



Canada's PropTech journey


Responding to
2021's real estate disruptors

Let's do this.


When it comes to embracing new and improved real estate technologies, Canada might not be considered a leader compared to its global peers. Despite our traditionally conservative approach to PropTech, however, our appetite for enhanced business models and digital capabilities is growing as the sector explores digital transformation on several fronts to keep pace with pandemic trends and workplace changes.

These trends are leading to an acceleration in digitization, evident by workplace innovation in the short-term.


Real Estate digital transformations




Integration & retro-fitment of **IoT-based solutions** in buildings to accelerate access to real-time data and visuals




Use of **digital twin technology** grew significantly, combined with a 3D model of the facility



Globally, brokerage firms are using **virtual reality** for real time space visualization and 360° tours



Increased reliance on **robotic process automation (RPA)** for processing contracts and management




Onset of **cloud based platforms**, for virtual commercial Real Estate transaction/deal related services


Spotlight on workplace changes




Remote working became the norm which shifted the focus of companies towards space **occupancy management** to offload excess leased spaces



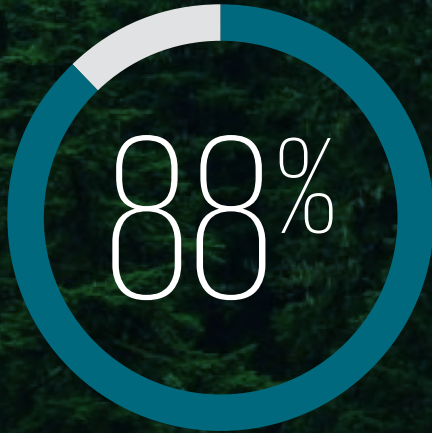
Intensified the urgency for **energy efficient buildings** resulting in increased adoption of energy management information systems



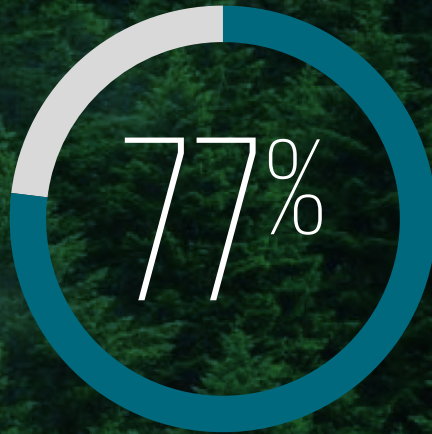
Automation through IoT sensors, and **remote monitoring software** applications surged to reduce the need for on site staff



COVID-19 has fueled the use of **touchless entry systems** which rely on facial or voice recognition and biometrics to ensure safe and healthy ecosystem



of the real estate industry believes that COVID-19 has encouraged interest in flexible office concepts and new business models



of Canadians like the idea of a hybrid workplace model, and 71% believe a hybrid workplace (aka “hybrid office”) should be the standard model for all organizations

Certainly, the upsurge of hybrid offices, demand for hygienic technologies, and emerging opportunities for Big Data and innovation are inspiring Canada's real estate players to expand their digital horizons.

Still, for all our progress, there is room to go further.

According to our [2021 Real Estate Innovations Overview](https://assets.kpmg/content/dam/kpmg/nl/pdf/2021/sectoren/Real%20Estate%20Innovation%20Overview%202021.pdf)¹ (2021 REIO), only a third (32%) of Canadian real estate leaders have accelerated or enhanced their data strategy implementation. Moreover, less than half (42%) of domestic real estate players are making a coordinated effort to collect, manage, and analyze data throughout their organizations. The good news is that those who are taking the digital transformation journey are doing the upfront work to determine the “why” behind becoming a data-driven organization before laying out the “how.”

Ultimately, Canada's real estate industry is primed and ready for PropTech innovations. The next step is seizing the good work of our domestic firms, and taking the lead from organizations that have embraced the digital transformation.

¹ <https://assets.kpmg/content/dam/kpmg/nl/pdf/2021/sectoren/Real%20Estate%20Innovation%20Overview%202021.pdf>

² <https://time.com/collection/best-inventions-2020/>



A global innovator

Canada's approach to adopting innovations and enhanced systems seems to be holding steady, even as many companies within our borders continue to provide innovations to the world. Of note, Canadian inventions occupied five of Time's Top 100 Inventions of 2020².



A global perspective

In 2020, 19.9 billion euros (approx. 29.5 billion CAD) was invested into PropTechs (-25% compared to 2019). This dip can be attributed to a pause in investments through the pandemic and is expected to increase and surpass 2019 levels in the near future.

Recoding real estate

Before we dive into the Canadian companies highlighted in our 2021 REIO, let's take a look at different ways in which the real estate industry is set to change, as a result of physical environments blending with digital technologies in new and increasingly innovative ways.

Safety and hygiene

The pandemic placed a renewed focus on providing clean, hygienic, and sustainable environments, both within new and existing assets. The result is increased demand for health and safety technologies, such as “touchless” technologies, health monitoring wearables and sensors, and automated cleaning robots equipped with UV lights and other enhanced hygiene technologies.

Advances in data analytics are also making an impact. Real estate firms are implementing data-driven cleaning services that respond in real-time to occupancy levels and the usage of space.

All combined, the real estate sector now has a wealth of digital tools to meet and exceed today's increasingly high health and safety standards.

Augmented reality (AR)

Cutting-edge technologies such as AI-powered tools, virtual/augmented reality, and advanced robotics are changing how building staff and occupants interact with their physical environment. These innovations are providing staff and occupants with new ways to communicate, collaborate, and connect to their surroundings.

Automated offices

Automation and AI are becoming increasingly common in back offices. They are being used as a means to streamline activities across entire buildings and portfolios and provide data-driven insights that inform business strategies (e.g., budgeting, procurement, occupant management, etc.).

Enhanced user experiences

User experience has also been a priority in real estate. Now, developers, property managers, owners, and brokerage firms have “smarter” and more automated means to optimize the occupant experience. What's more, there are more opportunities to use data to drive operational efficiency and target the right customers.

Construction and design innovations

Global net-zero carbon building goals are promoting the use of sustainable building materials and construction methods. Meanwhile, off-site construction management is benefiting from 3D printing, modular construction, VR modelling, and cloud-based software – all of which will enhance the development process from initial designs to final touches.

Nine degrees of digital transformation

KPMG's 2021 Real Estate Innovations Overview was developed to showcase innovations within the worldwide real estate sector and uncover the latest trends in local and international markets. To do this, we identified nine categories based on international trends and spotlighted Canadian players contributing to the sector (and each category).

Those nine categories include:

Digitizing processes: Using modern platforms and automation technologies to digitize and streamline traditional real estate management processes. This enables firms to analyze more data, expand online and real-time accessibility, and make day-to-day tasks more efficient and user-friendly.

Flexible (hybrid) workspaces: Adapting physical spaces to accommodate both in-person and remote teams ("hybrid workforces"). This involves creating more flexible office layouts, investing in cloud-based team platforms, establishing desk "hoteling" programs, adopting real-time video streaming, and implementing programs that support in-office and work-from-home employees equally.

Healthy workplace and living: Meeting demands for heightened health and safety with investments in air quality

monitors, smarter and more efficient HVAC systems, autonomous cleaning equipment, touchless entry systems, and even biometrics or facial recognition (AI-technology) that track building activities and provide data to inform health and safety programs.

Innovative construction: Upgrading real estate construction methods with the use of 3D printing, modular building, and sophisticated design platforms, all to derive architectural benefits and enhancements in construction materials and processes.

Internet of Things: Embedding smart cameras, sensors, actuators, software or other applications to existing infrastructure and creating a connected and automated world that can be monitored and analyzed in real-time.

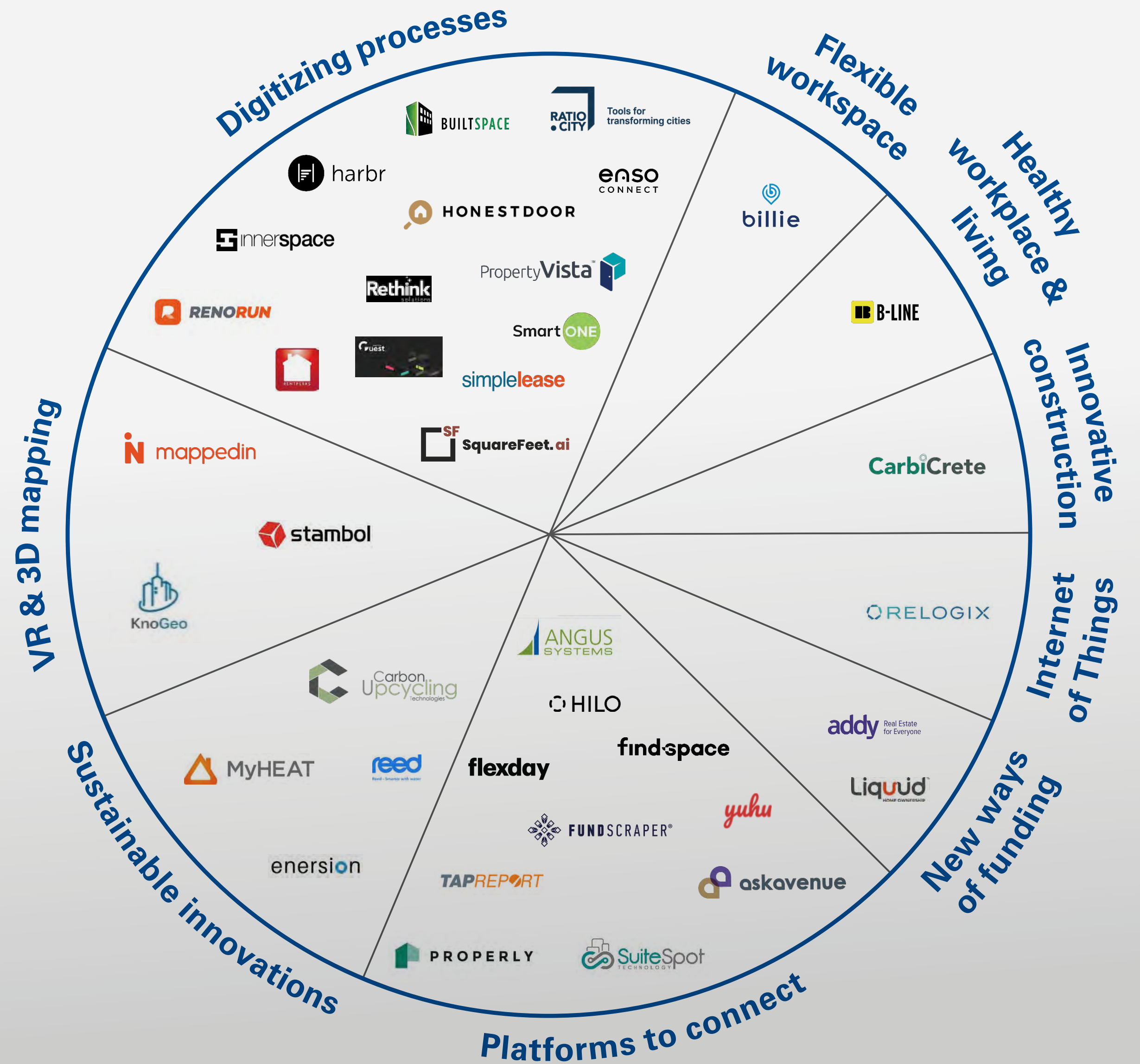
New ways of funding: Using digital platforms to leverage Big Data and AI technology to enhance a wide range of real estate services related to title operations, deal closings, escrow arrangements, and other facilities such as mortgage arrangements and insurance shopping. These platforms have integrated all services into a single digital solution, thereby eliminating commissions and excess cost for consumers.

Collaborative platforms: Using online platforms that connect stakeholders from multiple physical locations into one digital environment, enabling seamless collaboration and consistent communication. For hybrid teams, collaborative platforms can be a marketplace for supply and demand where the need for a middleman disappears. They can also provide a platform through which a service provider can communicate directly with the requestor (e.g., tenant), thereby paving the way for the introduction of new and innovative business models.

Sustainable innovations: Adopting innovations that focus on enhancing aspects related to ESG, energy savings, water efficiency, and circular economy in order to sustain our natural resources. Drivers may be regulatory changes, sustainability agendas, or cost reductions.

VR & 3D mapping: Using VR or 3D mapping technology to deliver digital property inspections or walkthroughs for prospective tenants, buyers, or managers. These technologies merge the images and videos of a property to create a digital space that is practically indistinguishable from the real property. In so doing, it provides new and exclusive experiences for investors and, by extension, an opportunity to set themselves apart from competitors.


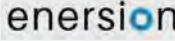
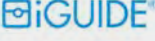
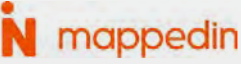


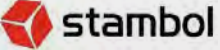



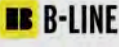

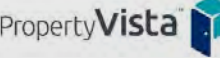


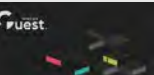


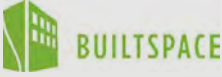









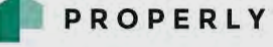






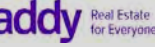


Who are Canada's PropTech companies?



Innovating the value chain:

Where Canada's real estate organizations are making an impact

Describes the position within the real estate value chain on which an innovation focuses and hence, gives insight into the strategic activities of the innovation and which market needs it acts upon.

Sourcing materials, products and technology	
Design & planning	     Tools for transforming cities 
Construction	  
Property and facilities management	               
Transaction and leasing	        
Investing and financing	  

How KPMG in Canada can help

The real estate industry is familiar with change. Even so, the increasing pace of change and rising demands for innovation can be a lot for any one team to manage.

At KPMG in Canada, we recognize the issues unique to the real estate industry and we continually focus on ways to help you compete, grow, and succeed. We also believe that these issues cannot get in the way of exploring innovative solutions into existing business models is one of the keys to success in an ever-changing world.

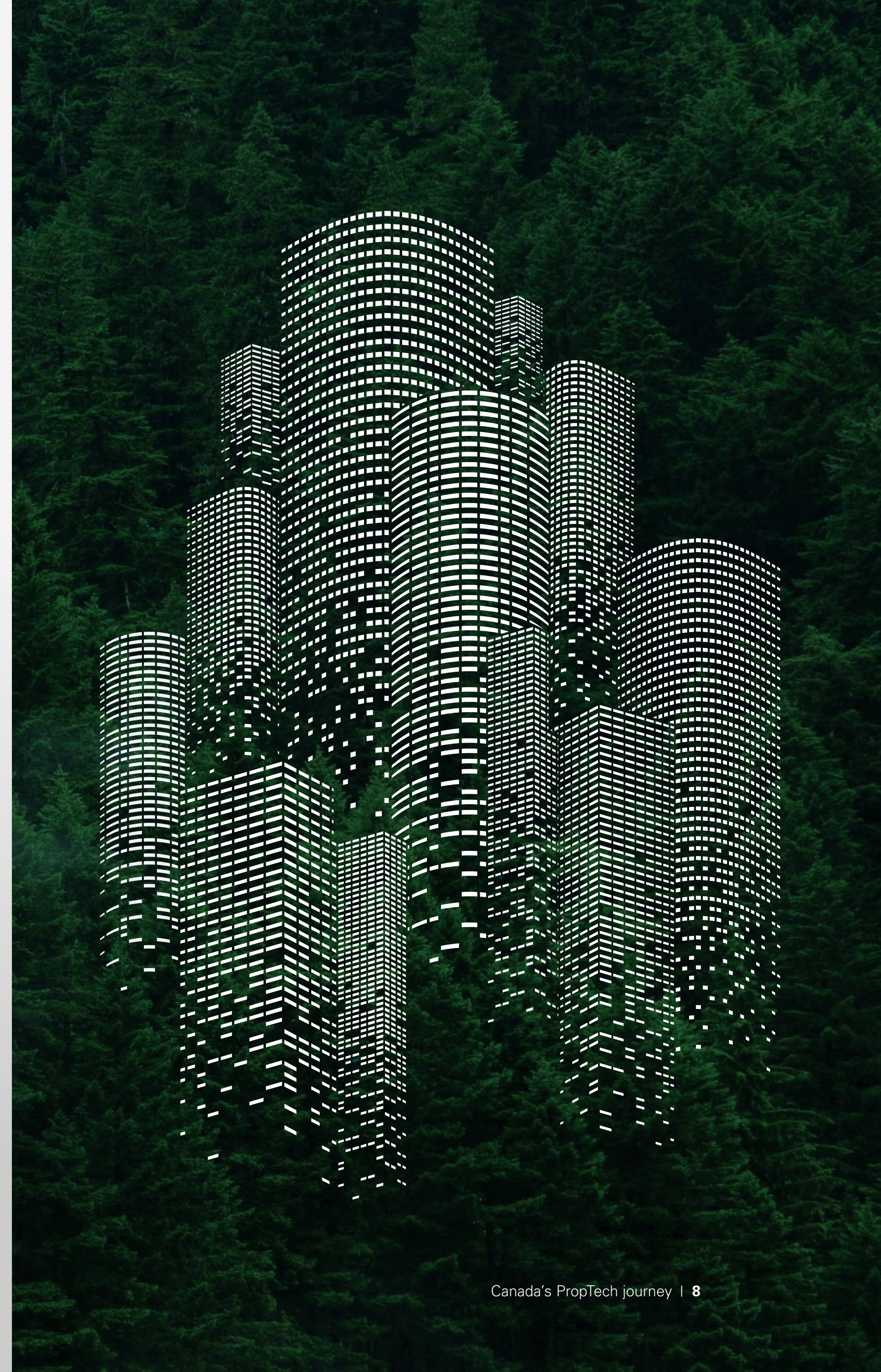
For these reasons, KPMG offers extensive services to enhance the value of real estate investments and implementation of operational efficiencies. Combining our in-depth knowledge of the Canadian industry with the global reach of KPMG International's member firms, we can help you keep pace with your global counterparts, lead in your own markets, and capitalize on the opportunities that PropTech brings today.

Ready to unlock PropTech's full potential? So are we.

Let's do this.



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