

Create Buildings that Deliver Superior Business Outcomes

Rethink how buildings work. Let's create a safer, healthier, more efficient environment to welcome workers back to the office.

Overview

As organizations plan for the return of their workers to office buildings, they should consider how to best use the space. How many will be returning to the office? Have space requirements changed? For workers in the office, how can the building help increase peace of mind on health and safety? For building owners, what changes can improve security and efficiency?

Smart buildings can help, with more automation, no-touch check-ins, and improved air quality. Increased cybersecurity can reduce risk, and greater operational efficiencies can offer a better environment with reduced costs.

The Cisco and Honeywell Building platform improves operations and security for building management while providing better health and safety features for building tenants and occupants. Figure 1 presents a vision for smart buildings, one based on the concept of convergence, or the 4th Utility. This approach connects all systems and services in a building (lighting, HVAC, elevators, alarms, access, IT networking systems) to create a converged, building-wide network infrastructure that is controlled by a single group.

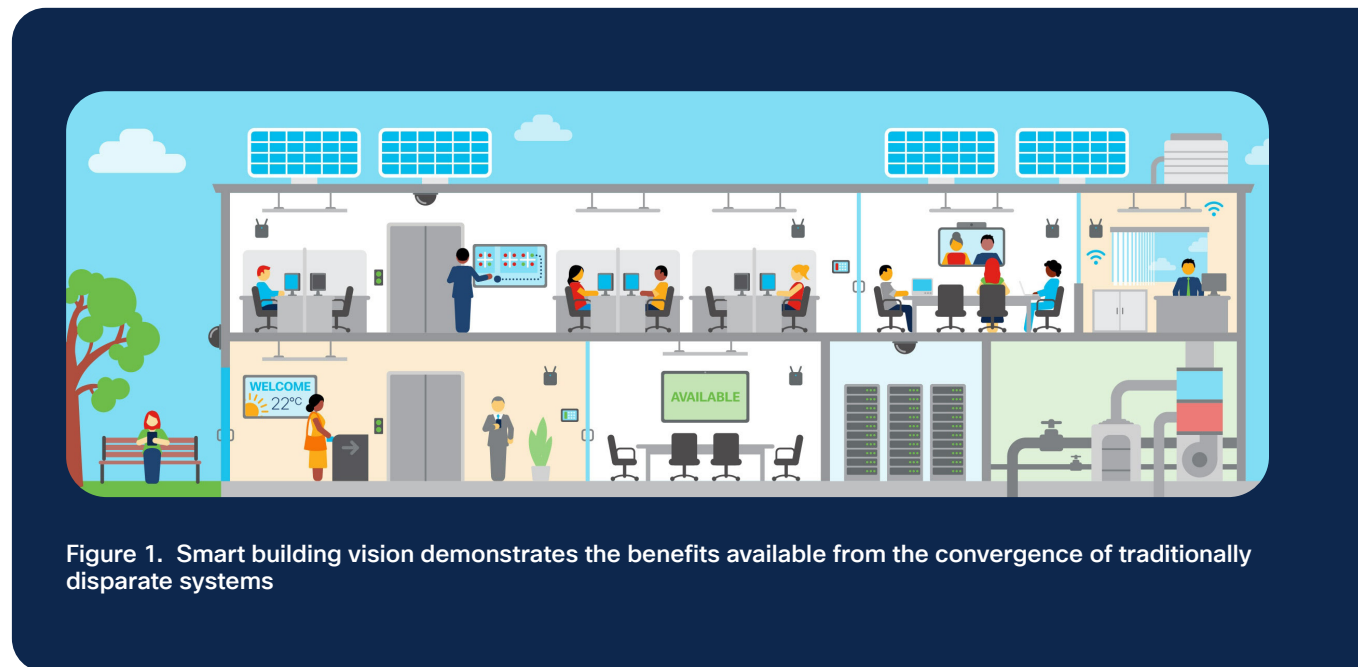


Figure 1. Smart building vision demonstrates the benefits available from the convergence of traditionally disparate systems

Benefits

- **Lower TCO up to 25 percent** with easier installations and automated network setup capabilities
- **Optimize energy costs** with a converged infrastructure and features such as occupancy-based controls
- **Improve operational efficiency** with predictive maintenance and space planning and usage data
- **Lower risk** with built-in cybersecurity for OT, integrated with the IT network
- **Enhance user safety and comfort** with secure and flexible workspaces, with distancing based on occupancy and improved messaging from Cisco® collaboration endpoints

“Smart building solutions not only transform the buildings into energy-efficient and sustainable buildings but also automate the way buildings can be managed and controlled.”

Globe Newswire, January 2020¹

Trends and challenges

Smart building growth

The smart building market is projected to grow more than 23 percent from 2020–2025, driven by increases in energy costs and consumption, in government-sponsored smart infrastructure projects, and in security concerns.¹ Building managers are looking for ways to unlock value from operations, such as lowering OpEx and TCO, and providing an improved environment to attract tenants.

The potential for savings is substantial. The US Department of Energy estimates that 50 percent of a commercial building’s energy costs are lighting and HVAC.² Additionally, redundant systems can exist between a building’s management systems, IT and OT networks, security, HVAC, and lighting. Installing a single, unified management system can monitor operations, provide customized controls, and reduce ongoing operational costs.

Post-pandemic workplace environments

As organizations plan for a return to the workplace, they are faced with new challenges. Some workers will continue to work from home, requiring secure connections from remote locations. Some organizations, such as hospitals, airports, or hotels, will want to establish enhanced safety checks and procedures for workers and guests. These could include infrared cameras for automated temperature checks, enhanced ventilation for improved air quality, and hands-free technologies to reduce touchpoints. Smart buildings that incorporate these types of system improvements will become more attractive to commercial real estate agents and building tenants.

¹ “Smart Building Market: Growth, Trends & Forecasts to 2025” ([Globe Newswire](#), Jan 21, 2020)

² “Energy use in commercial buildings” ([US Energy Information Administration](#), September 28, 2018)

How it works

Unlock the value from your building operations

The Cisco and Honeywell Building platform brings together industry-leading technologies to create a differentiated, more resilient environment. Honeywell's Building Management System (BMS) leverages the latest Cisco products to seamlessly expand sensors' connectivity and capabilities, move applications to the edge of the network, and leverage previously discarded data to enhance the workplace.

Figure 2 demonstrates how a converged network can drive long-term, sustainable improvements in building operations and safety while lowering ongoing costs. The process begins with the converged network and focuses on connectivity throughout the design of the building's systems. Sustainable operational efficiencies provide an exceptional user experience. The converged network can support additional smart features over time.

Components

As depicted in Figure 2, the Cisco and Honeywell Building platform includes the following:

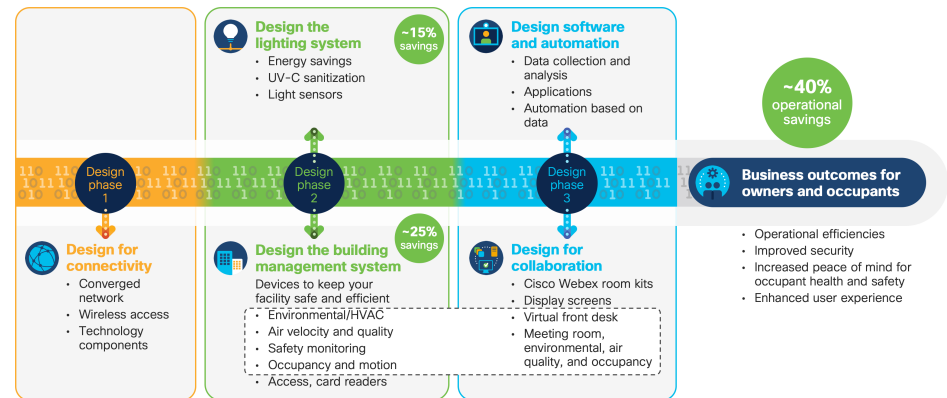
- **Design for connectivity:** Networking and [wireless technology](#) are at the core of connecting devices. Built using Cisco components such as [switches](#) and the [Catalyst® 9000 family](#), this secure, integrated network provides seamless communications between all building systems and applications, extending to edge devices and sensors for end-to-end management.
- **Honeywell BMS:** Using data from [connected devices](#) that monitor mechanical systems, air quality, security, and more, the [Honeywell Forge Enterprise Performance Management](#) software automates and optimizes operations based on that data.

- **Smart Lighting (Honeywell and Signify):** [Interact](#) integrated lighting can help optimize energy consumption, adapt the lighting based on occupancy, and provide navigation guidance to available workspaces. [UV-C disinfection lighting](#) can break down harmful viruses and bacteria from surfaces, rendering them harmless.
- **Software and automation:** Tools such as [Honeywell Forge](#) and [Cisco DNA Spaces](#) use data from connected building systems to support management decision-making and automate processes, ultimately driving operations to achieve targeted business outcomes.
- **Collaboration:** Intelligent collaboration systems such as [Webex® room kits](#) bring your meeting rooms to life. These applications help your work teams to better connect; communicate on social distancing, occupancy levels, and air quality; and, provide a virtual front desk/reception service.

Results

Across industries and different types of buildings, the Cisco and Honeywell Building platform can help you establish smart and secure spaces with simplified design, comprehensive management, and converged systems. Modernize the workforce experience and create an environment that is more attractive to tenants with sustainable operating efficiencies.

Figure 2. Converged network design drives business outcomes



Use cases

Industry name	Use case description
Commercial real estate	<ul style="list-style-type: none">• Workplace health and safety• Smart and intuitive spaces• Secure and flexible workspaces• Space divested and recycled
Education	<ul style="list-style-type: none">• Smart campus and automation• Hybrid learning spaces• Administrative collaboration• Campus wireless and connectivity• Residential living (higher education)• Video surveillance and physical safety
Healthcare	<ul style="list-style-type: none">• Accelerate IT/OT convergence• Auto-commissioning and self-segmentation between biomedical and BMS systems• Intelligent patient monitoring and healthcare management• Network cybersecurity that ensures patient data privacy and meets HIPAA compliance standards
Airports	<ul style="list-style-type: none">• Automate air flow to clean the air throughout the facility• Reduce congestion using video inputs and provide route guidance to people• Pre-screen body temperatures and confirm masks as people enter the facility• Use ultraviolet cleaning to reduce bacteria and viruses from airplane surfaces

Financing to help you achieve your objectives

Cisco Capital® can help you acquire the technology you need to achieve your objectives and stay competitive. We can help you reduce CapEx. Accelerate your growth. Optimize your investment dollars and ROI. Cisco Capital financing gives you flexibility in acquiring hardware, software, services, and complementary third-party equipment. And there's just one predictable payment. Cisco Capital is available in more than 100 countries. [Learn more.](#)

The Cisco and Honeywell advantage

Cisco and Honeywell are redesigning how buildings work to create a resilient return to the workplace. Honeywell is a Cisco STI (Solution Technology Integrator) partner, able to deliver Cisco-based solutions worldwide. Honeywell brings more than 100 years' experience in defining energy efficiency. Cisco is a worldwide leader in networking technology. Together, they optimize smart building solutions for joint customers around the world.

Call to action

Is your building optimized for workers' return? Please visit [NAME & URL] to connect with us to start creating your design.