

## PROPTech - IS 2017 THE YEAR THINGS CHANGE FOR THE PROPERTY INDUSTRY?

By Ian Shapiro

Technology has been a disruptive force in most industries and sectors over recent years. But in the real estate and construction (REC) sector, widespread adoption of new technologies has lagged somewhat. Indeed, the adoption of technology in property – or ‘PropTech’ – has fallen a little short of its anticipated take-up. For example, in the U.S., the construction industry is several years behind many other industries with regards to technology with many companies still using manual systems for project planning and management. That’s why construction remains far behind in reaping the benefits of advanced data and analytics, drones, automation and robotics.

However, 2017 is set to be the year the floodgates open for PropTech in the global REC sector, and we’ve looked at some key technologies you should be keeping an eye on in the industry this year.

### **The widespread use of drones**

Drones have been in the news for various reasons recently – both good and bad. Thankfully, they are being put to good use in the construction industry and we’re seeing things get far more efficient on projects because of them. They can be used during surveys to check the condition of hard to reach places and can be equipped with lenses that are able to read serial or model numbers, meaning that surveys can be performed in detail.

Drones not only save time (and therefore money!) but also improve safety for construction workers. For example, a roof survey would normally involve human workers climbing onto the roof, which naturally involves considerable risk. By using drones, construction companies are able to bypass this risk, without losing much, if anything, in the way of accuracy.

For this reason, we are now seeing a wider adoption of drones by construction companies. However, the popularity of this technology has had the knock-on effect of bringing in increased regulation: aviation authorities around the world have introduced regulations for drones because of perceived privacy and security concerns, with many countries now demanding licenses or permits to use drones for certain activities or around important landmarks.

### **Virtual reality – from gimmick to legitimate tool**

The use of virtual reality (VR) in property is already a \$1 billion global industry and Goldman Sachs estimates that it is set to treble by 2020. VR has its obvious uses in the real estate sector: for example, VR is used for sales and marketing in the prime residential market, where investors often live miles away from the properties they want to view.

VR is also viewed as the next phase of Building Information Modeling (BIM), and as an enhancement to computer-aided design (CAD): developers can use VR to create more realistic and detailed renderings, which are now transitioning into virtual reality walkthroughs.

Certainly, 2017 will see virtual reality transition from gimmick to a legitimate tool across the REC sector as the emergence of VR headsets, interactive hand controllers and movement sensors revolutionize how designers and contractors experience the construction process.

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## REPORT ON SPRING CONSTRUCTION COSTS, CONT'D.

### **The cloud and real-time data**

Increasingly, supervisors are turning to the cloud and real-time data to stay abreast of construction jobs. With the help of smart devices, such as an iPad or an iPhone, foremen and supervisors can follow a project in real time and identify specific “milestones” that can be checked off as a job progresses, causing invoices and payments to vendors or subcontractors to automatically generate accordingly.

### **Smart tech for smart buildings**

The term “smart building” has been in use for some time but smart technology is now making a real impact on the real estate sector. Buildings are now designed to be “smart,” which is making tenants’ and property managers’ lives easier.

By using smart devices to control things like heating and lighting, residents can decrease their bills and energy waste. Similarly, elevators can be programmed to reduce usage and automatically tell building managers when they need to be serviced. Here, PropTech is not only improving efficiency but also safety.

### **Robots in real estate**

The construction industry has yet to really adopt robotics although human-controlled machine equipment is widely used. The use of robots for high-precision activities is not new (consider welding or vehicle painting) but advances that allow robots to “see” via sensors mean that robots can now be used to perform previously human-only tasks, such as “couriering,” cleaning or gardening in hotels, warehouses or office buildings. I was recently given a coffee by a robot at a PropTech conference!

### **Cyber attacks drive interest in security**

In construction, cybersecurity issues are only now making an impression but in real estate, it is a real issue, especially as buildings become increasingly “smart” and therefore vulnerable. Thanks to the Internet of Things, everything down to your Christmas tree lights can now be controlled electronically; thus, buildings are becoming the new target of cyber attacks.

The use of ransomware is increasing and becoming more targeted to property. In recent years, it was claimed hackers stole the blueprints to Australia’s secret service agency HQ, presenting obvious terrorist threat concerns. It is therefore understandable that landlords and building owners would be concerned for the security of their assets, and must work with cybersecurity experts to protect their business.

Given the REC industry’s poor track record on innovation and the adoption of new technologies, tools and approaches, governments, developers and deliverers need to invest collectively to achieve these shared goals and future-proof the industry. In order to achieve this, firms need to develop digital road maps, appoint dedicated staff to think boldly about the digital agenda and partner with technology firms. BDO recently took a huge step toward this by partnering with Microsoft.

This is the digital age of collaboration, and the industry will soon come to realize that digital tools can be more powerful than the ones in a rusty toolbox. We all need to embrace this catalyst for change to attract a new generation of talent.

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