FUTURE OF PROPTECH

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Check the fine print

An emergent building industry based on 3D printing is making some eye-catching claims. Is it really possible to run off a house for little more than $10,000?

Charles Orton-Jones

A 3D-printing business in the US says it can construct a home in half the time required to build a conventional equivalent – incurring only 10% of the labour cost and 10% of the waste. One of its rivals says it can print a house out for a shade over $10,000 (£7,100). It sounds rather too good to be true, doesn't it?

One person who should know the answer is Henrik Lund-Nielsen. He's the founder and general manager of Copenhagen-based firm Cobod, one of the world's best-known house printers. His verdict? "The numbers you see are usually bullshit."

First, the cost of the houses quoted in headlines is merely that of printing the concrete walls, he says. None of the other elements of the building – from windows to wiring – are priced in.

Second, there's a lack of clarity about what's actually printable. A pretty picture of a finished home suggests that the entire edifice came out of a nozzle. In fact, only its walls are printed. The rest of the building is made using more conventional methods.

And third, speeds are often overstated. Lund-Nielsen's research suggests that one much-publicised printed house that took "one day to build" had been under construction for five months.

"The motivation is to win the attention of investors," he says. "There's a 3D project in China that attracted a lot of publicity. If the company behind it had told the truth, it would have got 10% of the coverage."

The marketing tactics seem to be working, though. "How many 3D printed buildings in the world do you think there are?" Lund-Nielsen asks. "There are fewer than 50, but they are the probably the most celebrated buildings ever."

Despite this, when you look beyond the marketing hype there are still clear advantages to be gained by using 3D printing. Returning to the speed factor, the printer uses nozzles on robot arms to extrude a thick concrete – usually a mix of cement, sand and additives that accelerate the setting process – in layers. This method is genuinely quick. For instance, New York company SQ4D can make the walls of a 175m² house in 48 hours of print time spread over eight days. This operation requires three people and the materials cost $6,000 – numbers that are hard to quibble with.

Then there's design flexibility: the printers can produce any shape. Paolo Guglielmini is president of the manufacturing intelligence division at Hexagon, a developer of simulation software used by house printers such as Mighty Buildings. He says that printing offers "unique flexibility, because there's a more direct link between digital design and production. You print ideas."

Guglielmini goes on to extol the benefits of simulation: "After the design, material and process have been perfected at this stage, issues such as warpage, delamination and residual stress will all have been eliminated virtually when the home is printed, meaning that there's no need to waste time and money printing a four-tonne prototype that's warped and not in spec."

The range of building materials that can be used is expanding too, offering further flexibility. Light-gauge steel, for instance, can be printed on site or at the factory.

Jesus Jimenez is an architect and director at White Red Architects, which has been involved in a 93-unit housing project in Kent that's using steel recycled from cars. "You build a skeleton from the parts, like a massive jigsaw," he explains, noting that the speed of the printing process slashes labour costs.

Every part can be printed bespoke – something that's hard to do using traditional fabrication methods. This makes it possible to upgrade components of existing buildings with printed light-gauge steel.

Jimenez says: "The tenants in one building to which we're adding units don't even need to move out."

The more material in a build that can be printed, the more cost-efficient that project is likely to be. Buildings that don't require much wiring, plumbing, tiling and other labour-intensive tasks are particularly suitable. It's why Cobod has been looking into producing warehouses and windmills, says Lund-Nielsen, who believes that the labour costs associated with his sector of the industry will inevitably increase.

"Try getting a young English kid to work in construction," he says. "They don't want to, but they might want a job where they can control a 3D printer with an iPad."

Printing giant Ricoh thinks that the technology can add real value to humanitarian aid efforts. Richard Minifie, a senior engineer at the company, sees it as a disaster-relief solution in remote locations or a way to ease problems caused by overpopulation in the developing world, rather than a replacement for standard housing.

"There is clear potential for it in countries lacking skilled labour or where it's hard to organise a workplace," he says. "The first printed school in Madagascar is set to open its doors this year, for instance."

In the future, robots will be able to perform tasks such as plastering and running cables. We may even see androids with superhuman strength working on site. Boston Dynamics has already built Atlas, a dextrous four-limbed robot with the ability to break through concrete panels.

So 3D house printing is here and, while the PR campaign surrounding it should be taken with more than a pinch of salt, it does offer significant efficiency savings. For instance, California-based Mighty Buildings is offering to install a fully furnished one-bed house for $221,750 (£157,250). No hype – it's ready to order today.

Even Lund-Nielsen – who reckons that "between 95% and 98% of the claims published by the industry are misleading" – believes that the technology is all set to change the world. Coming from the arch-sceptic, that's quite something. ●

Michal Cizek/AFP via Getty Images

NEW YORK COMPANY SQ4D CLAIMS TO HAVE CONSTRUCTED THE WORLD'S LARGEST 3D-PRINTED HOME

SQ4D, 2020

175m²

48 hours of print time (over 8 days)

$6,000 for the materials

3 people needed to print the house

HQ boosts its IQ

Commercial landlords are hoping that a new wave of apps designed to improve the tenant experience will help office buildings to stay relevant after the pandemic

Daniel Thomas

The commercial real-estate industry has been slow to adopt tech designed to help clients get more value from the properties they use, but that is changing. A flurry of so-called tenant experience apps have emerged in recent years, enabling users to book meeting rooms, order from the on-site café, create online forums, adjust lighting levels and even monitor a building's air quality.

The aim is to do for office space what apps have already done for banking: make life easier for clients. The technology also offers landlords access to rich data about their real estate, which could aid their efforts to remain relevant once the Covid crisis is truly at an end.

It may seem like an unusual time to invest in this kind of tech, given the Covid-driven trend towards flexible working, but Jones believes that it will help her firm's offerings to become "more enticing" in a highly competitive market.

"It adds to the tools we already use for gathering data on aspects such as energy use and footfall," Jones says.

> **Tenant engagement apps are never going to be the 'iOS' of a building**

"This will enable us to gauge things from the perspective of our tenants. We will see how much they like our spaces, what retailers they're engaging with and what events they like and don't like."

Excitement about tenant experience apps has fuelled a spate of investments, particularly in the US. Chicago-based Rise Buildings was acquired by real-estate software company View The Space for $100m (£71m) in March, for instance, while

The 10ha Broadgate office campus in the City of London is one of the latest adopters. Its owner, British Land, is using a white-label system from Australian start-up Equiem to offer enhanced services to its occupiers, which include advertising giant McCann Worldgroup, investment bank Peel Hunt and cinema operator Everyman.

"People are used to engaging digitally in all other areas of their lives, so it's unconscionable for property not to do it," says Sally Jones, British Land's head of strategy, digital and technology. "Our business is about creating beautiful places – and this adds a digital layer on top of that."

The system is in still in "soft-launch mode", she says, but it will be fully activated once employees return to Broadgate in larger numbers. British Land plans to implement it at three further campuses around London thereafter.

To be successful, the apps need to act as a "thin veneer", integrating the tenants' technologies seamlessly into one coherent and intuitive interface. "This is critical, he says. "That way, we can evaluate what amenities we're offering and interact more with our clients, ultimately better serving their needs."

Boston's HqO raised $60m in series C funding in April.

Perhaps surprisingly, some of the best-known providers have increased their revenues significantly during the pandemic. Equiem, which reported record sales in the first quarter of this year, now serves 500 buildings worldwide, while HqO tripled its sales and doubled its headcount in the year to April.

Samuel Warren, HqO's MD for the UK and Ireland, believes that tenant experience apps can help to "bridge the gap between the physical office and the digital workplace" once the
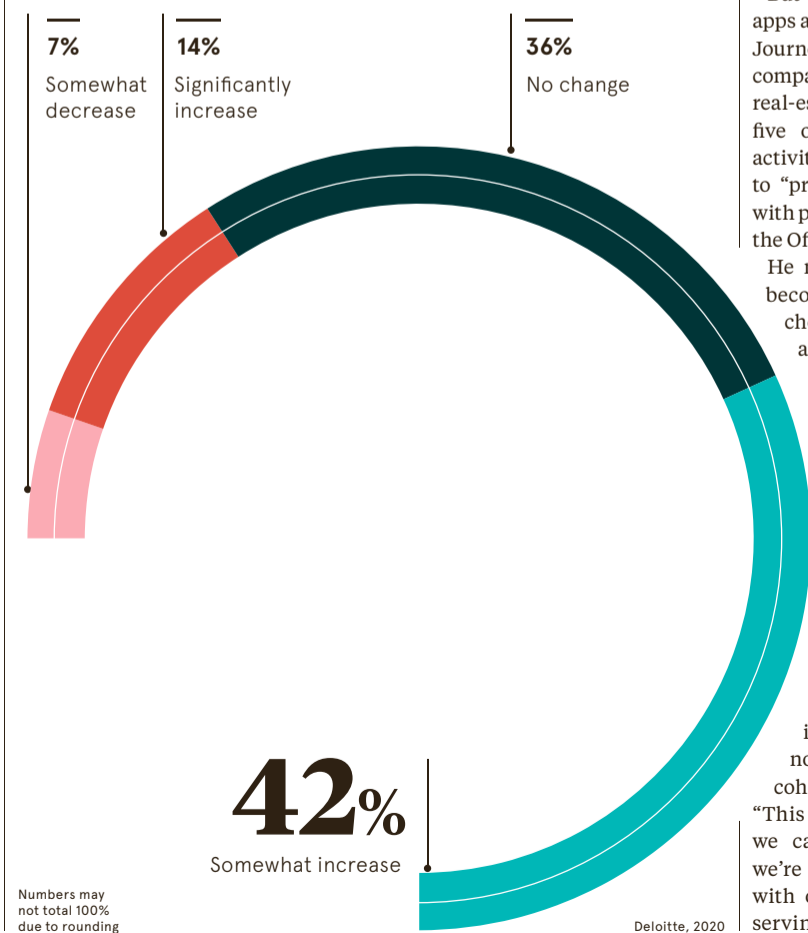
pandemic is over. They also complement landlords' strategies to attract and retain tenants by offering a more "consumer-first approach".

Warren explains: "The growth of flexible work models means that the workplace and its community have evolved past the four walls of the office building. Landlords need to find ways to create valuable experiences, for both those who are returning to the office and those taking a more hybrid approach."

Nick Romito, co-founder and CEO of View The Space, believes that the apps can also play a key role in Covid-era health and safety. He observes that the return to office life will necessitate "best-in-class technology to better manage tenants' changing requirements". Such systems offer functions such as "touchless building entry and insights into building sanitation and when common areas were last cleaned".

Market research firm Futuresource Consulting predicts that demand in the industry for such apps will continue to increase. Fears that the pandemic has put an end to office life have been overplayed, according to its associate director, Chris Mcintyre-Brown.

"Although many firms might go fully virtual in the next five years, companies will still need to meet and collaborate," he says. "A lot of office space could be repurposed as flexible meeting space. Apps will play an important role in personalising these and making them more attractive to their users."

Mcintyre-Brown sees the growth of apps as part of a wider trend towards so-called smart offices, with younger employees in particular expecting more from their workplaces. "For generations Y and Z, it's this idea of the office as a hotel – the gym on site, beanbags, the ping-pong table," he explains. "That has been hard to realise from a technology perspective, but that is changing."

But not all tenant engagement apps are created equal, warns Ronen Journo, senior MD at Hines. His company, one of the world's largest real-estate developers, uses apps at five of its complexes to support activities ranging from data mining to "promoting the brand", working with providers such as HqO, Rise and the Office App.

He notes that the app market is becoming more crowded, which makes choosing the most suitable tech an increasingly tricky task.

"There is so much energy and activity, but you need to be able to sift through that noise," Journo says. "Tenant engagement apps are never going to be the 'iOS' of a building, so we need to be pragmatic and consider what really makes sense and what's going to add true value for the occupants."

COMMERCIAL REAL ESTATE DIALS UP TECH INVESTMENT

Executives in commercial property are planning to manage their tenant-experience-related tech investments in the following ways

| 7% Somewhat decrease | 14% Significantly increase | 36% No change |

42% Somewhat increase

Numbers may not total 100% due to rounding

Deloitte, 2020

Q&A

Proptech gets its data house in order

Frustration with the cumbersome processes involved in expanding his buy-to-let portfolio drove **Matt Gilpin** to start Sprift. In providing a single source of comprehensive property information, his business is making life easier for the whole industry

Q What inspired you to start a proptech business?

A Most people would agree that buying property in the UK can be a very difficult process. I was in property investment and development when the idea for Sprift came to me. I'd always start looking at a property's details, such as plans and photos, on industry portals, but there's not much detailed information there. I'd then look at all these other websites and data sets, getting increasingly frustrated as I tried to assemble the information required to make a decision. I knew there were property data providers, but no one was aggregating that information at an individual property level.

I spent about a year speaking to people involved in property, and who have bought and sold houses. It quickly became clear that this was an issue for the wider house-buying public: a lack of access to vital information upfront at a time when you're deciding whether to buy the most expensive asset you're ever going to buy.

Q What are the ramifications when property buyers can't obtain that information at the outset?

A Information takes too long to be produced throughout the

transaction. Quite often, you can be three months into conveyancing before a piece of information arises that may stop the deal dead in the water, or certainly cause angst that requires the estate agent to jump back in and try to resell the property to the buyer. It's why many transactions fall through.

Even if you forget the fact that transactions are taking longer now because of the huge upsurge in purchases owing to the stamp-duty holiday, many were still slow before Covid. Poor access to information is usually the cause of delays – and it's then the supply of misleading information, or the late disclosure of key facts, that gives buyers the jitters.

Q How did you go about improving access to property data?

A When I decided to solve this problem, I first thought I could download data from the Land Registry and sync it with Google Maps and all this other open data. But the problem with raw property data is that it's held by so many parties. It's so disparate, and all these diverse stakeholders identify, locate and catalogue property using different methods. So we had to source the data and actually find where this information sits – a lot of it is really hidden.

Then we had to do this huge translation job, so we could produce a single trusted source of truth for all properties – of which there are over 28 million in the UK. As the data is held in so many formats by so many people, cleaning it up is a huge task. But that's what we've spent the past five-and-a-half years doing. We're also collaborators, because the more the information is shared and agreed by all parties to a transaction, the better it is for everyone involved.

Q How would you describe the Sprift user experience?

A It's incredibly simple. Any user can enter an address and

immediately gain accurate information for that property in one place there and then, making buying and selling it quicker, easier and cheaper. Once the property has been selected, the technology cross-references all of our data sets before building a fully interactive online dashboard. We pull more than 100 data points from official and trusted sources into the dashboard, which is available instantly.

We've learnt and developed based on user feedback. The information that sits on our dashboard is based primarily on responses from the estate agents who use our service. They're the first

professionals involved in the transaction, so they are the people who have – to date – benefitted from Sprift. All the information is in one place, available at the outset for anyone interested in a property.

Q What's motivating estate agents to use Sprift in such large numbers?

A While estate agents do use Sprift to convince homeowners to list their property with them, its biggest benefit lies in educating buyers. If they are better informed, there's less chance of a fall-through, because all that information has been shared and verified at the start.

This has been particularly valuable during the frantic surge of interest in viewings during the stamp-duty holiday. Estate agents are more assured that they have serious buyers if they've read the Sprift report. It's also helping to reduce transaction times.

of the most stressful things you can go through. But I firmly believe that taking the pain out of buying a property, by providing easy access to accurate upfront information, will encourage people to buy and sell more often. If you thought it was a pretty painless process, rather than three or four months of frustration and dread, wouldn't you do it more often?

One of the biggest issues facing the property industry is a lack of stock. That's mainly because people become so entrenched in their homes. They don't want to go through the pain of moving again. By drastically improving the customer experience, it's a win for every element of the industry, because there will be a lot more transactions.

For more information, visit **sprift.com**

COMPLETED RESIDENTIAL SALES FROM 1ST APRIL 2020 TO 31ST MARCH 2021

Top areas

1139	Croydon CR0
1043	Tower Hamlets, London E14
994	Newcastle-under-Lyme ST5
989	Brighton BN3
949	Bristol BS16
914	Nottingham NG5
901	Brighton BN2
893	Loughborough LE12
837	Brighton BN1
829	Leicester LE2

Sprift

> **We're keen collaborators, because the more the information is shared and agreed by all parties to a transaction, the better it is for everyone involved**

Over **28**m properties stored on the Sprift platform

1.3m property reports produced

Q What impact do you think Sprift will have on the market in the coming years?

A Next to bereavement and divorce, moving home is one

CONVEYANCING

Property solicitors must embrace tech

In a world where more and more transactions are going digital, property sales remain archaically analogue. Can conveyancers break the shackles of tradition and adopt new systems to make everyone's lives simpler?

Chris Stokel-Walker

Edward Amdur successfully remortgaged his property in July 2020, yet one crucial element of the conveyancing process – the legal transfer of title from one party to another – still isn't complete.

"I ran a search on the property a few weeks ago and there was still no update," he says. "The freeholder's name has yet to be changed on the Land Registry."

Amdur knows only too well that his situation isn't unusual. As the MD of London-based estate agency Tatewood, he's often dealing with people who struggle to get timely resolutions to conveyancing issues.

While all other parts of the property industry have embraced new tech, the legal side has not shown similar enthusiasm. That's a real problem when the market is booming, thanks to the stamp-duty holiday, and agents are still struggling to handle a transaction backlog caused by the Covid-induced hiatus in activity in 2020.

Tom Ansell, head of residential conveyancing at City law firm Shakespeare Martineau, believes that technology in conveyancing has actually "come on in leaps and bounds over the past decade. Some law firms have been adopting lots of tech really quickly." The problem, he explains, arises whenever a transaction chain involves any one of the many firms that have yet to do so.

"Conveyancing is being made all the more cumbersome, manual and fragmented by legacy constraints in digitising the processes of asset transferral and ownership authentication," says Jaco Vermeulen, CTO of digital transformation specialist BML Digital.

He believes that the main constraint is "not legality, but the attitude to embracing change", yet not everyone agrees with this view. Although a handful of law firms may well be steadfast Luddites, the industry consensus is that most do want to modernise but are confused by the variety of solutions available to them – and making the wrong purchasing decision here could prove costly.

"Some might be slightly blinded by that choice," Ansell acknowledges. "In an industry that's operated in much the same way for hundreds of years, adopting any new process takes time. This might sound like a long way off, but I'd hope that the sector is fully digitalised by 2030."

The market's bottlenecks cannot be blamed on the lawyers' slow digital transformation alone, argues Jonathan Hopper, chief executive of Garrington Property Finders. He explains that "a lot of important tech innovations rely on primary data coming from public sources, such as local authorities. Until their processes catch up with where the private sector is at, the market will remain hamstrung."

It seems bizarre, Hopper adds, that problems in getting hold of information digitally are still delaying transactions in this day and age.

For its part, the Land Registry states that it has "always focused on how we can enable digital conveyancing. By accelerating our plans for the adoption of digital ways of working – notably, in relation to digital signatures and identity checks – we are supporting the property market now and developing its efficiency and resilience for the future."

Hopper believes that the industry as a whole – including the way that property transactions work in the UK – is a key contributor to the frustrations felt by all participants. "There is a lot in the fact that, actually, the whole system is antiquated," he argues. "Is it fit for purpose?"

Amdur observes that the risk of making an expensive mistake in the conveyancing process has contributed to law firms' wariness about embracing digital tech. "Solicitors like to do things manually, because it means that they do a more thorough job," he says. "You're stuck between a rock and a hard place, where consumers want things to be done more quickly, while conveyancers believe that this would create too much potential for error."

Alison Taylor, a lawyer in Mishcon de Reya's property team, agrees with his assessment. "We are bound by a huge amount of red tape. We must ensure that anything we do complies with the regulation," she says, adding that lawyers need to decide whether they'd want their law firm to be the first to have to theoretically defend their use of a new system in court, should it go wrong.

Admittedly, the overheating property market has exacerbated the problem for conveyancers, who've been inundated with work. Solicitors in the UK handled 5,829 house sales every day of March 2021, according to HMRC. That's the highest number since records began in 2005.

Since the start of this year, the law firm to which Tatewood has regularly recommended its clients has been unable to handle any more, so Amdur has temporarily stopped making referrals.

"It's a small firm that's been processing more than 70 completions a month because everyone's been rushing in," he says.

One positive side effect of the latest crunch on solicitors' time is that it could spur the profession into action, according to Ansell. "We've got a kind of focus on this problem at a high level, which is filtering down through the industry," he says.

Amdur agrees that any concerted industry-wide effort to tackle the problem should be good for buyers and sellers alike. "Having a situation where everyone can obtain the information they need quickly will speed up the whole process massively."

Although it has already been extended once, the stamp-duty holiday is due to end in England and Northern Ireland on 30 June, when there will be a staggered return to the previous set of tax bands. If all goes to plan, that should have a cooling effect on the market and gradually ease lawyers' caseloads. But, until that happens, many overworked conveyancers will be obliged to leave the task of managing any kind of digital transformation on the back burner. ●

> **Solicitors like to do things manually, because it means that they do a more thorough job**

HOW FAR HAS THE SURVEYING PROFESSION PROGRESSED IN ADOPTING PROPTECH?

Percentage of surveyors from organisations of all sizes throughout the UK ranking their firms' proptech adoption on a scale of 1 to 10 (where 1 is no adoption and 10 is fully adopted)

No adoption

01	20%
02	7%
03	10%
04	7%
05	12%
06	15%
07	11%
08	10%
09	4%
10	4%

Fully adopted
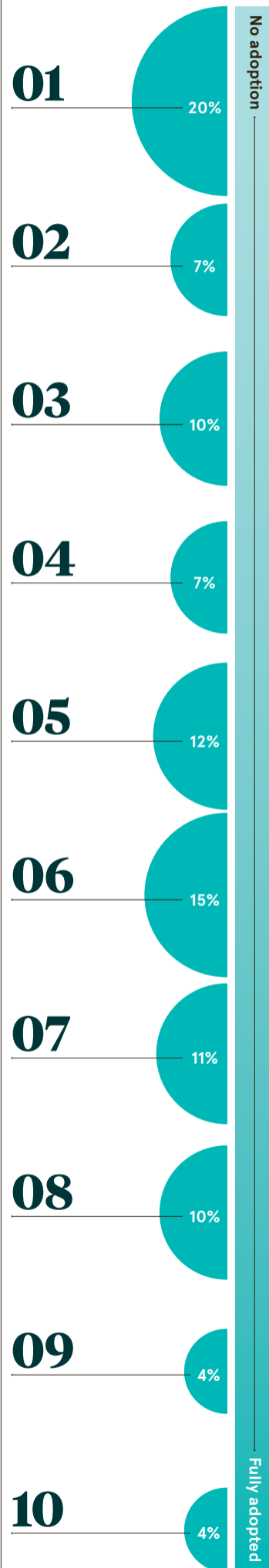
Royal Institution of Chartered Surveyors, 2020

Property squares up to digital transformation

The experience of buying and selling a home in the UK is primed for digital transformation which will not only improve the process but also result in a happier society as a whole

The customer experience has advanced significantly in recent years across multiple industries. Whether it be navigating to a location on Waze, hailing a taxi on Uber or ordering a pizza on Deliveroo, many sectors have invested heavily in the consumer's digital journey as expectations have evolved. One industry where the experience has remained stubbornly similar, however, is one which often leaves consumers the most frustrated: property.

That frustration is typically fuelled by a collision between infrequency and expense. Tasks such as ordering products on Amazon or online banking are done so frequently that they become almost instinctive. With an intuitive interface to support the user journey, customers feel comfortable, relaxed and in control. Buying a property, on the other hand, is something a home-mover has done only a handful of times in their life, if at all, so it's highly unfamiliar, and the industry hasn't been great at guiding people through the process in a simple way.

When this unfamiliarity meets the sheer expense of buying a property in the UK – typically the most expensive purchase anybody will make – the result is a very stressful experience. Although there is a huge opportunity to transform the customer experience of buying, selling and owning a home in the UK, through the use of innovative technology, there is a large, distributed ecosystem of providers that must first line up behind that goal.
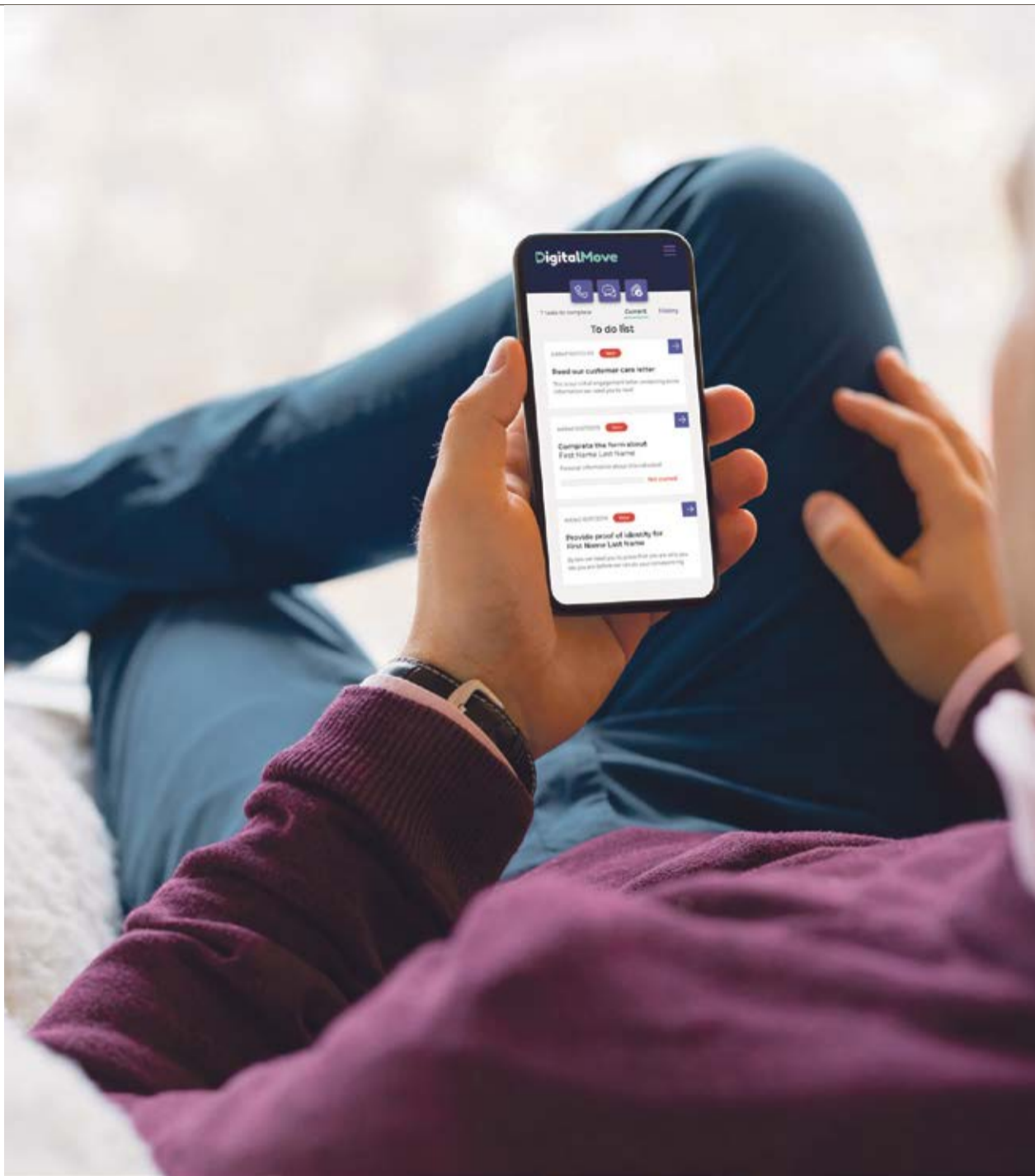
"I just bought a house myself and, even though I think I'm a pretty rational person, having to remember what happens at what time – do we need to buy insurance at this point? How do we sort out moving the utility bills? Do I need to give notice to people? Why do I want to look at this legal document from my conveyancing lawyer? – was difficult and stressful," says Jesper With-Fogstrup, CEO of ULS technology, a tech company in the property and legal industry.

"If you've had a bad experience, why would you expose yourself to it again? By the time you would do it again, you've forgotten all the details but you remember how stressful and horrible it was, and how your relationship was maybe on the brink because you went from that state of excitement about moving to your dream home, to the trauma you have to go through to actually make it happen. Technology can help with all of those things, both to contextualise what you're doing and to help facilitate a much more frictionless experience."

ULS is already well known among conveyancers and brokers as the company behind eConveyancer, an online comparison service where solicitors compete to be instructed by customers introduced by lenders and intermediaries. The platform accounts for around 5% of all new conveyancing instructions in the UK's mortgage and remortgage market. ULS also offers online comparison services for lease extensions, wills and estate agents.

Over the last two decades, ULS has helped over 800,000 people buy or sell their home. Now, however, it is setting its sights on revolutionising the whole home-buying journey through one centralised digital property platform, DigitalMove, which enhances the conveyancing process through a modern, intuitive user interface and more consistent user experience. Already, more than 45,000 property transaction cases have run through the DigitalMove platform.

"We're harnessing all of our knowledge and experience from 20 years serving the property and legal industries to create a super way to buy, sell and own a home," says With-Fogstrup. "The industry as a whole is really ready for it. Everybody I interact with talks about the friction and the need to improve the process, and that has encouraged us to dramatically improve this experience.

"We built the first iteration of the DigitalMove experience where we're helping people get onboarded with their conveyancer, so instead of reams of paper that, quite frankly, are not good for the environment and probably nobody is going to read anyway, we managed to create a more consumer-friendly journey for onboarding through a smartphone or computer. We also created a safe environment for people to communicate about their transaction.

"We hear from both consumers and from the professionals that they're enjoying this experience. But we want to make it even better so we have a roadmap full of further enhancements – from the moment you start thinking about buying a property to finally moving into your new home. We are committed to making the whole process more seamless, as well as more personally and contextually relevant to each person, so that everybody buying or selling a home constantly feels in the loop and totally in control."

By investing in this experience, which is only going to continue to evolve in the years ahead, there is an opportunity both to transform people's mindset and attitudes towards moving home, and for everyone involved in transactions to build trust with their customers. If people find the experience of buying a new home less stressful and off-putting, it could have hugely positive implications for communities as a whole and general happiness in society.

"Success for us is that people think 'that wasn't so bad, I can do it again'. If we get people to that point, we've achieved something much bigger," With-Fogstrup adds. "People will be more likely to move to a place they really desire to move to, and they'll take risks they're not currently willing to take to change their life. As a result, we'll have a more transient, mobile society that is happier, not only because they didn't find moving so stressful, but because they are living where they actually want to live their lives, with a better balance of what's important to them. That's ultimately what we want to achieve with the DigitalMove platform."

> **We are committed to making the whole process seamless as well as contextually relevant to every person. We want everybody buying or selling a home to feel fully informed and totally in control**

For more information, visit
www.digitalmove.co.uk/raconteur

DigitalMove

WILL INVESTMENTS IN PROPTECH CONTINUE TO RISE?

Number of real-estate tech deals made worldwide from 2014 to 2020

PwC, 2021

Year	Deals
2014	209
2015	317
2016	377
2017	430
2018	500
2019	510
2020	501

94%
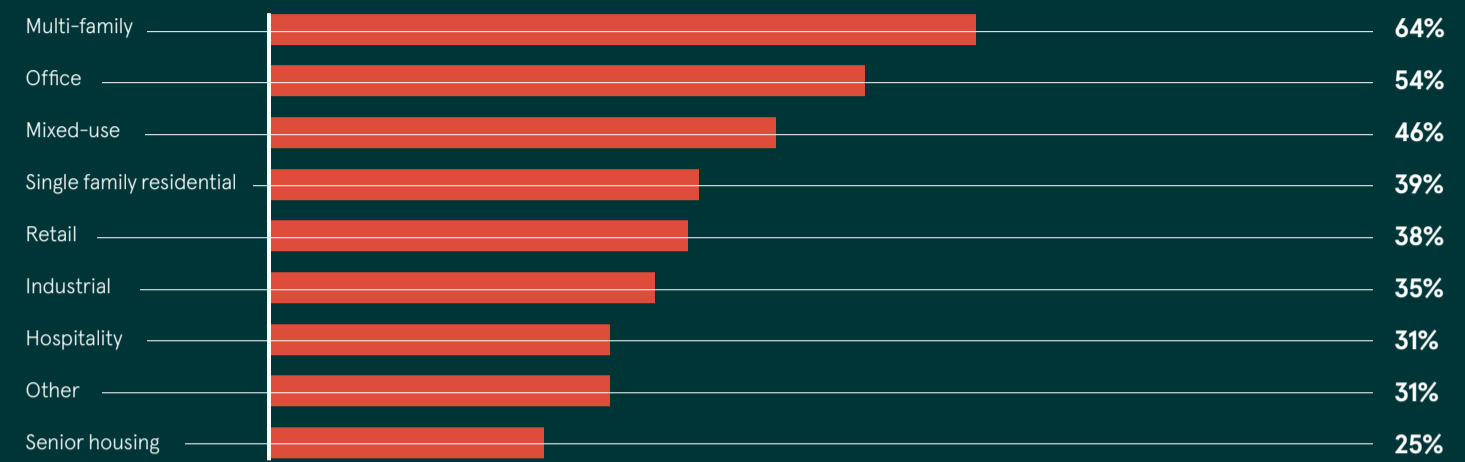of investors believe that Covid-19 will accelerate the adoption of proptech

76%
of investors expect to see more acquisitions over the next 12 months

Metaprop, 2020

WHICH AREAS ARE PROPTECH START-UP FOUNDERS INVESTING IN?

Focus of proptech start-ups on property asset types worldwide in 2020

Royal Institution of Chartered Surveyors and Real Estate Board of New York, 2020

Asset type	Share
Multi-family	64%
Office	54%
Mixed-use	46%
Single family residential	39%
Retail	38%
Industrial	35%
Hospitality	31%
Other	31%
Senior housing	25%

32%
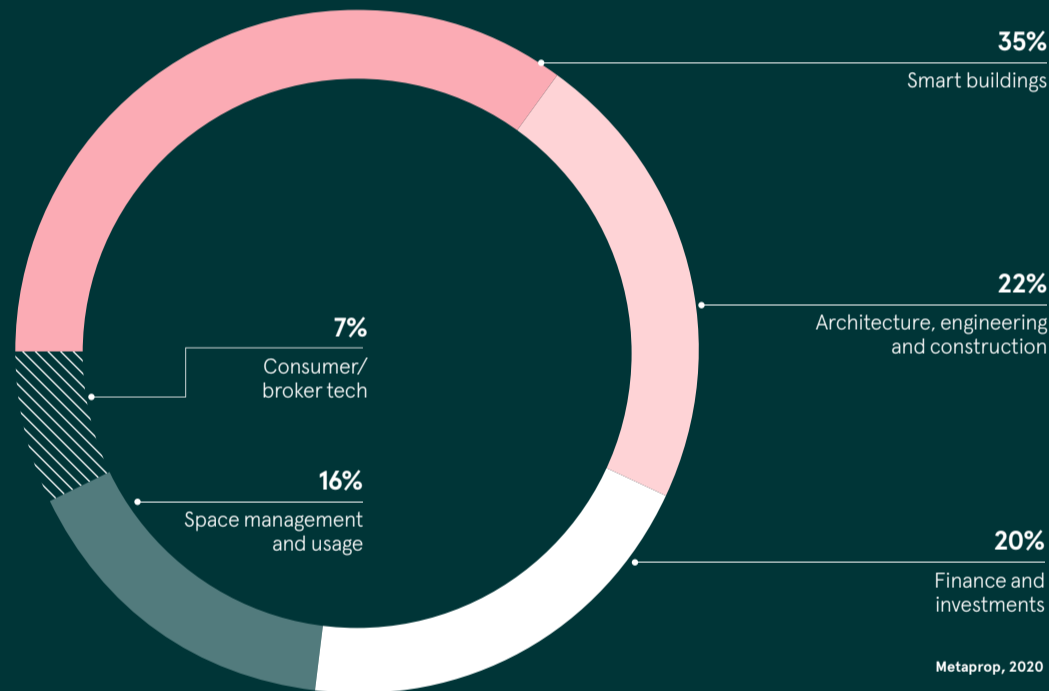of proptech start-ups expect it to be easier to raise venture capital over the next 12 months

10%
of start-ups expect their space to be less competitive over the next 12 months

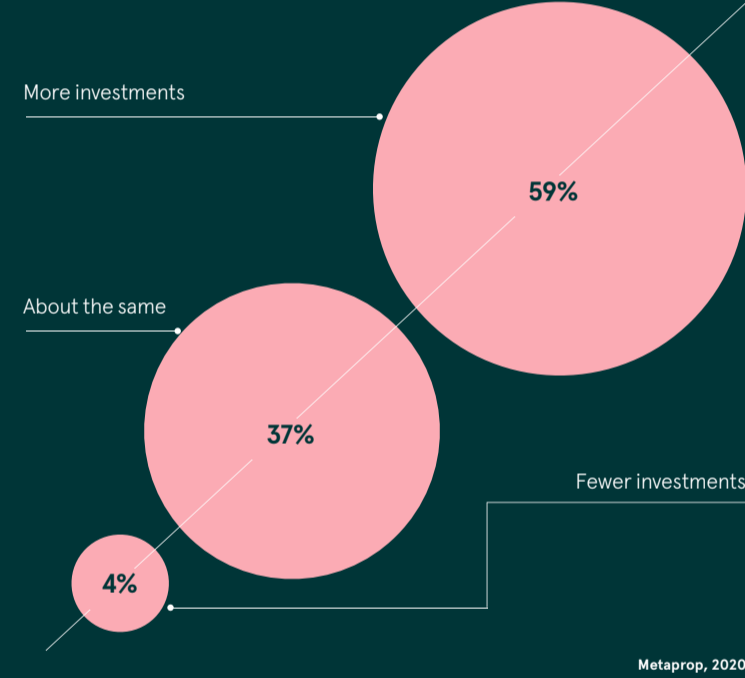Metaprop, 2020

WHERE ARE INVESTORS PUTTING THEIR MONEY?

Share of proptech investors interested in selected areas of innovation worldwide in H1 2020

- 35% Smart buildings
- 22% Architecture, engineering and construction
- 20% Finance and investments
- 16% Space management and usage
- 7% Consumer/broker tech

Metaprop, 2020

INVESTOR PLANS FOR 2021

Investors expect to make the following number of proptech investments in the next 12 months

- 59% More investments
- 37% About the same
- 4% Fewer investments

Metaprop, 2020

HOW FOUNDERS ARE FEELING ABOUT GAINING INVESTMENT

Share of proptech CEOs on how easy it will be to raise venture capital over the next 12 months

- 39% Easier to raise
- 45% About the same
- 16% Harder to raise
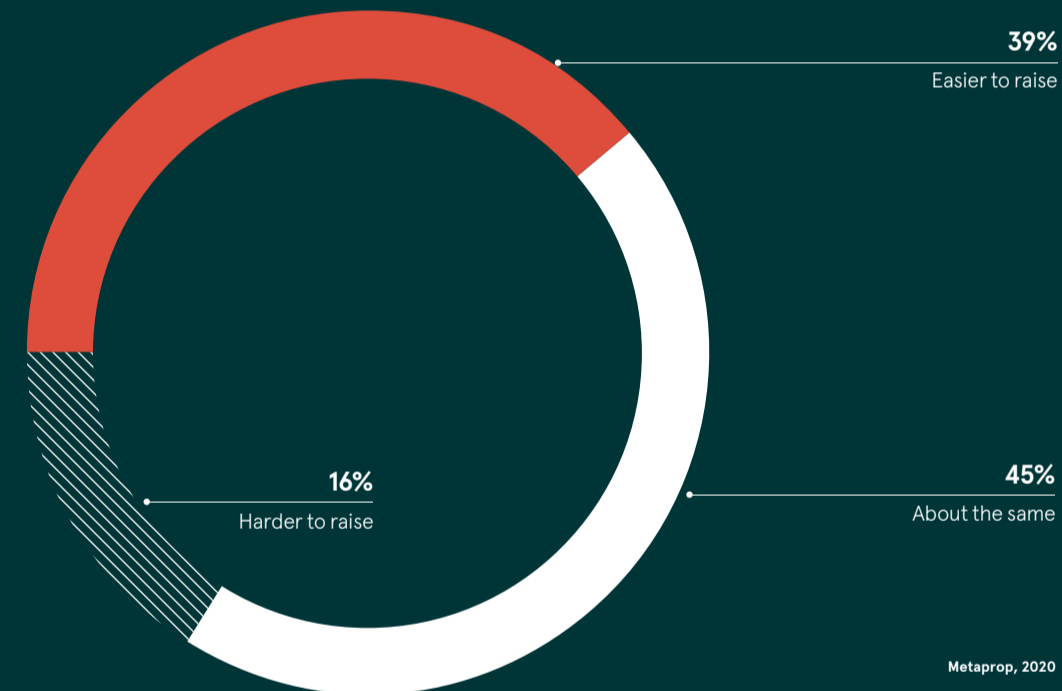
Metaprop, 2020

HAS COVID-19 HELPED OR HINDERED PROPTECH'S ASCENT?

The impact that CEOs believe Covid-19 will have on adoption of proptech in the real-estate industry

- 92% Accelerate adoption of tech
- 4% No change
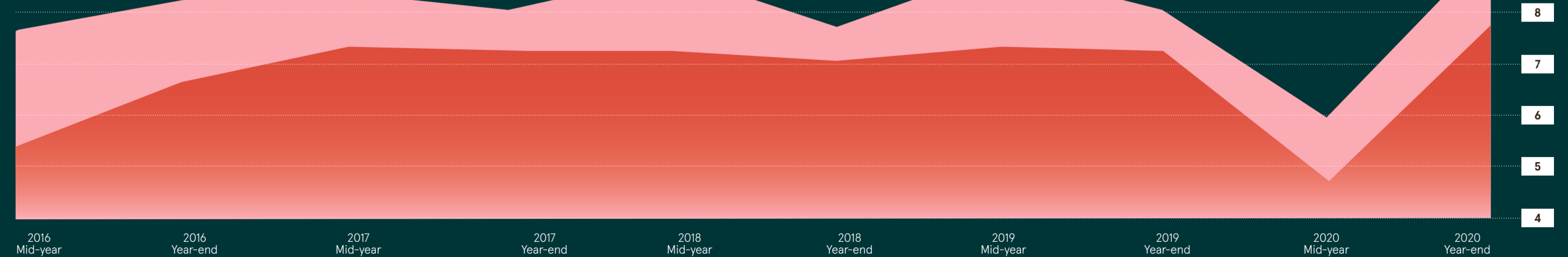- 4% Decelerate adoption of tech
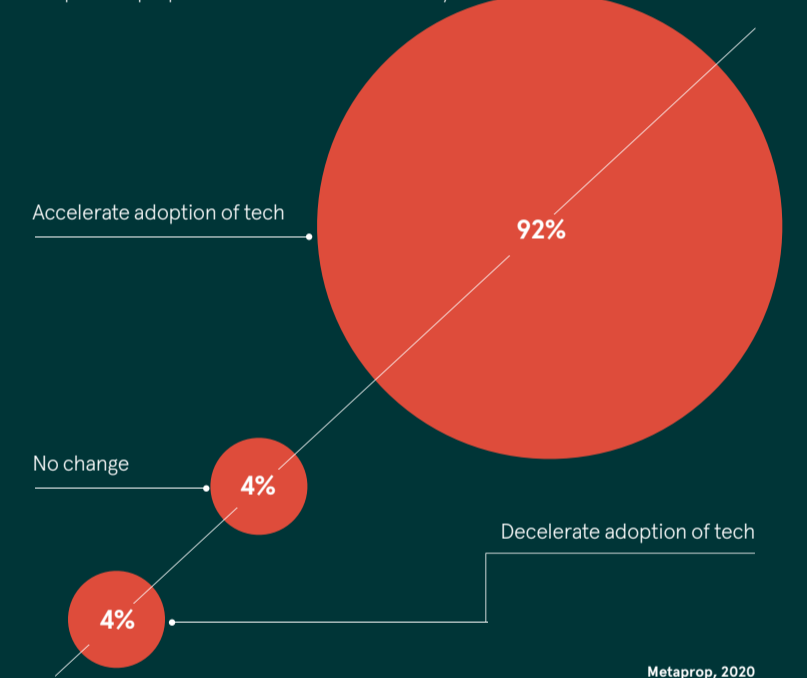
Metaprop, 2020

INVESTING IN
PROPTECH

Covid-19 has shaken the confidence of businesses worldwide but, when it comes to proptech, investors don't seem worried. So where are venture capitalists pouring their money – and has this confidence spilled over to the start-up founders of proptech providers?

● **Investors** ● **Founders**

START-UP FOUNDER VS INVESTOR CONFIDENCE IN PROPTECH

The confidence index is based on response to four sentiment questions about future market expectations and has a range of 0 to 10. A score above 5 indicates responses are confident in the market, whereas a score below 5 indicates that they aren't confident

| 2016 Mid-year | 2016 Year-end | 2017 Mid-year | 2017 Year-end | 2018 Mid-year | 2018 Year-end | 2019 Mid-year | 2019 Year-end | 2020 Mid-year | 2020 Year-end |

Fly-through-the-wall documentaries

Immersive tech such as VR is finding applications in the property industry, from detecting architectural flaws before a brick is laid to helping vulnerable people sell their homes while self-isolating

Sarah Dawood

Courtesy of Aspire

Property design: helping clients to visualise their dream homes

Architecture firms are using VR to showcase yet-to-be-built residential properties to prospective buyers, inviting their input before construction begins. This makes home design a more collaborative effort.

"We've made sharing this process a cornerstone of our practice, developing many tools to make it accessible," says John DeForest, founder and principal of DeForest Architects.

Using headsets, hand controllers and IrisVR software, the Seattle-based firm's architects are able to walk their clients through their virtual designs.

"Many clients find traditional 2D drawings hard to interpret, so VR offers an intuitive way to evaluate spaces, offering insight on room proportions, lighting and window views," says DeForest, adding that many of these insights would be tricky to gather even from physical 3D models.

For instance, a VR walk-through of a planned house with views of Mount Rainier enabled clients to envisage how the volcano would look from various windows.

Features such as latitude, time and date can be entered into the system, which can demonstrate how natural light would move through a property throughout the day. This has enabled clients to make choices such as whether to install a pool in the garden or not, depending on how much time it would be exposed to the sun.

Different design iterations can also be made and flicked through in VR, helping clients to decide how to use a space. For instance, the buyers of a converted barn were shown different functions for it, from a dance hall to bedrooms for children.

This all helps to manage expectations, says DeForest, who adds: "It lowers stress levels and reduces the chance of a last-minute scramble. One of the most expensive and unhappy things is a client not understanding what they're going to get."

And there's also an environmental benefit: fewer meetings in person are required. "Sometimes we work with clients at great distances," he says. "So meeting them in a VR property means that there's less flying to do."

Construction: using VR to spot problems early

On big commercial projects, VR can help construction firms to design with precision and avoid costly alterations during the build.

Anglian Water's construction arm, @one Alliance, uses Resolve VR software to build water treatment centres, for instance. Three-dimensional models are designed and exported to the program. Users don headsets or access the system on their desktops, look around the space and click into individual objects to explore these in more detail. The system also has a 'fly' mode, enabling people to move around at height or see through layers of the model.

This ultra-immersive feature enables design experts and novices alike to review models and spot problems such as valves that would be hard for maintenance engineers to access or inefficiencies in the pipework.

"The use of VR allows teams to confidently assess the site for issues before it gets built and increases engagement with our existing 3D models, improving the quality of the real-world product," says Richard Morris, engineering implementation manager at @one Alliance.

He notes that obtaining internet access and sufficient bandwidth to use the system can be hard at some of the company's more remote sites.

"You need to connect to 4G or Wi-Fi to download 3D models and join meetings," Morris says. "The situation is improving, but it is frustrating that many rural areas of this country still have poor connectivity."

Courtesy of DeForest Architects

Construction: using AR to create digital replicas

Coral Butler, group head of digital project delivery at the Dublin-based PM Group, uses XYZ Reality's AR software HoloSite through glasses while out on site overseeing major construction projects.

This enables her to project her digital model on to a building at any stage of construction so that she can spot any discrepancies and make changes in her design software later. This ensures that she has the most accurate virtual version of that property – a 'digital twin' – as the project continues.

Using HoloSite helps to accelerate the construction process, reducing the likelihood of excessive design changes, which usually mean a lot of extra work for the builders.

"It saves on a huge amount of building information modelling processing. This eliminates costs and unnecessary resources," Butler says.

Courtesy of XYZ Reality

One way that the process could be improved is through automation. "If you're out on site and something is not the same as in your 3D model, you have to raise an issue manually," she explains. "Ideally, that would be automatic, feeding straight back over the cloud to your design software."

Courtesy of Aspire

Viewing and selling: virtual tours for buyers and renters

Over the past 18 months there has been a significant increase in the number of estate agents using virtual viewings to let buyers assess their properties while averting unnecessary travel during the pandemic.

London-based agency Aspire, for instance, has been using Matterport VR software. Its digital tours, which are opened via a hyperlink in an email invitation, can be controlled by the agent or the client. They are accompanied by the agent's narration as they walk through a property together. It's the closest someone can get to a real-life viewing, according to Aspire's MD, Matthew Dabell.

"It can save a lot of time for prospective buyers or tenants," he says. "I think those who are seeking to move from a distance tend to find it more useful than someone moving locally, where a physical viewing is relatively easy to arrange."

The virtual tours help buyers to narrow down what features they really need in a property before committing to physical viewings. The facility is a time-saver for staff and has been especially helpful for vulnerable clients. One older person's house was sold by Aspire last year after 22 virtual viewings followed by only two actual visits.

House dressing is another useful tool at the agents' disposal. Various decorative styles can be superimposed on to images of an empty home, giving buyers a better idea of how it could feel with their tastes applied. Dabell reports that a "Scandi redressing" helped his firm to sell a house in Fulham for £1.3m this year.

This relatively simple VR system does not require headsets and can be helpful for property buyers, but there is "no replacement for a full physical tour to provide that warm, fuzzy feeling when you find your dream home", Dabell stresses. "And it is, of course, still vital to see the finer details of the property and suss out the local area."

The future of immersive tech in property

John DeForest thinks that the virtual viewing experience will become ever more lifelike as the technology advances. "It'll be really valuable for sales when VR becomes more realistic," he says. "That will create a real emotional impact, which architectural renderings just can't achieve."

Coral Butler thinks that automation could streamline the use of AR. She hopes that the technology will become intelligent enough to recognise discrepancies itself, so that users no longer need to flag these up manually.

"This technology is revolutionising construction, making processes leaner, protecting our schedules and enabling us to allocate the right resources," she says. "The possibilities are endless." ●

Courtesy of Aspire

CYBERSECURITY

Internet of stings

A smart building isn't nearly so smart if its online connectivity is making it vulnerable to hackers. Can you say for sure that your networks are secure?

Christine Horton

In 2017, hackers stole several gigabytes of sensitive data from a Las Vegas casino. It was later discovered that their point of entry to the network was a newly installed fish tank, which had an internet connection enabling it to be monitored remotely.

This case illustrates the security risks posed by the increasing use of the internet of things (IoT), especially in the shape of smart sensors that track the performance of commercial buildings. Each one of these represents a potential chink in the network's armour.

Cybercriminals can find vulnerabilities in devices that most of us might not even consider to be vulnerable. For instance, when Joe Biden moved into the White House in January, even his smart exercise bike was deemed too much of a security risk.

Before the IoT revolution, most buildings' systems tended to be self-contained and therefore safe from hackers, says Nick Morgan, information security manager at property investor Derwent London. This began to change with the introduction of remote management via permanently connected smart sensors.

"Poorly configured building management systems, which handle aspects such as access control and air conditioning, or even a landlord's network infrastructure can provide a gateway to a remote attacker," he warns.

As IoT devices continue to proliferate, the need to secure these from attack becomes paramount, says William Newton, president and MD of WiredScore, a provider of certifications rating the quality of digital infrastructure in buildings.

"All IoT devices present possible entry points for hackers," he warns. Letting any one of these go unprotected is "the digital equivalent of leaving a small window open downstairs whenever you leave the premises. Everything that's linked to your network – from lighting to the CCTV system to the elevators – needs to be subject to the same stringent security protocols as those applying to databases containing confidential information."

Sally Jones, head of strategy, digital and technology at property firm British Land, observes that the rapid adoption of technology in the built environment has left some people behind the curve. "We're working hard to educate them as to why this area is so important and why it takes a long time to get a certain supplier on board or to get everything connected," she says.

Earlier this year, WiredScore began offering a certification called SmartScore. Jones reports that this new benchmarking system is "helping us to bridge the gap in our organisation. We're using it to communicate why cybersecurity is important and what it means to be a secure smart building."

But it's still too easy for even the biggest firms to ignore the cybersecurity risks in their eagerness to adopt smart new proptech.

Craig Young is principal security researcher at Tripwire, a provider of threat-detection software. He says that he once discovered a vulnerability at WeWork that was leaving the coworking giant's building control systems exposed to hackers.

"I was able to contact someone there and they quickly changed their systems, but often I can't get any kind of response from people in this industry," he says. "For instance, I know that there's a company in the construction-safety field that seems to be exposing its customers to potential attacks. After months of phone calls and emails, I've been unable to get the ear of anyone there who cares."

Young believes that, in many such cases, firms find it hard to conceive that something as seemingly inconsequential as a thermostat can become the ideal discreet entry point for a hacker. His advice to property management firms is to "invest time and money in security testing, monitoring and strategy now, rather than spending it later to clean up after a breach".

Ed Cooke, CEO and managing partner at Conexus Law, believes that there's also a risk concerning the demarcation of responsibility for cybersecurity in many companies. He explains that, while a firm's head of IT will typically focus on protecting operational systems, "buildings are increasingly being run by computers that aren't within the IT team's remit. These are probably managed by a facilities director or property director, depending upon the size of the business. Indeed, they may even be managed by the landlord."

The 2021 Queen's Speech included proposals that would oblige the manufacturers, importers and distributors of smart products to ensure that those available for purchase in the UK meet minimum security standards. But what action can building managers and owners take now to ensure the cybersecurity of new IoT installations?

Luke Portelli is a building manager at US real-estate and investment giant CBRE. He suggests that one obvious way to mitigate risk is to ensure that sensors in a building are kept independent of the control systems. "This way, if the IoT is hacked, the most the cybercriminal will be able to manipulate is secondary data," he says.

Portelli cites WeMaintain's secure, IoT-enabled elevator maintenance set-up as a case in point. It operates in a secure private cloud, with the operating and monitoring systems operating separately from each other. This enables CBRE to retain control over the operation of the elevators and other essential systems in the building while still benefiting from the IoT data provided.

Property companies should also question their building management partners, advises Tiago Dias, a cybersecurity consultant at commercial property insurer FM Global. There's a risk that these "third parties may be the weakest link", he says. If their systems become infected, "they'll need to block the connections that link to the building management equipment".

He continues: "Another example is where devices have weak security features – for instance, hard-coded default passwords – that can be exploited by attackers aiming to take control of a system. They can use botnets to flood the network with high volumes of data, disrupting targeted services in what's known as a distributed denial-of-service attack."

Dias ends with a clear message for building managers. "You need to ensure that your managed devices are fully protected," he urges. "These must not be exploited or utilised as launchpads for malicious gains." ●

> Howard Kingsnorth via Getty Images

> **Invest time and money in security testing, monitoring and strategy now, rather than spending it later to clean up after a breach**

COVID HAS EXPOSED VULNERABILITIES IN THE COMMERCIAL REAL-ESTATE SECTOR

Percentage of executives in commercial property who believe that the pandemic has exposed problems with their firms' digital capabilities and affected plans for transformation

Numbers may not total 100% due to rounding
Deloitte, 2021

56% Agree/strongly agree	26% Somewhat agree	15% Neither agree nor disagree	3% Somewhat disagree	2% Strongly disagree

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OPINION

'Proptech can play a vital role in realising three ambitious goals that the government has set itself'

Proptech can do more than digitally transform an industry. It is also facilitating environmental, social and economic progress in the UK. Ministers and key players in the property sector recognise that proptech can play a vital role in realising three ambitious goals that the government has set itself. These are: cutting the nation's carbon emissions to net zero by 2050, while at the same time building 300,000 homes a year and achieving an average annual GDP growth rate of 2.8%.

It's not surprising that the pandemic has challenged the property industry, but it has prompted businesses to redefine their working practices in such a way as to serve the government's aims. The widespread adoption of virtual viewings and e-documentation, for instance, has created a new 'business as usual' that will, I hope, remain beyond the reach of Covid-19.

Two-fifths of the country's total greenhouse gas emissions come from the built environment, which suggests that the property and construction industries can play a key role in meeting the government's carbon-reduction goal. The UK PropTech Association has adopted the motto 'first comes data; then comes action'. A great example of this is how data collection can help building managers to optimise the consumption of energy, a third of which is typically wasted in buildings owing to poor property management. With the help of proptech, they can reduce carbon emissions by optimising heating, ventilation and air-conditioning systems, utility meter readings, space usage and more. To say that data is useful would be an understatement. Data is critical.

Meanwhile, construction technology is helping traditional construction companies assess the environmental impact of conventional building materials and processes, pointing them towards more eco-friendly options. Reinventing the industry with the aid of modern methods of construction (MMC) such as modular construction will demonstrate that MMC is not a mere buzz phrase. It has been predicted that modular construction alone could accelerate the development of new homes by 30% and reduce their energy consumption by up to 20%.

Construction is only half the challenge, as the task of securing planning approval is taking up a growing proportion of the whole process. Streamlining is required here if 300,000 homes are to be built each year. Proptech has been at the heart of the planning reforms announced by the government last year, focusing on digitising the process and providing benefits for communities. For example, community engagement tools and 3D models enable a larger and more diverse set of interested parties to have their say about urban developments. Town-hall meetings attended by only the most vocal citizens should become a thing of the past.

The benefits offered by proptech are many and varied, but what all these systems have in common is their ability to improve efficiency and productivity. Some of these gains have the potential to benefit consumers directly. As I write, I am six months into the process of buying my first home. Yes, that's half a year. The average length of a transaction has increased considerably in recent times, which is frustrating for all concerned. While many of the factors that cause delays are uncontrollable, proptech has been making some progress in the shape of online collaboration tools, which have improved communications and kept buyers and sellers better informed.

The continued commitment of the property industry and the proptech sector is encouraging. All things considered, with guidance from the Ministry of Housing, Communities and Local Government and other public-sector bodies, this industry has a fighting chance of helping the UK to achieve these three ambitious targets. ●

Sammy Pahal
Managing director,
UK PropTech Association

How data is oiling the wheels of property deals

Technology is becoming increasingly vital to the success of property lawyers, but the automation required to elevate their role and accelerate transactions relies heavily on high-quality information

The property law sector may not be renowned for being at the cutting edge of digital transformation, but Covid-19 has propelled it forward in the innovation stakes. Remote working has forced both residential conveyancers and commercial real-estate law firms to invest in transacting more electronically, while the stamp-duty holiday has triggered a 66% increase in completion volumes in March 2021 compared to 2019, according to Landmark's Property Trends Report, meaning that speed and efficiency have never been so important.

Lawyers play the pivotal role in facilitating property transactions. They have a long and complex task, with a focus on due diligence to ensure that each sale can proceed. Considering the enormous amount of data to be gathered – from local-authority and title searches to checks in areas such as drainage, highways, insurance and fraud – this is not something that should be rushed.

Even when it's not rushed, a monotonous task is still prone to human error. Mistakes only prolong transactions, which is bad for all concerned. Clients, of course, generally want to buy a property as quickly as possible, but so do law firms, which typically aren't paid until completion. Big firms in the commercial real-estate space also bid for complex transactions without necessarily having all the information needed to best assess whether this work will be profitable. All of this has put AI on lawyers' radars – and data is the essential enabler.

"When it comes to the property legal sector, data really is the new oil," says Dr Thomas Quirke, MD of SearchFlow, an established provider of conveyancing search solutions for over two decades. "For lawyers, proptech will play a major role in automating the monotonous, yet meticulous, aspects of the role. But data is the lifeblood. Digitised data supports the transition to automating specific tasks, enabling property professionals to maximise opportunities while minimising risks."

He continues: "Conveyancers will tell you that transaction volumes in the residential market are stratospheric. Having at-a-glance access to data for a wider area beyond a property, meanwhile, is important at the commercial level of the market. Yet what's really important to all lawyers is the client relationship. Automation can free up their time to focus on human relationships, but the accuracy and consistency of data is make or break."

Property lawyers work with SearchFlow to access searches, due-diligence data, insurance, and ID and money-laundering checks. It has completed 5 million instructions and 26 million searches, enabling more than £1.2tn-worth of transactions. Part of Landmark Information Group, holding the UK's largest property and land databases, SearchFlow works with more than 2,500 legal clients to provide certainty and data, delivering efficiencies to the whole transaction process. Crucially, its access to 700 data sets and 1 billion data points enables it to create the AI algorithms that facilitate insights that are then flowed quickly into law firms in such a way that, if a lawyer handling a transaction goes on leave, someone else can take over. It provides efficiencies and cost reductions while maintaining compliance and better accuracy than human beings are capable of. Law firms can therefore focus on giving their clients expert counsel.

"For us, it's about giving lawyers the maximum amount of contextual and relevant data they need for each property," Quirke says. "They are the final people arbitrating the risk, but our technology flags all potential issues on any given property and gives them the exact insight they require to keep the client informed on progress. Commercial real-estate lawyers, meanwhile, can refer to our 'class-leading mapping systems for rich information about a property's surrounding area to inform whether and how they should bid. We save people time – and time is a lot of money in this sector."

> **For lawyers, proptech will play a major role in automating the monotonous, yet meticulous aspects of the role**

For more information, visit
searchflow.co.uk

SEARCHFLOW

Courtesy of Fabrix

Safe space: bringing staff back to office life

Many people have grown so fond of remote working that employers are having to make HQ a more enticing environment. But are rooftop pools and cinemas really what employees want?

Sam Forsdick

Once the employees of Samuel & Co Trading return to their base in Watford, they will be greeted by an array of new wellness benefits. They'll be able to check their emails while working out in the refurbished gym, spend lunchtime relaxing in the steam room and round off their day with a film screening in the company's own cinema.

The stock trading and training firm has spent £200,000 on the redesign, which also incorporates a meditation space, a pool table and games consoles. Its founding director, Samuel Leach, says that the lockdowns gave him the chance to completely rethink the office space.

"The pandemic provided a good opportunity for us to get a new base sorted and to make it an enjoyable workplace," he says. "We have been trying to work out how we can help our staff benefit from going back to the office, encouraging people to return to an environment they have not been in for well over a year."

Now that lockdown restrictions are easing again, it's an issue that

many businesses are considering. When the University of Strathclyde surveyed more than 3,000 people who'd been obliged to work remotely during the Covid crisis, it found that fewer than 10% wanted to be back working at HQ on a full-time basis, while 31% would happily never set foot there again.

Such attitudes present a problem for the many business leaders who are keen to bring their teams back together and recapture the sense of collaboration that video meetings struggle to engender.

Landlords and commercial property developers are also flexing their creative muscle in a bid to attract new tenants. For instance, property firm Bruntwood Works has installed sleep pods, yoga studios and a podcast room at its Blackfriars House offices in Manchester. The company's CEO, Ciara Keeling, believes that, by bringing some home comforts to the office it will "help businesses to power up creativity, enhance productivity and generate ideas".

The transition to a hybrid model of working, where employees are

required to come to HQ only a few times a week, has put less demand on desk space. This has given designers more room to play with, leading to what Keeling calls the "evolution of workspaces into more creative and less structured spaces".

Online authentication platform Okta is also re-evaluating its approach, with plans to provide a series of "experience centres" to complement its head office. Its recently appointed head of dynamic work, Samantha Fisher, explains

that these smaller offices will "function similarly to Apple stores", enabling customers and employees to "immerse themselves in company culture, receive product demos, have meetings and work when they need to".

Not all offices are relying on tech-driven enticements. For instance, property investor Fabrix hopes that a 0.5ha rooftop forest will be the unique selling point that attracts tenants to its new office development. Based on the site of the old

Courtesy of Fabrix

Blackfriars Crown Court in London, the complex will feature more than 100 trees, 10,000 plants and a glass-bottomed swimming pool.

The company's CEO, Clive Nichol, believes that these surroundings will be able to lift the occupants' moods. "People have become more connected to nature over lockdown and we're more aware of the value it can have for individuals," he says. "Yet this is something that's rarely considered in the workplace."

Nichol observes that "incorporating nature in the design helps to soften the working environment. If you are working in a tall glass tower, you're focused on corporate outcomes. If you are in a building that has more of these sensitivities, you're able to act in a more human and balanced way."

Although not all companies will be able to cultivate their own forests, of course, there are some simple, yet crucial, alterations that they and commercial landlords can make to future-proof their workplaces. So says Dominic Dugan, director at Oktra, an office design company whose clients have included M&C Saatchi, Gymshark and Adidas.

"For the first time, employees are picking up on the intricate details that allow them to get into the office more easily and work there in a safe, positive and interactive manner," he says. "I've seen an office with a golf course in the middle of it that doesn't get used. Such things are great for attracting talent, but they do nothing for retention. When you're looking to persuade people to return, they simply want an office that performs."

For Dugan, this means making adjustments to improve air quality and acoustic performance, creating flexible meeting rooms and providing well-equipped changing facilities for people who want to cycle or run to work. "It's about having all those stepping stones to bring you comfortably to your workplace, get yourself settled quickly and embed yourself in the company's culture," he says.

Health and safety is also a key consideration when creating office spaces for the Covid era. Many businesses have noticed a heightened level of concern among employees about hygiene, for instance. A survey of workers by wireless sensor developer Disruptive Technologies in April found that more than half of respondents were afraid to return to their offices because they were worried about the level of cleanliness.

These anxieties are being reflected in office design, according to Dugan, who says: "Leaving the pandemic to one side, the office was a really unhygienic place. Aspects such as air quality are being picked up and invested in for the first time. Some companies are spending a lot of money on touchless doors."

As many companies move to a hybrid working model, enabling a smooth transition from remote working to the office will also be important. British clothing brand Joules became acutely aware of this when designing its new HQ, known by staff as The Barn.

Construction work on the company's purpose-built head office on the outskirts of Market Harborough in rural Leicestershire commenced before the pandemic struck the UK. But it soon became clear that the space needed to be altered to suit the more flexible working methods the business had adopted as a result of the Covid crisis.

The Barn was originally meant to accommodate more than 500 employees. But the company's CEO, Nick Jones, anticipates that only about about half of that number will be using the space at any one time.

"Fortunately, we had the advantage of starting with a blank canvas," he says. "We haven't had to repurpose an old building; we have been able to reshape or adjust the space with flexible and remote working in mind."

These changes have enabled Joules to expand the central atrium and create more space between workstations. Each meeting room is equipped with audiovisual technology enabling remote workers to call in for meetings, while outdoor features, including a bug hotel, help to connect the space to the company's countryside heritage.

Despite the many alterations to this multimillion-pound building, a change in company culture will be equally important in determining the success of the new workplace. "Rethinking the practical ways of working is as important as creating a conducive space," Jones says. "You have to promote a new mindset and culture. If you don't, you aren't going to make the most of the space."

The next few months will therefore be a crucial period for Joules's new home. "None of us will have got these changes completely correct," Jones admits. "We will definitely need to learn and adjust to continually improve the space and our ways of working." ●

Digital onboarding set to transform property transactions

Automating anti-money-laundering and ID checks will remove the frustration that buyers experience during property transactions, saving time and reducing risk for all parties

Amid rapid technological changes enhancing how we live and work over the past two decades, the process involved in one of life's most important purchases – a home – has barely evolved at all. Home buyers find themselves engulfed in an endless stream of requests for identity and finance documents to meet strict ID protection and anti-money-laundering (AML) regulations. Although the checks that lawyers are required to make are time-consuming and inconvenient for buyers, the frustration is multiplied when agents, brokers and lenders ask for exactly the same documents.

With so many stakeholders and competing interests involved in transactions – agents want speed, while lawyers and lenders prioritise risk mitigation – the property sector has been slower than others to digitally transform. The lack of a trusted, well-adopted tool to securely share important information about a client, which is desperately insecure and puts data at risk of landing in the wrong hands.

As the highly influential central ledger of all UK property data, HM Land Registry largely dictated the pace of property's digital agenda, but Covid-19 has accelerated the digital transformation of conveyancing. The Land Registry is now introducing initiatives such as its digital ID standard. Law firms meeting this standard – via the use of biometric and cryptographic verification – are protected against recourse in claims resulting from the registration of a fraudulent transaction.

This has paved the way for wider uptake of cutting-edge technology that can help modernise conveyancing, cutting out fraud risk and accelerating the process for lawyers and consumers. Backed by regulators and government bodies, remote technology tools were embraced during the pandemic to deal with the challenges posed by home working, social distancing and the fact that in-person identity checks became almost impossible.

"By allowing home movers to confirm their identity securely via their mobile phones, digital ID can dramatically cut the timeline of a transaction." So says Olly Thornton-Berry, co-founder and MD of Thirdfort, a fintech start-up focused on the legal and property sectors, which saw a fivefold increase in inbound leads during the first national lockdown.

He continues: "Manual identity checks can take weeks, contributing heavily to the ever-lengthening property buying and selling process, which now sits at 22 weeks. Digital ID checks take a matter of minutes and can be done anywhere."

FCA-regulated Thirdfort is a mobile app with an ID system that meets the Land Registry's new standard, combining facial-recognition innovation and open banking to streamline identity and source-of-funds checks. Harnessing the latest developments in biometric and cryptographic verification, the platform is trusted by more than 500 legal and property firms for safer, faster ID and AML checks. This government-grade offering is at the helm of fraud protection, with the technology being

used on a significant chunk of all UK residential property sales.

Automated onboarding removes the frustrating and ineffective duplication of checks, while reducing risk in any property transaction. Lawyers, for instance, can see pertinent information on a client already discovered by the agent. Thirdfort estimates that client onboarding – the process of running ID and AML checks at the start of a relationship with a buyer or seller – takes between three and four weeks of the average 22-week transaction. Automating AML checks can reduce this to less than a day, saving home movers £324m, the firm has calculated.

"Imagine if Deliveroo did ID and AML checks – that's how simple the app is to use," says Thornton-Berry. "We will be the first to launch a trusted and shareable digital ID and AML platform built specifically for the property transaction. Buyers and sellers will be able to do their checks once, up front through the app, and choose whom they want to share their personal information with to satisfy their searches. The app becomes the single source of truth that multiple stakeholders can feed into, removing risk so everybody involved can move with more confidence."

For more information, visit
thirdfort.com

thirdfort