



Future of real estate: Shift to phygital

Annual flagship report of the Deloitte Canada Real Estate practice

The great shift toward user experience and service

Between the difficult economic environment, technological advances, net-zero target obligations, and increasing client expectations, the real estate industry **is facing a slew of challenges.**

We surveyed real estate owners and tenants across Canada to hear their thoughts on the looming recession, high inflation, high interest rates, and declining valuations. Over half of the tenants who responded said that in case of a recession, they plan to seek some relief: **52% of tenants** said they will ask for rental concessions and **48%** said they will demand more flexible lease terms.

At the same time, the pandemic created a tectonic shift in the way space is being used—among other things, **tenants are looking for smarter and more sustainable spaces.** They are also looking to capture the environmental sustainability data of the buildings they operate in for their own performance benchmarking or ESG reporting purposes. Our survey also showed that **over half of them** are looking for more digital and personalized amenities, such as digital concierges, space personalization, digital assistants, and real-time visitor monitoring. *(See the sidebar on our survey methodology.)*

In light of these changing sensibilities, we believe that the industry needs to evolve from the traditional focus on "location, location, location" to a more holistic approach that prioritizes insights and occupant experience, shifting from being solely product-focused to concentrating on service as well. In this report, we look at the top trends that we expect to drive the future of real estate, along with what tenants are expecting and what real estate owners can do to remain successful:

1. Business model innovation:

The game changer. Leading real estate companies could emulate technology companies and move from physical space providers to "phygital" service providers. They could realign their business model to provide real estate as a service (REaaS) to generate new lines of revenue while elevating the tenant experience.

2. Digital: The modern foundation.

Real estate companies need to embrace digital technologies to streamline their operations and enhance the tenant experience. They can begin by improving systems integration and digitalizing across the building life cycle (design, construction, and operations) through technologies such as building information modelling (BIM) and digital twin.

3. Data: The differentiator. To deliver better services and improve performance, owners will need to collaborate with building stakeholders and blur the lines of data ownership to get better control of complete building information. Building a common data environment can help with running advanced analytics and machine learning algorithms to better inform decisions.

4. ESG: The opportunity. The real estate industry is facing increasing pressure to reduce its carbon footprint, improve its social impact, and enhance its governance. Owners must place greater importance on the environmental, social, and governance imperative, because tenants are willing to take action—even terminating leases early—if landlords fail to decarbonize quickly enough. The digital and service-based approaches will apply here as well, because data and technology will enable many sustainability initiatives.

Survey methodology

Deloitte Canada recently surveyed top executives from 100 major Canadian commercial real estate owners and tenant companies. The owners who responded represented both real estate investment trusts (REITs) and non-REIT companies, and the tenants who responded were from diverse industries, including technology, media, and telecom; banking, insurance and investment management; and retail, public sector; and professional services.

The survey asked about the current state and the respondents' expectations of real estate fundamentals, capital markets, leasing, digitalization and smart buildings, REaaS models, data, and ESG matters in 2023 and beyond. Survey respondents included commercial real estate (CRE) owners and tenants with revenue of at least C\$50 million.

Business model innovation: The game changer



The business model for real estate owners is evolving, from traditional space provider to a more service-oriented approach. In other words, from physical space providers to phygital (i.e., the convergence of the physical and digital) service providers. Today's tenants are looking for improved productivity, sustainability, activity-based design, accessibility, and more. Services could include pay-per-use models for various needs, such as energy management, occupancy analytics, or predictive maintenance.

All these services and business models can be enabled by technology and smart buildings. In fact, smart buildings are **becoming a renewed area of interest for tenants, as technology advances continue to change what buildings can do**. Our survey shows that **only 8% of tenants** have more than half their leased portfolio in smart buildings. However, **46%** expect that more than half their portfolio will be smart buildings in five years.

To help think of the range of services that a smart building might provide, an interesting analogy could be drawn with smartphones. Consider the similarities:

- **Connection:** Just as smartphones connect to various networks, such as Wi-Fi and cellular, smart buildings rely on the internet and various network protocols to communicate with other devices.
- **Sensors and data:** Smartphones are equipped with sensors that gather data, such as GPS coordinates, accelerometer stats, and ambient light levels. Smart buildings use sensors to collect data on occupancy, temperature, humidity, and other environmental factors.
- **Automation:** Both smartphones and smart buildings use automation to improve efficiency and convenience. For instance, smartphones can automate tasks like turning on a flashlight or setting a reminder, while smart buildings can turn off lights when no one is in the room or adjust the temperature based on occupancy patterns.

- **Integration:** Smartphones can integrate with various applications and services to provide a seamless experience. Similarly, smart buildings can integrate with systems such as lighting, HVAC, and security to provide a more efficient building management system.
- **User experience:** Both smartphones and smart buildings are designed to provide a user-friendly experience. Smartphones have touch screens, voice assistants, and intuitive interfaces, while smart buildings have mobile apps for managing diverse systems, voice control, and personalized settings.

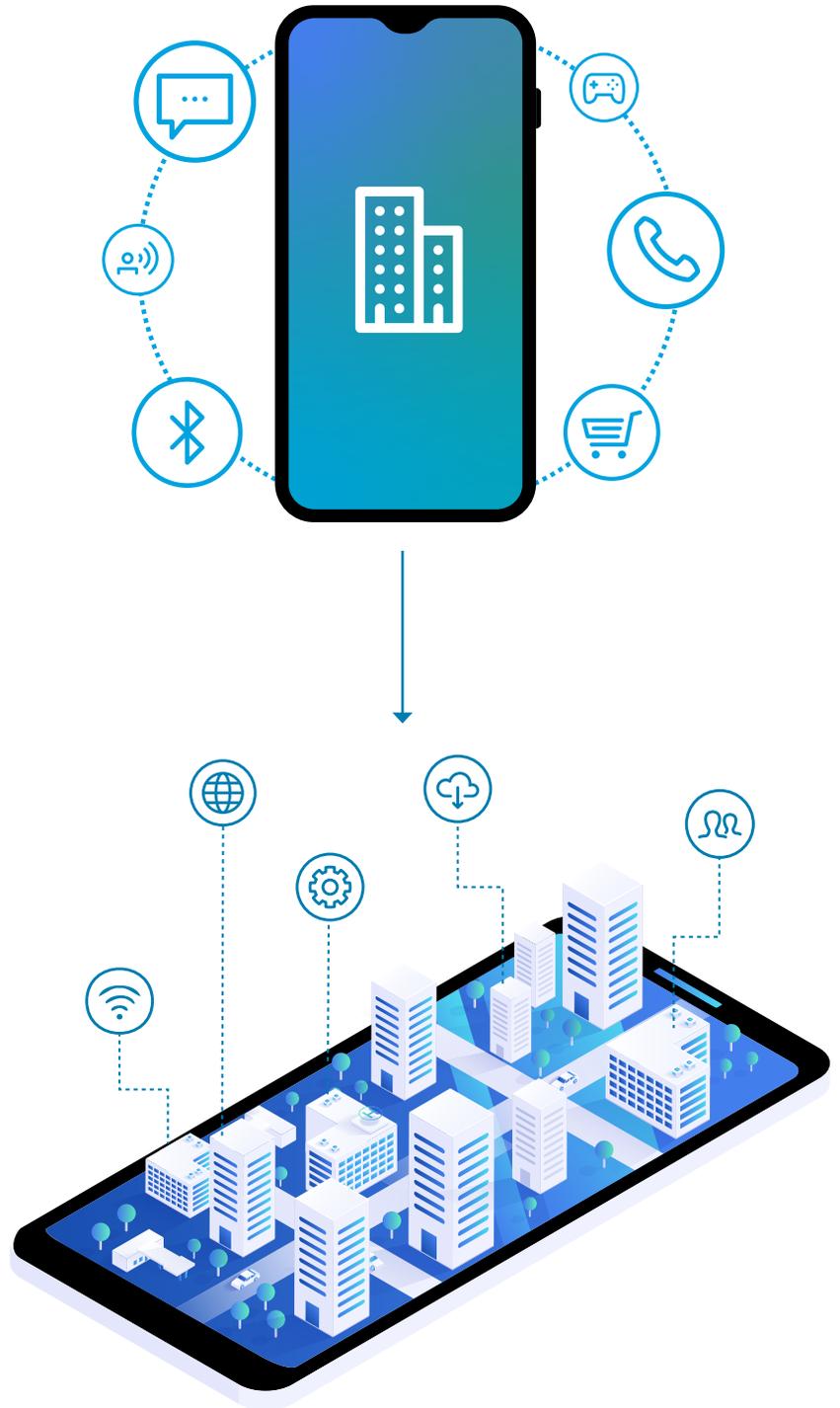
Just as smartphones are differentiated by the experiences their apps can provide, smart buildings might use an app store from which tenants could choose and customize services and amenities according to their unique needs.

What could an app store for a building look like?

After starting out focused on making products, smartphone companies eventually diversified their revenue model by moving to service portfolios. Apple's services revenue, for instance, has grown at over twice the pace of its non-services revenue in the past decade.¹ Following this lead, real estate owners could consider expanding their rent-per-square-foot revenue model to include subscription-based services, a share in app revenues, and third-party services facilitation.

Apple's services revenue has grown at over twice the pace of its non-services revenue.

Figure 1: Smartphones and smart buildings



Source: Deloitte analysis

It generates revenue based on the delivery of better experiences and productivity to the occupants working in the connected building.

The rise of REaaS: The property app store and platform business model

Speaking of services as a revenue stream naturally leads to the concept of Real Estate as a Service (REaaS).

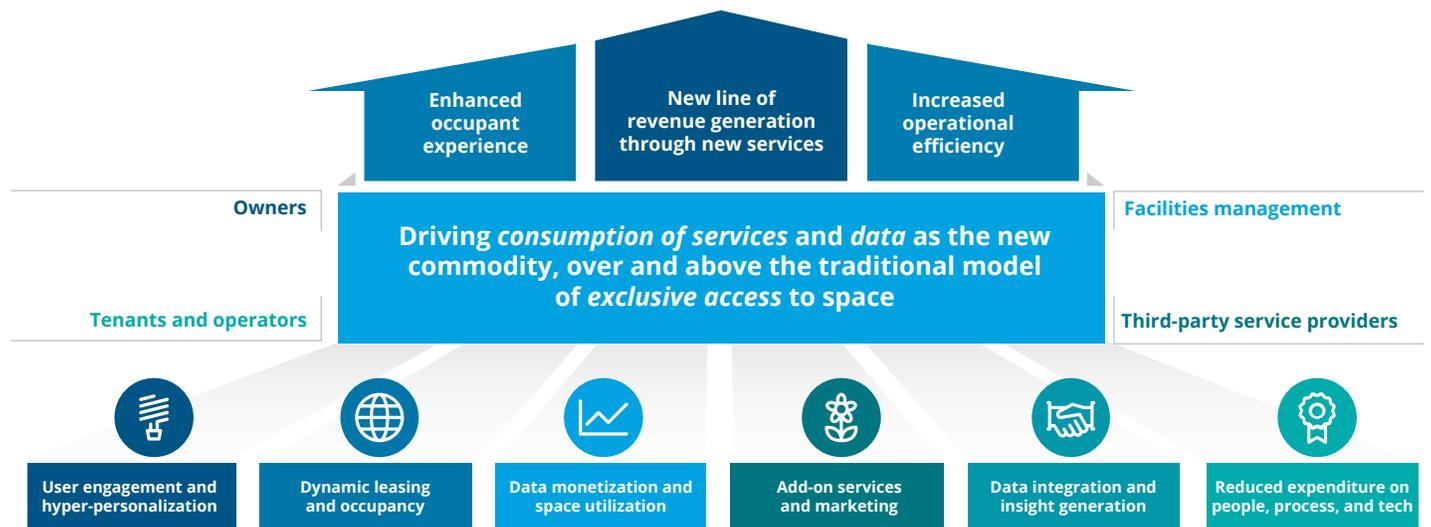
REaaS expands the traditional landlord business model of exclusively providing access to space, to one that also provides access to services enabled by that space.² It generates revenue by delivering better experiences and productivity to the occupants working in the building, charging for each digital service. The integrated digital ecosystem of the smart building uses building data in new ways and is accessed via a single platform—essentially a marketplace accessible to different stakeholders.

The consolidation of physical and digital elements enables a more streamlined control of operations, which generates greater insights and establishes **the consumption of services and data as the commodity, rather than just access to the space**, as in the traditional model. REaaS can benefit owners and tenants in many ways, as shown in Figure 2.

This can be incorporated into the kind of platform business model that has already transformed numerous industries by connecting producers and consumers in new and innovative ways. Real estate owners could adopt this approach to positively reshape the tenant experience and foster sustainable growth. The common platform business models

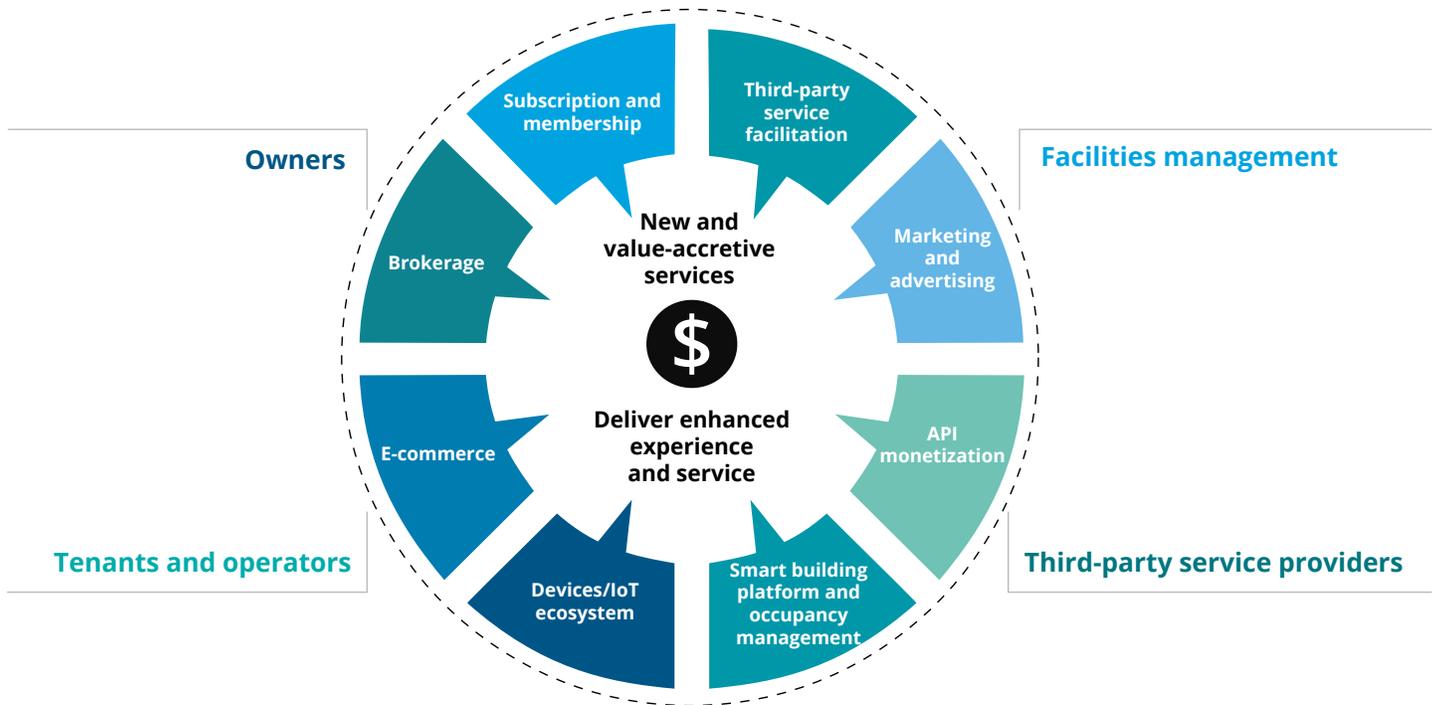
focus on aggregation, socialization, and mobilization,³ and they are typically created and owned by a single entity (called the orchestrator). Platform business models for real estate could be a combination of these models, and created by the owners.

Figure 2: REaaS benefits multiple stakeholders in terms of experience, revenue, and efficiency



Source: Deloitte Advisory

Figure 3: New real estate services that a platform business model can enable

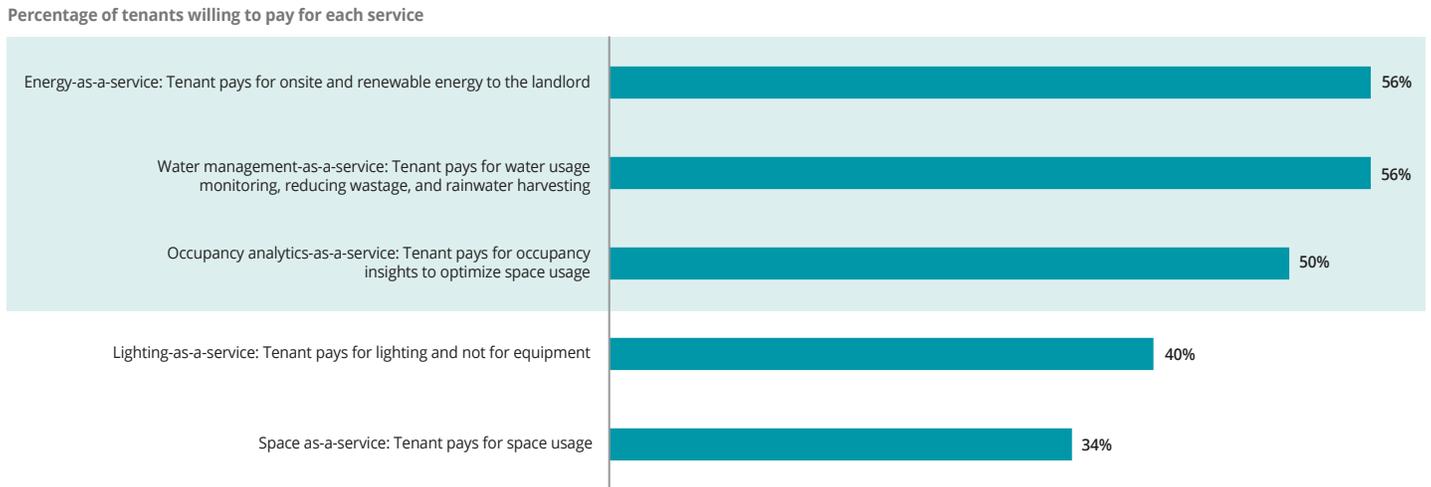


Source: Deloitte analysis

There are several ways in which owners, as the platform orchestrators, can diversify their revenue stream, as shown in Figure 3. These include:

- Subscription and membership services could include, for instance, intelligent energy consumption, indoor environmental quality (IEQ), predictive maintenance and automated work orders, occupancy and location analytics, and customer and people analytics.
- Many third-party service providers could use the platform to provide their services to tenants, paying a commission to the orchestrator or paying per click.
- Real estate orchestrators can monetize the data on their platforms related to space usage, building systems, parking spaces, resource efficiency and more, similar to the way technology companies have monetized their application programming interfaces (API) by providing access to their platform data.
- Smart building components can be monetized as software as a service (SaaS) or infrastructure as a service (IaaS); for instance, tenants could use a smart-building platform to access building intelligence or rent an occupancy sensor to inform their own analytics.
- E-commerce also has good potential for enhancing the user experience while providing an additional revenue stream to the orchestrators. For instance, a smart building app could give users the ability to order coffee or food from any store in the building. Over time, the data on user preferences could also be leveraged in different ways.

Figure 4: Tenants showing interest in as-a-service models



Source: Deloitte Canada Real Estate Survey

Tenants are ready to pay for new services

Our survey revealed that the majority of tenants would be interested in seeing their landlords provide new as-a-service models. For instance, **56%** said they would be interested in paying their landlord to monitor renewable energy or water usage, reduce waste, or harvest rainwater. **Half of the tenants** also indicated interest in paying for occupancy analytics so they can optimize their space usage (see Figure 4).

Our recommendation: Shifting from product-centricity to systems-centricity

Owners can take a modern approach by aligning their business model more with services, technology, and tenant experience offerings. This means expanding from being product-centric (bricks and mortar) to

being systems-centric (interconnected features and capabilities)—in other words, thinking of the building not as an end-state but as a scalable, living prototype that can be enhanced by incorporating user needs as they evolve. Owners’ tenant-facing service teams will need to focus more on customer relationship management (CRM), and ensure that their account managers are relentlessly focused on service delivery, efficiency, and tenant productivity. With a platform business model and digital services, owners can capitalize on the growing demand for innovative solutions to open new revenue streams. In short, these platforms and services are set to play a crucial role in shaping the future of the real estate industry—which will increasingly be phygital.

Digital: The modern foundation

Digital real estate can **help owners and tenants to extract new and better value** from their physical assets through business transformation, operational efficiency, data analytics, and solutions architecture. It can enable the integration of services that have traditionally worked in silos by helping them to share and leverage data from day-to-day operations to support better decision-making.

Tenants' digital expectations have increased

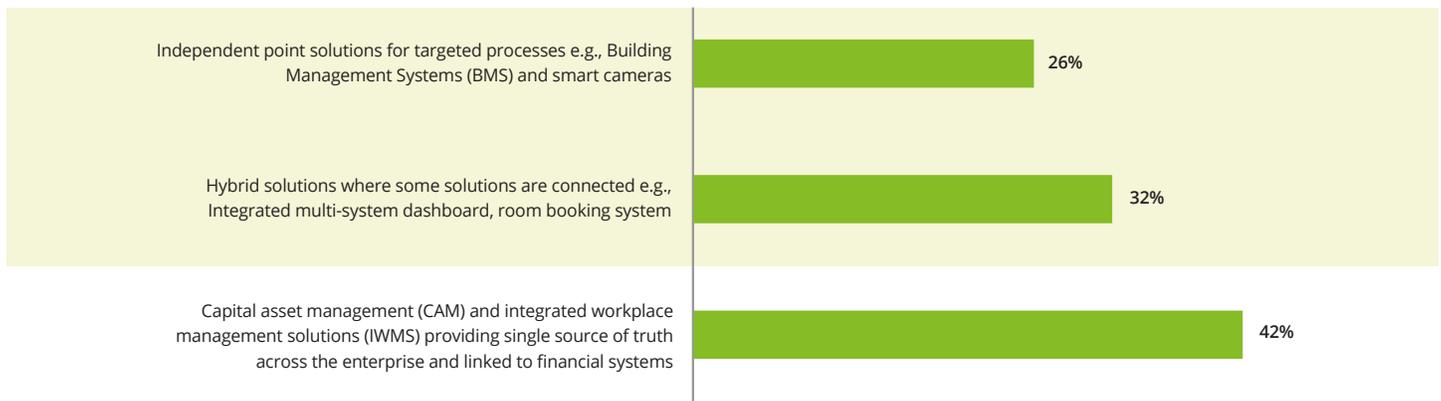
In our survey, we asked tenants about their digital real estate expectations regarding people, technology, workplace, and space. They told us they want their landlords to provide more digitalized and personalized user services such as digital signage and space personalization, use cognitive technologies such as data analytics & AI, and deploy robust property monitoring systems such as smart cameras and real-time visitor monitoring. Given these tenant expectations, real estate owners need to build a strong foundation. That starts with well-synchronized systems integration.

Owners need to speed up systems integration

Our survey shows that **58%** of owner respondents are still using **point or hybrid** systems solutions, with few integrated aspects (see Figure 5). Technology can enable data to be shared seamlessly between different verticals rather than hoarded by individual systems or growing stale because the legacy systems don't talk to each other. Instead of deploying capital on solutions for individual issues, owners should adopt a platform strategy and consumption-based business model, shifting costs into operations through REaaS. For instance, integrated workspace management solutions (IWMS) provide a single source of information across the enterprise and can be connected to financial systems to better plan and prioritize investments.

Figure 5: Owners still use point or hybrid solutions

Percentage of owners using each type of solution



Source: Deloitte Canada Real Estate Survey

Our recommendation:
Digitalize across the building life cycle with BIM and digital twin

Building information modelling (BIM) is becoming a necessity in the design stage of real estate.

BIM helps to streamline the design and construction process as well as aggregate information into a single source of truth. It can serve as a connected collaboration environment between all project stakeholders, and it has many other notable benefits in terms of time, money, and resources. For more details, please refer to our report on the [future of sustainable real estate](#).

While BIM provides a digital database of the physical and functional features of buildings, **owners and managers need a more dynamic way to manage the operations and maintenance of their buildings**. This is especially true for existing buildings: it's estimated that nearly 80% of them will still be standing in 2050,⁴ yet many don't have proper digitalized design documentation, which can make it difficult to create accurate digital models that can integrate building systems and data.

This is where digital twin technology comes in. A digital twin can integrate the physical and digital worlds by using AI and machine learning to fill in any data gaps and generate a live digital version of a building. Companies can then leverage real-time data to run simulations, scenario planning, and what-if analyses, predicting building performance and exploring different ways to achieve optimum results. Digital twin technology is not limited to bricks and mortar—it can layer in data about people and processes to provide a more operational context of the built environment. This can be a game-changer, allowing owners and managers to make more informed decisions based on combined insights from building systems, tenant demands, and user behavior.

Our recommendation:
Take a systematic approach to digitalization

To ensure they have the necessary digital architecture in place, real estate owners should take a systematic approach. They can start by establishing or improving their digital infrastructure across building operations, security, and accessibility. This includes implementing technologies and systems to establish the requisite functionality from day 1, while being connected and ready to collect data.

Next, owners should define the data and application strategy that will best support their smart building vision, enable automation, and prepare to aggregate and analyze the data that's generated. This includes smart platform amenities such as location-based services, occupancy analytics, and interactive walls and apps for things like interactive workspaces and digital concierges.

The next priority is to implement technology that enhances occupant engagement and improves their experience. This includes an enabling technology environment, ambient intelligence, user profiling and preferences, and hyper-personalization. In parallel, owners should enhance their investments in cloud, AI, and data analytics to provide the services the tenants expect.

Owners and managers need a more dynamic way to manage the operations and maintenance of their buildings.

Figure 6: Benefits of BIM

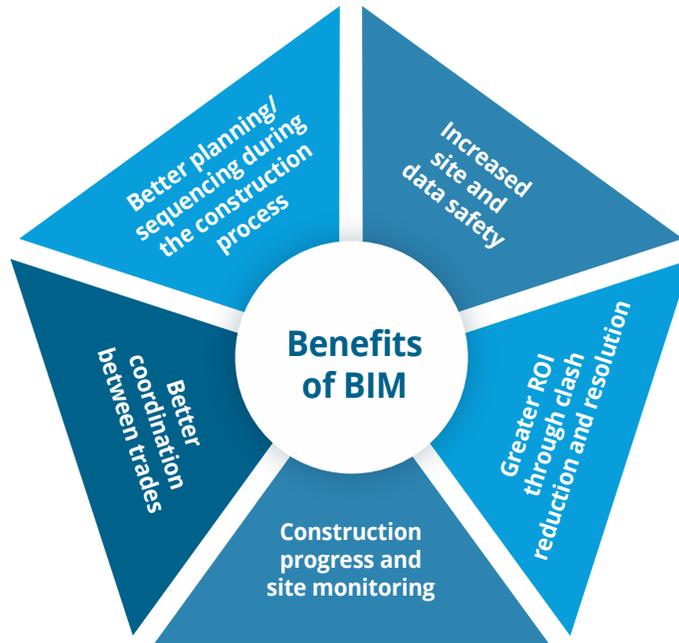
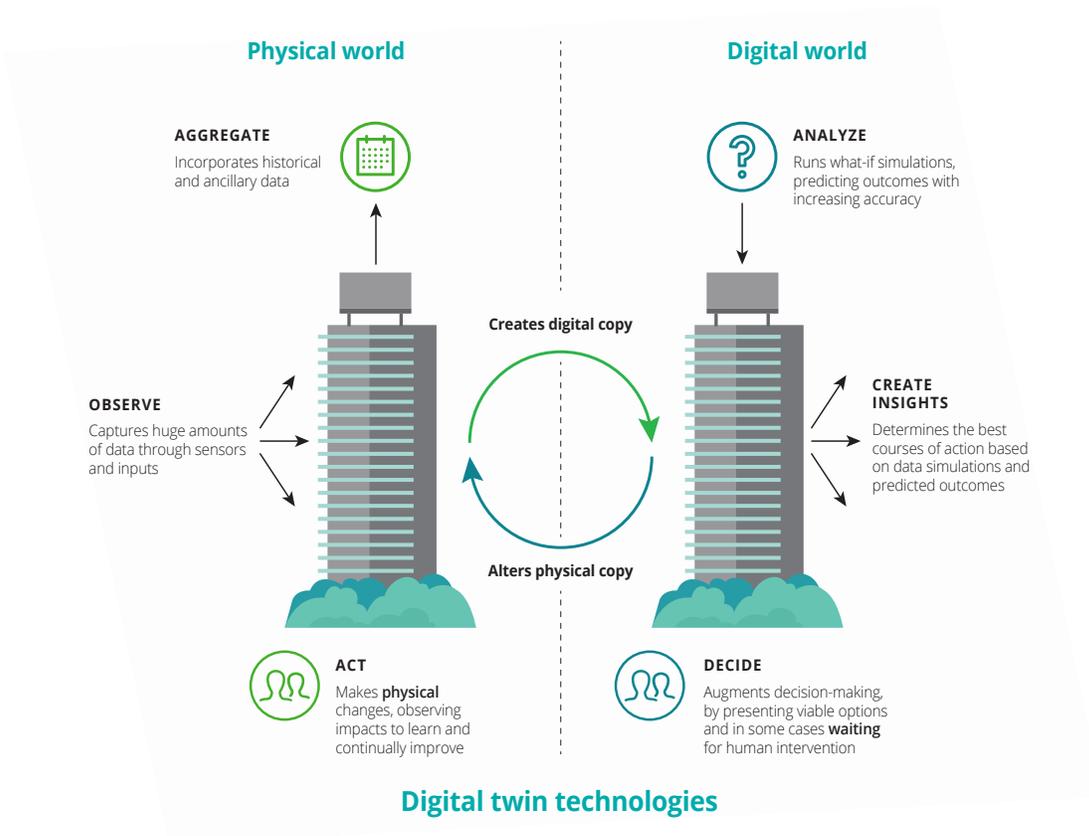


Figure 7: Benefits of digital twin technologies



Data: The differentiator

To build a strong foundation and realize the benefits of digital real estate, CRE owners need to be able to collect and aggregate real-time building data and leverage it to improve operational efficiency and generate new revenue streams. Buildings and their occupants generate hundreds of gigabytes of performance data every day, yet much of it goes unused because both landlords and organizations fail to perceive, and thus derive, its true value. The challenge of tapping into this data is also an opportunity to shape the company's data strategy to pursue profitable and tangible outcomes.

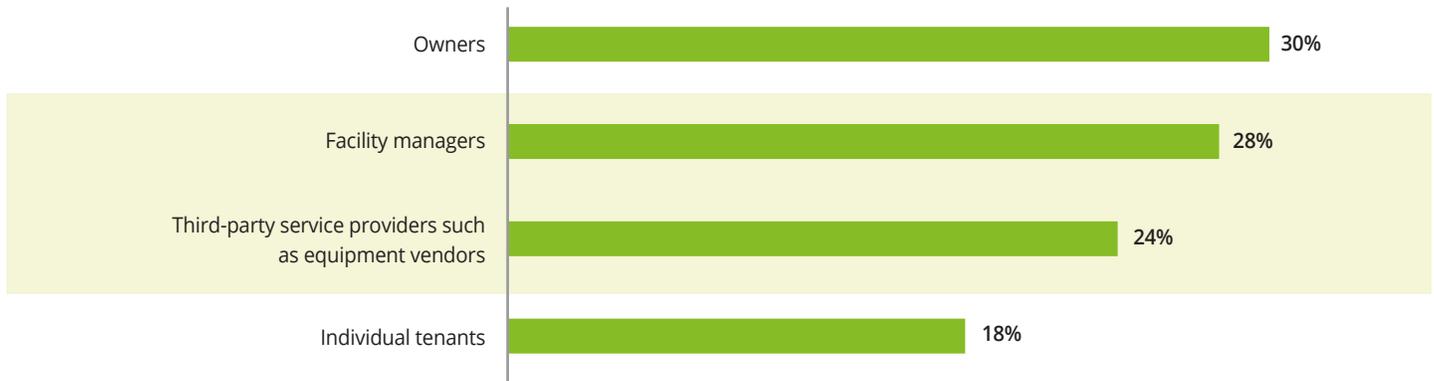
Owners only control a small portion of a building's data and face challenges in data usage

Our survey highlights that on an average, CRE owners control **less than one-third** of the data generated in their buildings.

Slightly **more than half** (52%) of the data is controlled by facility managers and third-party service providers, such as equipment vendors, and tenants control **18%** (see Figure 8). Collaboration between these building stakeholders is clearly of paramount importance for creating an integrated digital ecosystem in which aggregated data is used to enable effective analytics and smarter decision-making. Owners also face diverse challenges in effectively using the data they collect. In our survey, **48%** said that limited data standardization was a top challenge, while **44%** highlighted manual processes and lack of integration.

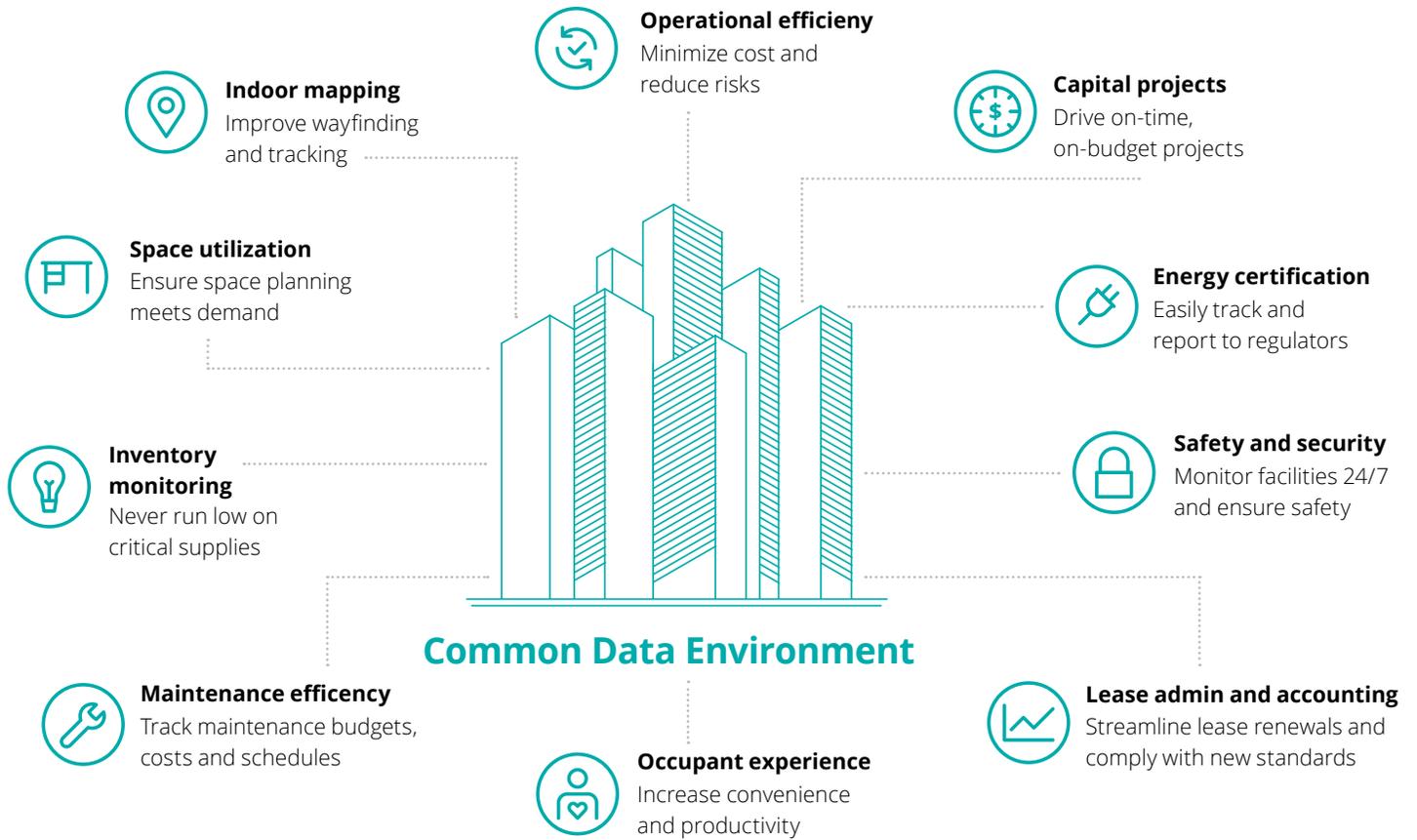
Figure 8: On an average, owners control less than a third of the data generated in their buildings

Average percentage of building data controlled by stakeholder type



Source: Deloitte Canada Real Estate Survey

Figure 9: A common data environment optimizes performance across different domains



Source: Deloitte analysis

Our recommendation:
Build a common data environment

To get optimal benefits from the available data, companies should build a common data environment wherein all building data, plans, models, and financial data—contributed by all stakeholders—is integrated into a central repository from which all projects can be managed. As shown in Figure 9, this could include data related to space utilization, operations, maintenance, lease accounting, occupant experience, and indoor mapping, among other things. This can enable ongoing analytics of building data, cross-correlational analysis, real-time feedback to enhance operations and services, and ongoing scenario analysis and testing.

To build an effective common-data environment, many owners will need to improve their collaboration with different stakeholders, including facility managers, equipment providers, and tenants. And to do that, they'll need to digitalize data collection processes, ensure data standardization, and improve systems integration.

ESG: The opportunity

As stakeholders continue to push real estate companies to improve their environmental sustainability, owners should take note of the broader benefits—a strong business case can be made for a profitable and revenue-accretive path of sustainability across the entire real estate life cycle of design, build, and operate. In addition to environmentally conscious practices, forward-thinking real estate companies are including more social and governance initiatives in their operations. For instance, they might work with businesses owned by Indigenous people, people of color, and women, and add more inclusive features to their designs such as universally accessible entrances that also include features for people with mobility challenges. From a governance standpoint, owners need to choose the ESG reporting frameworks that not only help them comply with regulatory requirements but also fulfill the demand for sustainability data by investors and tenants.

Owners aren't giving strategic importance to ESG matters

Our survey indicates that owners still don't see the strategic importance of ESG factors and of adopting sustainable building techniques. **Only 38% and 34%** of leaders have or plan to have an ESG-dedicated board member and a chief sustainability officer position, respectively. And **only 26%** have a decarbonization strategy and emission reduction goals for 2030. When it comes to sustainable construction, **just 34%** of owners use sustainable materials or employ modular construction techniques (see Figure 10).

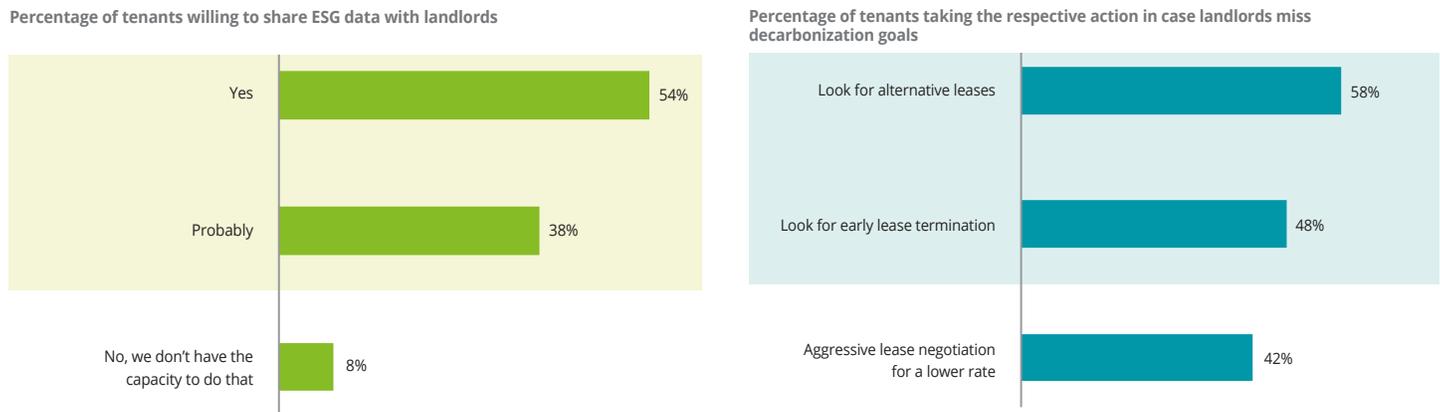
Figure 10: Owners need to give more attention to ESG matters

Percentage of owners choosing to focus on the respective ESG-related aspect in 2023



Source: Deloitte Canada Real Estate Survey

Figure 11: Tenant ESG preferences: Data-sharing and landlord decarbonization efforts



Source: Deloitte Canada Real Estate Survey

Tenants could look for early lease termination if landlords fail to decarbonize

Becoming increasingly conscious about the carbon footprint of their leased spaces, tenants are looking for more environmentally sustainable buildings. Our survey found that **nearly 92% of tenants** are willing to share their ESG data with landlords (see Figure 11) in return for better insights on their space usage, resource efficiency, and carbon footprint. As Figure 11 also shows, in cases where landlords fail to meet their own decarbonization and net-zero goals, **58% of tenants** said they would consider looking for alternative leases while **48%** might seek early lease termination. These are critical numbers, especially at a time when the retention is a key priority for owners.

Our recommendation: Owners can monetize ESG data insights while helping tenants become sustainable

Tenants want to see the data on the environmental sustainability of their leased spaces. **More than half** of the tenants who responded to our survey want to capture data on their energy and water consumption, waste management, and carbon emissions. This presents an opportunity for owners to collaborate with their tenants—perhaps even monetizing

the data and insights—while demonstrating their commitment to decarbonization and resource efficiency. It is important to note that digitalization and data centricity will be a key enabler of ESG initiatives for smart and sustainable real estate.

Our recommendation: Enhance ESG's strategic importance and establish it as a long-term value driver

Real estate owners need to place more importance on ESG factors, at both the leadership level and the project level. As tenants get more disciplined about reducing their environmental impact, they'll expect the same from their landlords. Owners will therefore need to have a well-organized approach to accomplishing their own decarbonization and net-zero goals across the design, build, and operate life cycles.⁵ (For a detailed action plan, refer to our earlier publication on [future of sustainable real estate](#)). They will need to embrace social equity and promote diversity and inclusion. Lastly, the accurate measurement of ESG metrics and the standardization of data and reporting will help owners to improve on governance and keep their tenants happy.

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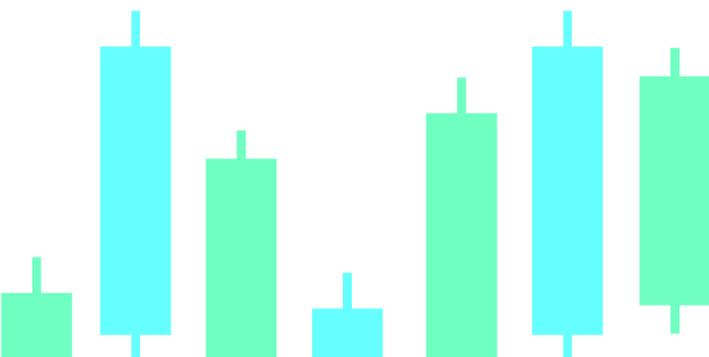


It's time to get phygital

The future of real estate lies in the convergence of the physical and digital worlds to create new opportunities and experiences. The boundaries between those worlds are already blurring; owners that move now to capitalize on the inevitable will likely succeed. At the same time, they'll have to make their spaces sustainable, given new climate regulations and increasing stakeholder pressure, and in doing so they will realize financial and environmental benefits.

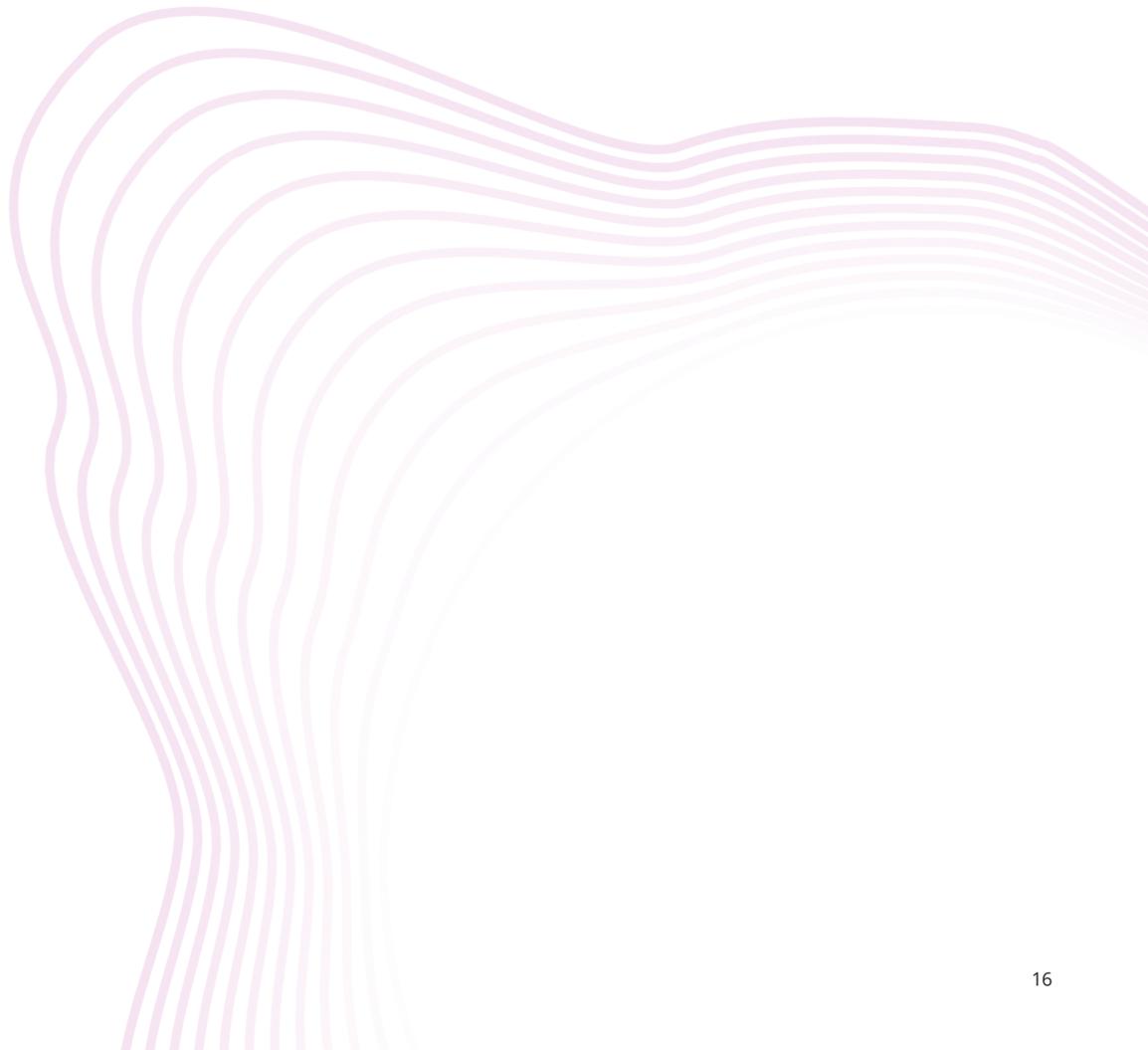
Mastering data and analytics and increasing stakeholder collaboration will be key to achieving both smart-building and sustainable goals. Data-driven insights and intelligence can empower real estate companies to improve operational efficiency, generate new revenue, and elevate the tenant experience, while collaboration between stakeholders—owners, operators, tenants, investors, and facility managers—can have a multiplier effect on improving the buildings of the future.

There's a lot to do to prepare the real estate industry for the future. It's time to act.



Endnotes

1. [Apple's Annual Net Sales by Product Segments \(2012–2021\)](#), GlobalData.
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