



Unlocking the Future with Smart Buildings

What is a Smart Building?

Imagine a building that knows exactly what's needed to help things run smoothly. A building that can help improve productivity, experience, health, and safety. That's a Smart Building—a digitally connected space that uses tech to create a seamless experience for occupants. By harnessing the power of the Internet of Things (IoT), Operational Technology (OT), and Information Technology (IT) Smart Buildings can make life easier for the people who use them and those who keep them running.



Building a better workplace

In today's world, business leaders are facing many challenges, like helping employees thrive in the office, meeting sustainability goals, dealing with rising costs, and managing everyday operations. Smart Buildings offer solutions to help streamline operations and save money while focusing on designs that make the office a destination.

These are some of the challenges that Smart Buildings can help address:

WORKPLACE EXPERIENCE

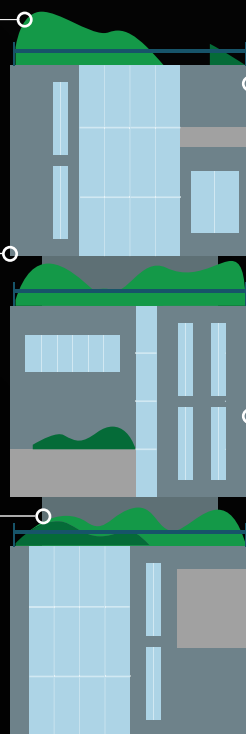
Hybrid work has left many offices underused, which can affect employee culture. With some workplaces going digital, real estate managers may need to rethink these spaces to fit modern needs, support flexible schedules, and promote collaboration and safety.

MARKET PRESSURE AND COST MANAGEMENT

Higher office rents and a lack of modern spaces in prime locations are often pushing costs up, which is adding competition. And rising utility bills are impacting budgets, affecting profits and tenant appeal. Smart budgeting and planning can help organizations stay ahead.

LACK OF DATA REGARDING USE OF SPACE

A lack of reliable data often makes it hard to understand portfolios, stay compliant, and manage assets effectively. This can make it challenging for real estate managers to make smart choices about leases, renovations, or reconfigurations.



MAINTENANCE AND AGING INFRASTRUCTURE

Limited funding can lead to deferred maintenance, which can cause important infrastructure to decline. Additionally, older infrastructure can present challenges when it comes to integrating smart technologies, which compromises the efficiency of these spaces.

REGULATORY COMPLIANCE

Changing state and local rules can make compliance challenging, especially with old, inefficient systems that struggle to keep up. These outdated systems contribute to energy waste and increased consumption of natural resources, which can increase costs and emissions.

Navigating Smart Buildings together

Deloitte's Real Estate & Infrastructure practice is here to support you on your Smart Buildings journey. We've identified four key areas in which Smart Buildings can add value: Experience, Efficiency, Effectiveness, and Environment. These drivers play a large role in helping organizations get the most from their spaces and in helping leaders face the challenges of the current landscape.

EFFICIENCY

Reduced operating costs through measurement and monitoring of critical asset performance and condition.

ENVIRONMENT

Harnessing AI and IoT to achieve conservation and sustainability goals, including energy and water conservation and reduced energy consumption.

EXPERIENCE

The connected environment improves employee health, well-being, and productivity by enhancing air quality, temperature, lighting, etc., and through unified digital workplace apps that simplify reservations, wayfinding, parking, and other work activities.

EFFECTIVENESS

AI and IoT capabilities enable delivery of real-time building system data to improve effectiveness of systems such as HVAC and lighting by operating based on usage metrics and actual needs.

Over the course of this series, we'll dive into these four drivers, and how technology and digital features can be integrated into buildings to boost the way buildings work. You'll learn how Smart Buildings can benefit owners, operators, and occupants.

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