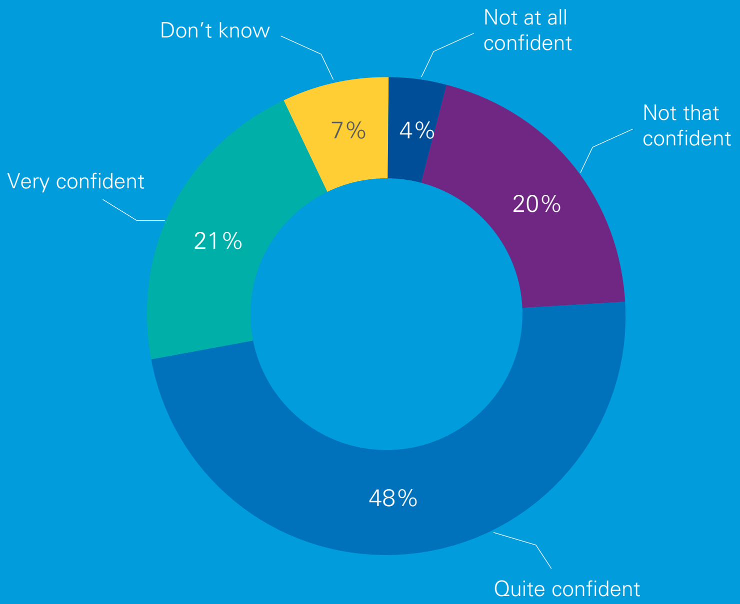
67%

of respondents are either “quite confident” or “very confident” of their cyber maturity

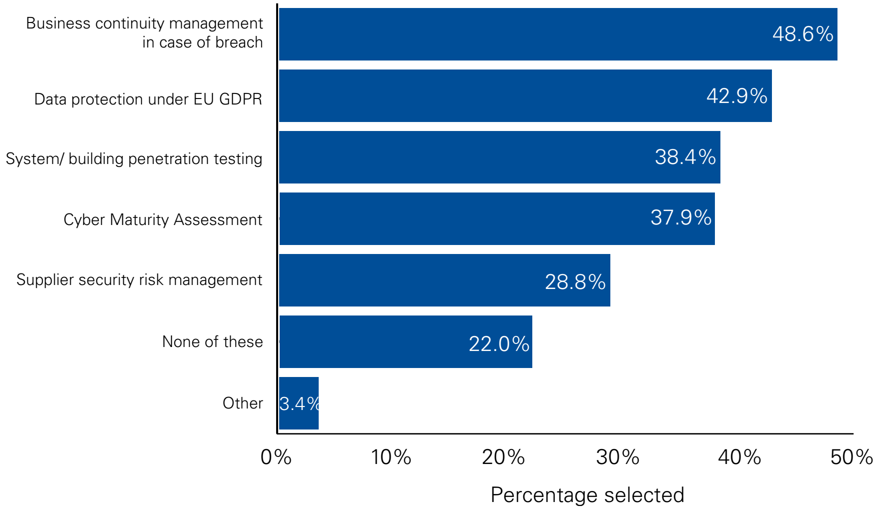
30%

have not tested their preparedness.

**Confidence in current cyber-security readiness**



## Cyber-security assessments undertaken




Of the potential assessments, business continuity management in case of breach was most commonly performed (49%), followed by data protection under EU GDPR (43%), system/building penetration testing (38%) and Cyber Maturity Assessment (38%).

And while data testing under GDPR had been undertaken by 70% of European respondents, including those in the UK, a full 30% have not tested their preparedness. Meanwhile, there are questions over how well prepared American respondents are to protect the data of their European clients.

Importantly, cyber security shouldn't be seen as a purely defensive capability. Instead, information security should be viewed as a strategic function and a source of competitive advantage.

Transparency is crucial here. By being forthcoming about how they handle data and privacy – even to the extent of showing how they deal with data breaches – real estate companies can differentiate their brands and foster greater trust among consumers.

# Systems integration: much to be done

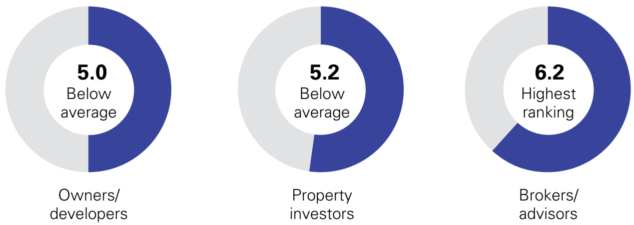
**Levels of systems integration are low at present. Most companies run different systems that are neither properly integrated nor cloud-based and mobile-enabled. Very few are using a single system to conduct all their operations.**

We asked respondents to rate the integration of their internal systems from 1 to 10. A score of 1 reflected a patchwork with no integration while 10 represented fully integrated internal systems. The great majority of respondents (85%) rated their systems between 3 and 8, with 44% between 4 and 6. The mean score was 5.38.

In line with the findings on digital transformation, brokers and advisors were the most advanced of the sub-sectors here. Property investors and owners or developers were some way behind, as Fig.9 shows.

### Extent to which decision-making is led by data

Systems integration – mean score

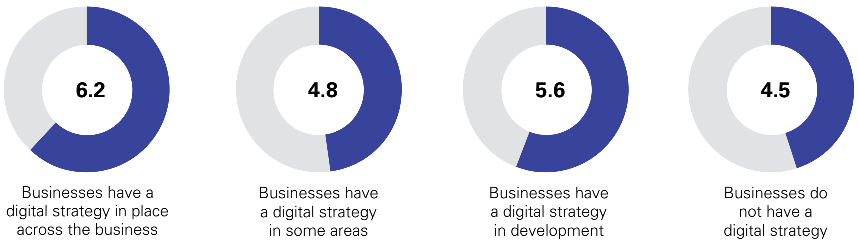


By company size, however, there was little difference. The fairly even distribution of scores by the total amount of assets suggests that size of business isn't a major factor in determining the level of systems integration.

With a mean score of 5.73, integration is more advanced in Europe (excl. UK) than in the Americas (5.09) or the UK (4.86). But Asia and the rest of the world put themselves highest, at 6.14.

### Extent to which decision-making is led by data

Systems integration – mean score




A more telling factor was the presence of a digital strategy – either in place across the business or in development. Perhaps unsurprisingly, companies with business-spanning digital strategies were likely to be the most integrated, but those with a digital strategy in only some areas did flag that they were less integrated. These companies had mean scores closer to those with no strategy in development.

KPMG's anecdotal evidence suggests that the average self-assessment of 5.38 is at best optimistic. Real estate companies are still getting to grips with their technical debt caused by over a decade of underinvestment in IT. According to our estimates, a property manager or developer can operate up to 30 standalone systems to manage finances, operations and different stages of the property value chain (acquisition & construction, marketing & sales, property management, customer & facility services, portfolio optimisation, etc.).

The lack of integration across systems and functions results in inefficiency, task duplication and, most significantly, unreliable reporting and several variations of the truth.

Fragmented IT infrastructure is also making it very difficult for real estate organisations to achieve agility. The constraints of legacy IT and the lack of collaboration across organisational silos make it impossible for companies to be nimble and responsive to changes in their environment. This is an issue recognised by other industries – 79% of CEOs responding to KPMG's CEO Outlook said they are responsible for overseeing greater cross-functional alignment in a way that their predecessors were not.

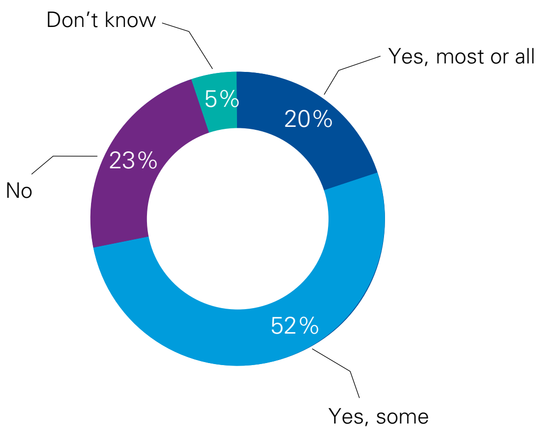
Given these challenges, real estate companies should undertake a detailed mapping of their current landscape of systems. This will allow them to identify its shortcomings and work out what a full-scale transformation should achieve.

> **"PropTech is not seen as a priority for the business which conducts itself on a 'business as usual' basis. It's seen as an opportunity but also a cost. Excel dominates, as well as experience or local knowledge."**
>
> US real estate firm

In doing this, companies need to ask themselves a number of questions. How can they use system integration to enable business agility? How can they encourage their people to embrace change? How can they get more value from the data they have across their functions and systems? And how can they provide the insight and control to oversee widespread innovation and transformation?

Cloud technology will play an important part in this process. Cloud-based solutions address fragmented digital infrastructures made up of a range of bespoke, on-premise computational infrastructure. The cloud offers scaled capabilities and advanced technologies that can transform how work used to be conducted via legacy IT. It can also enable companies to exploit the power of artificial intelligence and data analytics to develop meaningful insights. The resultant efficiencies should allow firms to focus on other opportunities across the value chain.

**Extent to which decision-making is led by data**



Currently, three-quarters of respondents have at least some cloud-based and mobile-enabled systems for capturing live data (Fig. 11). This level of commitment may not be enough to allow them to reap the full benefits of this technology, however.

A US real estate firm notes that PropTech "is not seen as a priority for the business which conducts itself on a 'business as usual' basis. PropTech is seen as an opportunity but also a cost. Excel dominates, as well as experience or local knowledge."

Again, cultural issues are among the biggest challenges here. The industry's prevailing attitude has been "if it ain't broke, don't fix it". This is beginning to change as companies face up to the risks of losing market share to digital and web-based challengers. But the incumbents are still playing catch-up, and their vulnerabilities are exacerbated by years of underinvestment – where there has been any investment at all.

The survey's findings should serve as a wake-up call to companies that have yet to open their eyes to the opportunities created by digital integration and the potential for market-share expansion.

**"The built-environment-related industries need more harmonised data policies and universal cross-industry digitalisation approaches and methods for the digital transformation to really kick off. Now non-compatible siloes and ancient ways of working are prohibiting even the basic digitalisation efforts."**

Finish real estate firm

# The property life cycle: a focus on asset management

**Asset or property management is the stage of the property life cycle most likely to have received IT investment in the past two years and is also the stage most likely to be using PropTech. It is a priority for future IT investment and the highest priority to invest in PropTech solutions or digital innovation.**

The survey asked several questions about the different stages of the property life cycle. We defined these stages as follows:

**Development:**
design and planning; construction; demolition and remediation

**Asset/property management:**
fit-out and refurbishment; sales and leasing; property management

**Investment and financing:**
asset acquisition and disposal; valuations; financing

The responses enabled us to identify which companies were involved with each of these stages. Of the real estate companies we spoke to, four-fifths are involved in asset management, with seven in ten involved in development and seven in ten in investment and financing.

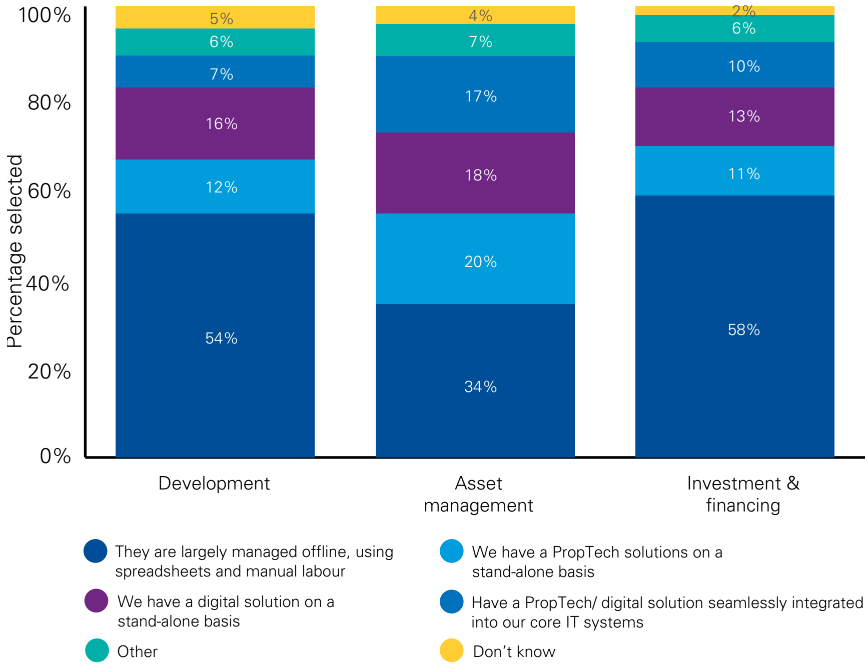
The asset/property-management stage is currently attracting the most attention from both real estate and PropTech companies when it comes to digitisation. This is largely because it is seen as requiring more resources and effort than other stages in the cycle. According to 43% of respondents, asset management is the most resource-intensive stage of the cycle, followed by development (33%) and investment and financing (18%). The tasks involved in asset management tend to be straightforward and repetitive, making them ripe for automation. This means that there's a big opportunity for efficiencies.

The focus on asset/property management might also be driven by the growing value of the market that it represents. This has been forecast to reach $22.04 billion by 2023, according to research company MarketsandMarkets. The increase has been driven by a growing appetite for the Property-as-a-Service model, rapid growth in property projects (and especially in 'smart buildings') and the proliferation of PropTech firms that focus on this stage.

In the asset-management stage, business processes are managed offline using spreadsheets and manual labour in 34% of cases, with a fifth using PropTech solutions on a standalone basis and almost as many using digital solutions on a standalone basis (Fig. 12). In 17% of cases, PropTech or digital solutions are seamlessly integrated into the company's core IT systems.

By contrast, development and financing are more likely to rely on manual processes than PropTech or digital, as the chart below shows.

**Business-process management across different stages of the life cycle**



Unsurprisingly, companies that have a full digital strategy are far more likely to have PropTech or digital solutions seamlessly integrated into their core IT systems.

Not only is there already more use of PropTech and digital in asset management, but this stage is also the highest priority for new technological solutions. Of our real estate respondents, 44% said that asset management was their top priority, compared with 27% for investment and financing and 23% for development (Fig. 13).

Broker and advisor companies are almost as likely to prioritise PropTech solutions or digital innovation in investment and financing as in asset management (50% compared with 53%). This may be because the digitalisation of their asset-management business is already well advanced – in line with the previous finding that brokers and advisors are the most likely to be managing their processes through PropTech or digital already.

Over the past two years, asset management was the stage most likely to have received investment in IT, digital or PropTech collaboration (84% of respondents). This was split more or less evenly between large investments (41%) and small investments (43%). Although most companies had also invested in development and investment and financing (72% for each), these were more likely to have been small IT investments.

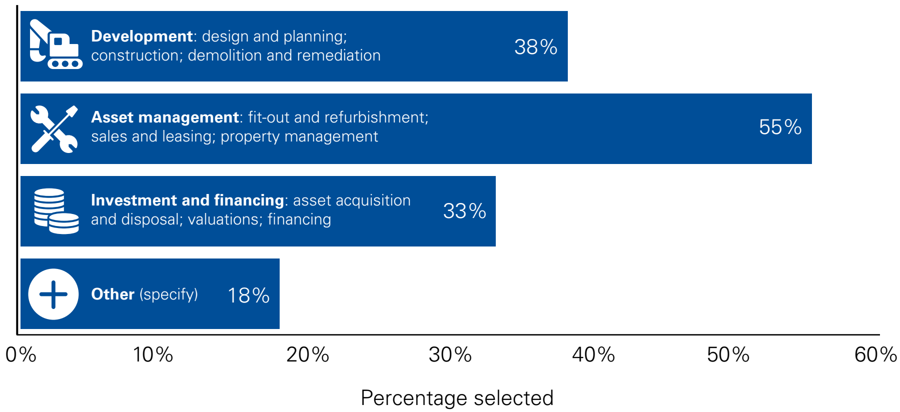
**Priority to use PropTech solutions or digital and innovation**

Asset management is also the stage of the property life cycle most targeted by PropTech companies – because that's where real estate companies need them most.

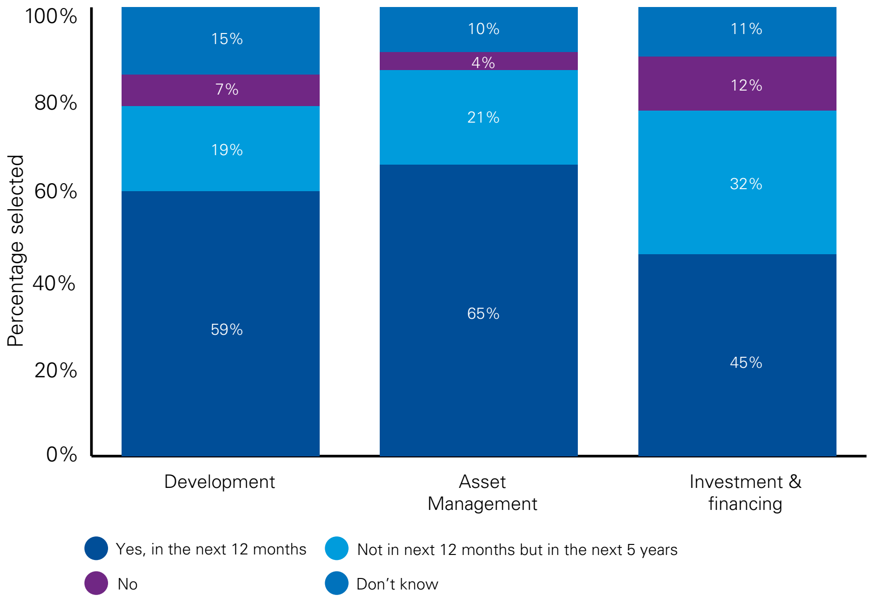
All stages of the cycle are highly likely to benefit from investment in IT, digital tech or PropTech collaboration in the next few years. Some 64% of real estate respondents thought there would be investment in IT, digital technology or PropTech collaboration in asset management in the next 12 months. For development and investment and financing, the figures were 59% and 45%, respectively. Only 4% thought there would be no investment in IT, digital or PropTech collaboration in asset management, although 10% said they didn't know (Fig. 15).

In development and asset management, even companies without a digital strategy believe that they are likely to invest in IT, digital tech or PropTech collaboration over the next few years. As noted earlier, the main motivation for this investment is improved efficiency and decision-making.

**Stages of the property lifecycle targeted by PropTechs**




**Likelihood for the organisations to invest in IT, digital or PropTech collaboration in the next few years**



# Property as a service

**The survey shows a real estate industry that is opening up to new, technology-driven business models, including Property as a Service (PaaS). Property as a Service (or Space as a Service) is the model whereby customers buy a package of services that lets them make best use of the space with the asset owner operating the building and incurring all the related costs. This is a significant shift from the traditional lease where tenants pay rent with a service charge on top to cover the costs of operating the building.**

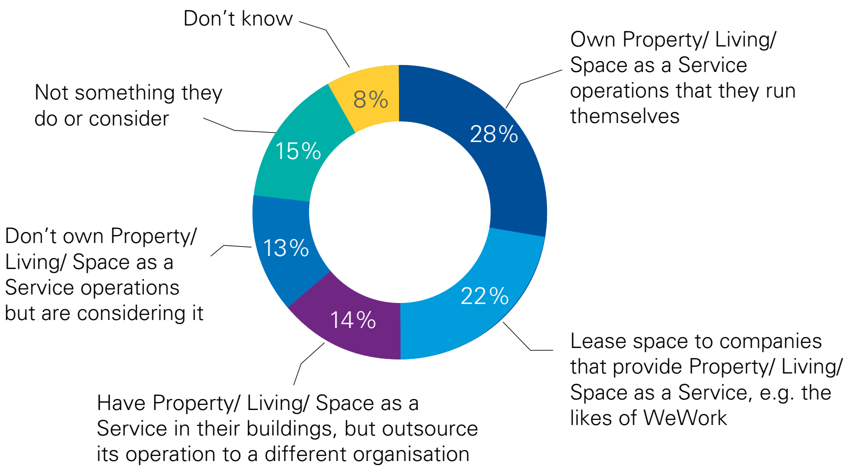
This is a significant market. If we look at flexible/co-working workspaces alone, the global market value is estimated at around $26 billion, and the number of coworking spaces is expected to grow at an annual rate of 6% in the US and 13% elsewhere.

So how are property companies responding to this opportunity? Most survey respondents (64%) offer some sort of PaaS (Fig. 16). This is more pronounced among companies with a digital strategy in place.

Despite its potential, however, PaaS still accounts for only a small proportion of space. Of the two-thirds of companies with some PaaS offering, half have it in 10% or less of their space. This may because the returns on investment are unclear, or because the size of a company's portfolio does not warrant a large proportion of PaaS.

Having a digital strategy is correlated with owning PaaS operations. A third of companies that have a digital strategy across the company (35%) or have one in some areas (34%) own PaaS operations that they run themselves.

### Approach to Property as a Service/Space as a Service



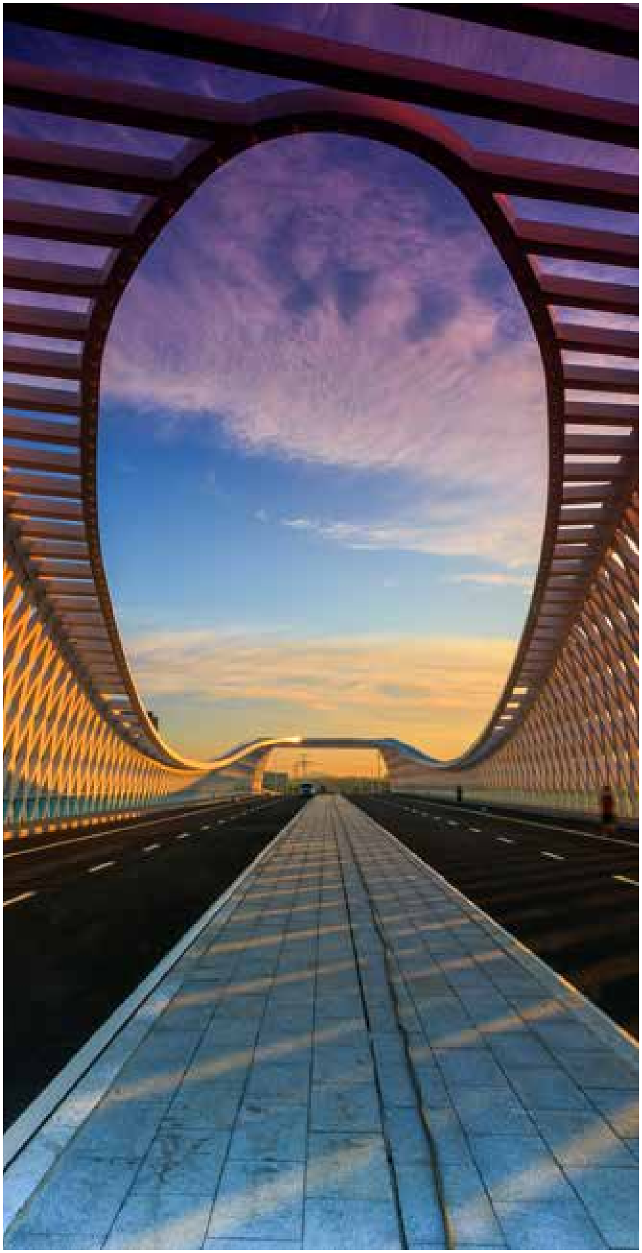
**"Improved customer engagement is where we see a difference will be made in the future"**

Altera

The widespread adoption of PaaS is an acknowledgement of the need to become more customer-centric. Nevertheless, when it comes to prioritising IT investment, a focus on the customer is outranked by concerns such as improving efficiencies, decision-making and asset performance.

This contrasts starkly with practices in PropTech, where most companies invest in NPS scoring and place great importance on customer feedback and improving engagement. According to one PropTech respondent, "literally everything is driven by feedback".

For real estate companies, then, there is still ample room for improvement in the adoption of a service model. As Dutch property firm Altera says, "improved customer engagement is where we see a difference will be made in the future".



# The road ahead

**So what is the direction of travel in the coming years? The survey suggests a rapid acceleration in digital disruption – one that will demand urgent cultural change from real estate companies.**

The PropTechs are hugely optimistic about the growth of their market. Of the PropTech respondents to the survey, 87% believe that the real estate companies they work with will increase spending on PropTech solutions in the next 12 months. No PropTech respondents expect investment to halt or decrease.

In the next two years, the PropTechs expect significant digital disruption in a number of areas. Real-time asset performance data was the area that the largest number of PropTech respondents (25%) saw as most ripe for disruption, followed by building optimisation (22%), transactions (19%) and customer data (16%).

> **"If you don't use data efficiently and effectively then you will miss a huge amount of value in your business/market. Others will not make this mistake and you will become increasingly uncompetitive. Ultimately the world is only going one way."**
>
> UK REIT

The PropTechs also see data capture and management as one of the areas where real estate companies are currently least prepared. It's clear from the survey, however, that a lot of real estate companies are working on their digital strategies and are also thinking about how they use and capture data.

Equally, much work remains to be done. Education and increased awareness of digital opportunities and threats are required to break the resistance of senior decision-makers. And companies need to get their data right before they engage in PropTech collaborations. That will entail investing in mature systems and processes for capturing, managing and analysing data that can be easily shared between applications.

It's also unhelpful for companies to be innovating in isolation. Collaboration is essential, and there's a need for industry-wide standards or common approaches for data management and digitalisation.

Above all, the industry's mindset needs to change. Currently, many property companies want digital solutions but aren't prepared to budget for them. These companies are insufficiently focused on the opportunity to improve customer service, and they are too nervous about the risks of digital investment.

Instead, they should see digital transformation as an opportunity to experiment more and learn from the results. For many, the first step should be bringing aboard the appropriate expertise – to ensure that their digital future is in the right hands – and then developing a strategy for success.

After that, the way forward will involve starting small, experimenting with innovations and becoming more agile in the process. In a fast-moving future, this agility will be essential for survival.

# About this survey

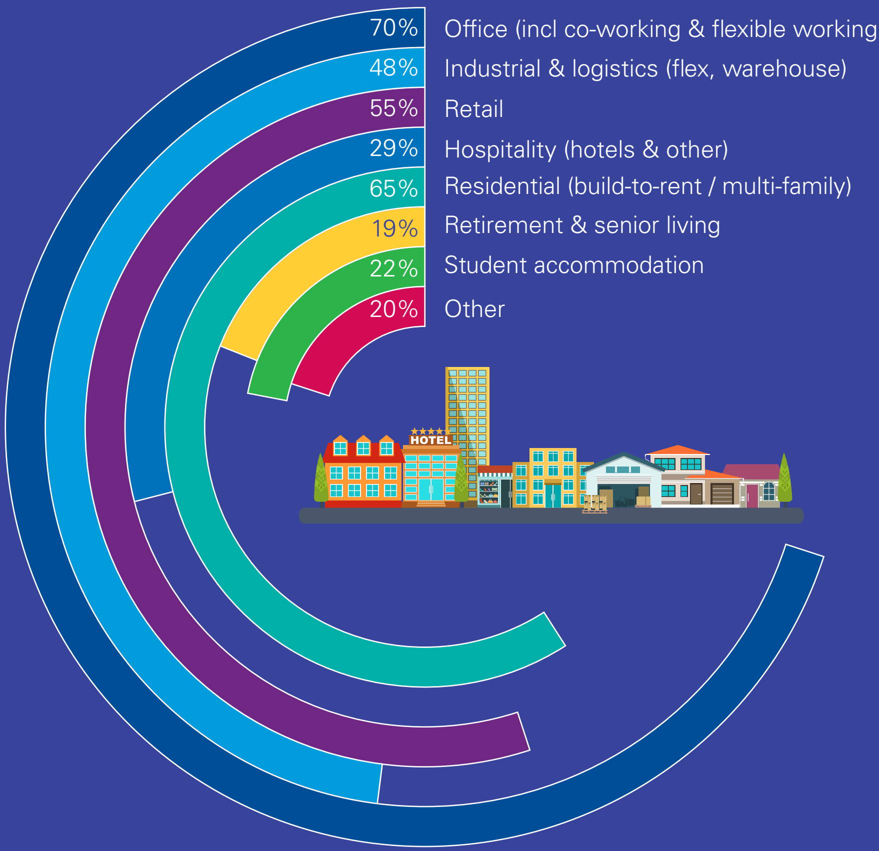
**In July and August 2019, KPMG professionals and research organisation 3GEM sought opinions on digital transformation and technology innovation from 188 real estate companies for KPMG's third annual PropTech survey.**

This covered companies from across the globe, predominantly in the UK, continental Europe, the Americas and Asia, and spanned a broad range of subsectors and company sizes. The canvassing of property companies was accompanied by a parallel survey of 92 PropTech companies.

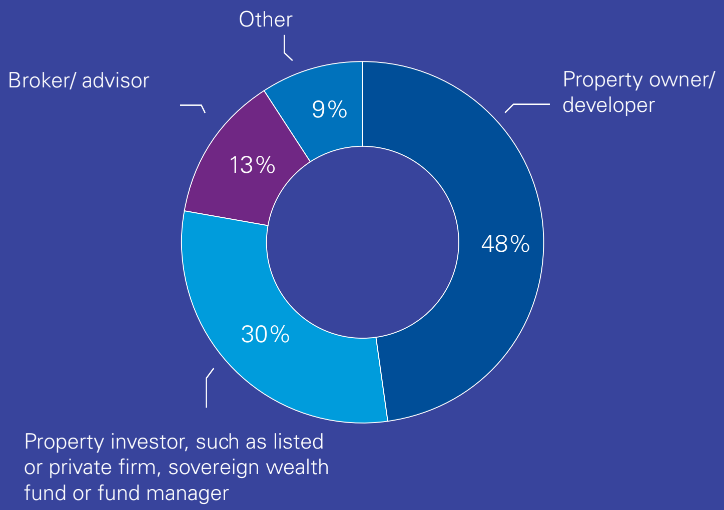
The survey tested companies' digital maturity and explored their views on issues such as data-management practices, cyber security, PaaS and system integration.

The charts show the breakdown of respondents by organisation type, asset size, property type and geography.

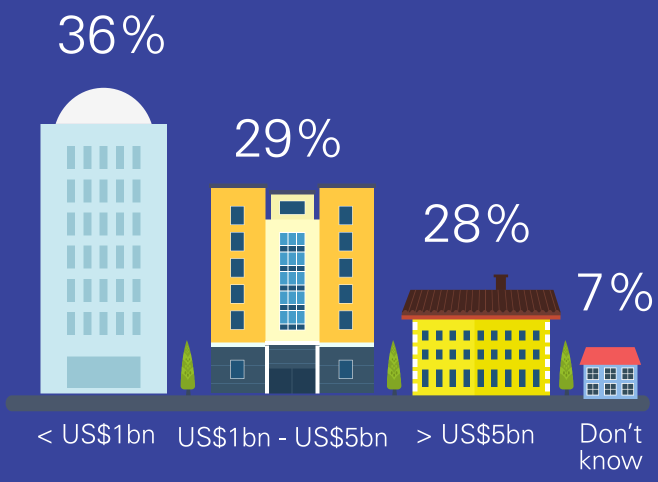
**Type of property they manage/own/invest in**



**Type of real estate organisation**




**Value of assets owner or managed**




**Region where they are headquartered**

# Contact us

### Andrew Weir
Global Chair,
Real Estate & Construction
KPMG International

+852 2826 7243
andrew.weir@kpmg.com

### Andy Pyle
Head of Real Estate,
KPMG in the UK

+44 20 7311 6499
andy.pyle@kpmg.co.uk

### Sander Grunewald
Global Lead,
Real Estate Advisory
KPMG International

+31 206 568 447
grunewald.sander@kpmg.nl

## Meet our KPMG Ireland Real Estate team

### Jim Clery
Head of Real Estate
KPMG in Ireland
+353 1 410 1172
jim.clery@kpmg.ie

### David Moran
Audit Partner, Real Estate
KPMG in Ireland
+353 1 410 2244
david.moran@kpmg.ie

### Shane McCarthy
Deal Advisory Partner,
Real Estate
KPMG in Ireland
+353 1 700 4155
shane.mccarthy@kpmg.ie

### Michael Daughton
Consulting Partner,
Real Estate
KPMG in Ireland
+353 1 410 2965
michael.daughton@kpmg.ie

### Mat Scott
Tax Partner, Real Estate
KPMG in Ireland
+44 28 9089 3810
mathew.scott@kpmg.ie

### Paddy Doherty
Tax Partner, Real Estate
KPMG in Ireland
+44 28 9089 3715
paddy.doherty@kpmg.ie

**kpmg.com**



Designed by CREATE | October 2019 | CRT118431B (5923).