

Why Invest in Smart Building Technology



Thought\\'ire

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Editor Note

As we continue to work with commercial real estate leaders, we are taking this time to learn from owners and occupants to determine what will be essential to work in spaces. While there will continue to be a focus on operational efficiency, the emphasis on transforming buildings into digital platforms that provide a safe and seamless experience for all occupants is accelerating.

In this eBook, we outline the forces changing CRE business models and the organizations that will be ready to tackle the disruption head-on vs. those who may find themselves struggling to compete.



In part 1 of this eBook, we're going to dive into the motivation behind smart technologies – why now?



The commercial real estate industry is ripe for disruptive innovation. Not only due to disruption caused by COVID-19, but a variety of trends that were already starting to emerge, CRE firms are beginning to explore investing in digital technology. The line between growing real estate firms and technology companies are becoming blurred, and existing real estate giants are being forced to begin a digital transformation if they wish to stay competitive during the next wave of innovation. There are many strong reasons why companies should invest now, rather than later.

Who are the primary disruptors of commercial real estate? Smaller companies, freelancers, and enterprises are ditching traditional office spaces and are lured in by shorter-term leases, trendy decor, and up-to-date technology in the workplace.



"According to a Deloitte survey, a full 60% of CRE executives said that their organizations are not capturing their own IoT sensor data. Of the 40% who do capture this data, only threefourths are using it to generate insights for decisionmaking." Professional real estate demand is expected to decline as more of the workforce transitions to flexible hours, work from home policies, and distributed locations.

Digitally enabled transformation technologies have taken the industry by storm, and real estate firms are implementing more technology-based **solutions** to improve tenant retention, satisfaction, manage energy usage, and get better control over their built environments. Lack of perceived ROI is a barrier to many commercial real estate firms - which should not be the case. The price you pay for the technology is quickly returned in the form of preventing equipment failures, costly system replacements, responding to emergency events, and automating routine workflows. It is unfortunately all too easy to imagine a scenario where a **smart building technology** could save lives in the case of security lockdowns, building fires, and medical emergencies.

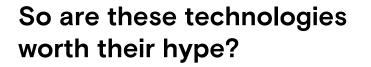


If smart building and other technology integrations become industry standard (as they are very quickly) then the real estate companies thinking in the short term will be left behind by those investing in the value of their assets. As technology continues to be adopted in CRE and business models are disrupted the future will likely see the scenario where **smart buildings** will simply be referred to as...buildings. In other words, the expectations are adapt to thrive or ignore it and die.

In Toronto – Tridel Condominiums has begun its own digital transition – implementing smart building technology called "Tridel Connect" in a 69 story community at Ten York. The aim is to improve tenant satisfaction and make workflows within the building more convenient. Oxford Properties implemented smart building technology at the EY Tower, which is seeing returns in the form of energy usage reduction and automating and orchestrating workflows between tenants and building management. Another notable build, by Menkes Developments, was the first to pave the way for smart cities in Toronto at the Telus Tower on 25 York Street.

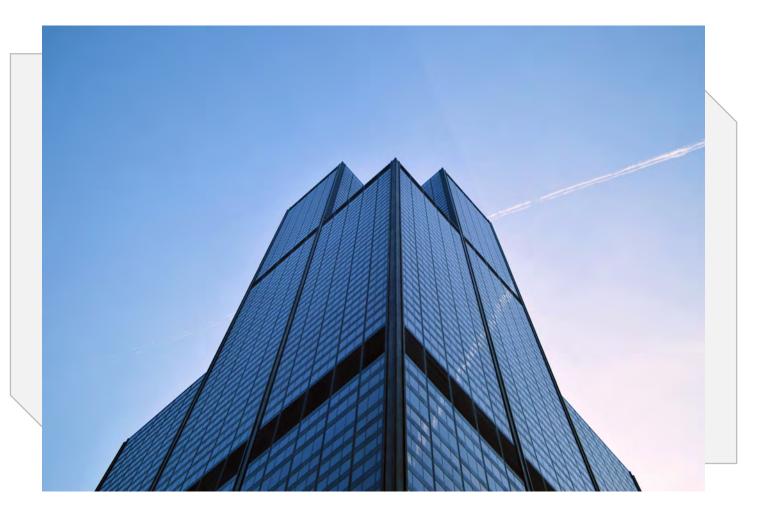
What can existing commercial real estate firms do? There is certainly a lot of noise in the IoT and smart buildings space - but emerging technologies such as a **Digital Twin** emphasize a "people-first" approach that drives real results, unlike devicecentric data analytics that fail to provide the context required to unlock real outcomes. Don't be afraid of innovation - find a complete smart building system that breaks down siloed systems to lead to complete and synchronized operational efficiencies.

Companies that choose to invest in innovation now will be rewarded for their efforts. Now is the time to pave the way for **the future of commercial real estate** – it's always better to be the early adopter than the company who is left behind.



In part 2 of this eBook we'll separate fact from fiction and dig deeper into the **smart building technologies** claiming to be the **next big thing**.

> Real estate companies have been historically sheltered from technology-driven disruption – but are now facing new challenges due to the impacts of COVID-19 and a variety of trends that have been on the rise – such as younger, tech-savvy clients, as well as the digitalization of every industry from insurance to mining and even law. The previous one size fits all mentality of commercial office space is unable to satisfy the dynamic needs of today's workforce.



Let's discuss tenant experience and the physical office space. Dynamic and flexible workplaces are the present and future – we see this through the emergence of open-concept offices, interconnected meeting spaces, remote work, and other coworking spaces. Organizations will also need to be able to adapt their spaces to meet the needs of the "new normal" when employees will return to work. With many options available to tenants (and their employees) – it is becoming more important than ever to provide a space that is healthy, enhances creativity, and collaboration, and ultimately comfort.

Massive companies have already taken note of this – with the emergence of tech and aesthetic focused built environments such as Googleplex, Microsoft Campus, and the Apple Park. The physical office spaces can be the difference between attracting and retaining top talent or falling behind. Small and medium companies cannot build their own work environment – so they look to commercial real estate properties to accommodate their needs.

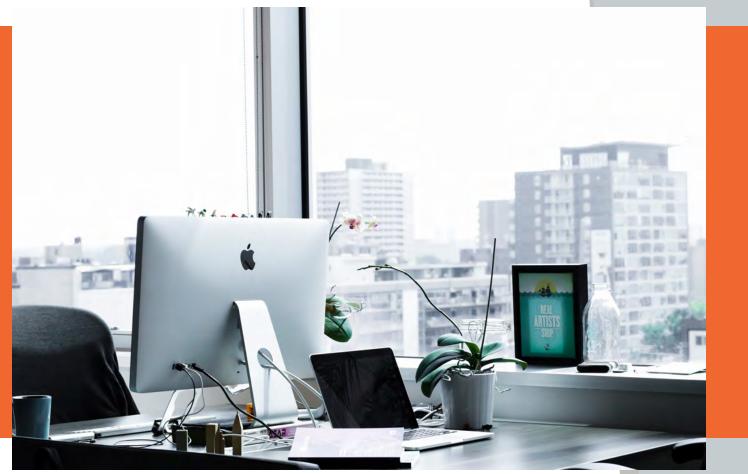




Outdated properties will have to be rented at discount relative to the market's newer, healthier, advanced workspaces. People have voted with their dollars that they want smart buildings - where they are able to control their environment temperature, lighting, mapping, and stay connected with their workspace.

For property managers and owners – these tech-focused built environments can make their lives easier too – through cost savings, reduced delay in workflows, and realtime monitoring of their property. There are many tech initiatives to choose from. The promise of IoT and big data has created hundreds of individual point solutions for energy efficiency, security surveillance, automation, and more.





The premise certainly sounds attractive - but many of these solutions fail to address the ultimate desired outcomes - raise asset value through **enhancing tenant experience**, and cost savings. For now - there isn't a 1:1 relationship of the promise vs what is technically feasible today. Many solutions end up as expensive "gimmicks" at worst or functional but incomplete at best; these systems can not effectively speak to one another or provide actionable insight. There needs to be a solution that connects the relevant systems and data to provide both owners/operators and tenants exactly what they are looking for - not a generic "one size fits all" solution.

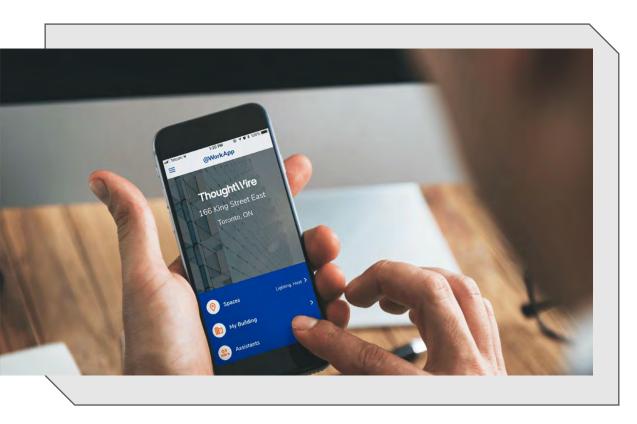


The key is data - the underlying unified data foundation enables a holistic solution that is flexible enough to grow as your priorities change.

A new era of digital transformation of for real estate has arrived that combines the best elements of IoT with the end results that property managers and tenants actually want. **Digital Twin Technology** has been successfully used in manufacturing, aerospace engineering, and more - to connect data points and bring real-time insight to users.



Now - **ThoughtWire** is bringing it to commercial real estate with our **Smart Building Suite of applications** powered by our Digital Twin. **PrecisionHub** for owners and operators allows full control and monitoring of your property, which realizes real cost savings through energy efficiency, improved operational workflows, and predicting/preventing costly equipment failures - such as an HVAC subsystem. Your building becomes safer than ever with real-time wayfinding, and the ability to remotely control the property in case of emergencies such as lockdowns and fires.





Your tenants will be delighted with the **@WorkApp** - which provides them with control of their workspace through our mobile app. They can communicate better than ever with property management, stay connected with building events, and manage comfort settings on their own. An isolated point solution that does one of the aforementioned features, or a generic solution that does not allow actionable insight simply doesn't provide the return or desired experience to be considered a smart building.

Are you ready for disruption?

t's time to discover a better way of unlocking higher asset values, we're here to help commercial real estate owners, operators, occupiers, and managers start their digital transformation journey. Schedule a conversation with us to learn how we can help you stay ahead of the competition.

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