



THE EVOLUTION OF BUILDINGS, FROM AUTOMATED TO TRUSTED

Building trust with a new
sense of purpose



BUILDING TRUST WITH A NEW SENSE OF PURPOSE

The evolution of buildings, from automated to trusted

As the real estate industry navigates the COVID-19 crisis and its economic fallout, the “next normal” in building priorities will shift from safety to well-being and ultimately to trust. To get there, real estate companies will need to foster a collective sense of purpose that prioritizes trust, wellness, community-building, and sustainability.

It is critical for real estate companies to build security and safety, both physical and digital, into their business strategies so that occupiers can trust that their buildings keep them free from harm and disease. Property investors will need to rethink the trust they put in their valuation, planning, and forecasting assumptions. Tenants and landlords will have to find common ground in lease negotiations.

Building managers will develop new guidelines that keep both staff and occupants healthy.

Before COVID-19, real estate companies pushed to make structures smarter in an effort to yield savings in operations and management. Now real estate is focused on developing data, automation, and up-to-date wellness strategies that emphasize health and well-being of people. Going forward, trust will become the most important factor for occupants. That’s not to say that making money isn’t important, of course. But creating meaningful careers, supporting local communities, and prioritizing health initiatives – particularly in remote-work environments – should be just as important.

A shift in focus: The evolution of prioritizations in the built world



A shift in focus: The evolution of prioritizations in the built world

AUTOMATED BUILDINGS: Late 1990s-Early 2000s

With the adoption of distributed computing and advanced networking protocols in the late 1990s, businesses developed open-communications protocols that enabled systems and facilities to communicate with one another and more efficiently process data and requests. The BACnet communications protocol, the basis for construction standards, was released by the American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE) in 1995. But building automation as we know it really started in the late '90s with the widespread adoption of direct digital control (DDC) devices, which enabled integration of building automation and information technology systems. By 2003, another important criterion, the LEED 1.0

standard for design and construction of green buildings, was unveiled. These developments reflect the political and social zeitgeist of the era. The Energy Policy Act of 2005 heightened the need for environmentally sustainable office buildings while the Kyoto Protocol, which went into effect in 2005, focused on fighting global warming and climate change.



SHIFTING THE BUILT WORLD'S PARADIGM



Business needs

Improve energy efficiency and sustainability of facilities, create open systems for voice and data, and more efficient networking to improve communications and systems performance.



Human needs

Convenient features such as single sign-on and equipment like network-connected printers, faster performance for users, and healthier indoor conditions in lighting and ventilation.



Community needs

Environmentally safe and energy-efficient building automation that can help advance sustainability in local communities and beyond.

A shift in focus: The evolution of prioritizations in the built world

SAFE BUILDINGS: 2001

The 9/11 terrorist attacks in 2001 heightened the need for greater safety in building design and construction. Engineers studied the collapse of the World Trade Center to understand how buildings fail. Based on these findings, they developed “intelligent” concrete that can withstand compression pressure four times that of traditional concrete.

A number of other changes were implemented by the International Code Council (ICC), an association that develops standards for the design and construction of safe and sustainable buildings. These changes included standards for wider exits and stairways to speed evacuation, improved fire-proofing, a new class of elevators for emergency responders, and enhanced coverage for emergency radio communications. At the same time, the U.S. government implemented new laws that increased collection of data on individuals and created new agencies like the Department of Homeland Security (DHS).



SHIFTING THE BUILT WORLD'S PARADIGM



Business needs

Stronger, more durable buildings that can withstand attacks and help streamline occupier evacuation, heightened physical security to help protect structures from physical attack, and identifying and tracking who enters and exits a building.



Human needs

After the 9/11 attacks, safety became a top concern for office workers as well as travelers; the focus on home life, family, and patriotism increased, but did not quell anxieties concerning potential future terrorist attacks.



Community needs

Improved emergency response and communications capabilities helped unite communities and prepare for potential attacks.



A shift in focus: The evolution of prioritizations in the built world

SMART BUILDINGS: 2010s

By 2010, advances in connected sensor-based devices and wireless communications allowed businesses to take advantage of the nascent Internet of Things (IoT)—and create the first true smart buildings. Initially, smart structures connected disparate building assets to understand energy consumption, better manage facilities and equipment, and automate occupier services. These early buildings, however, could not monitor how building occupants use the space, their preferences, and behaviors inside the building.

At the same time, new proptech companies began to offer end-to-end platforms to connect, integrate, and monitor diverse systems, devices, and data. These platforms combined new technologies like GPS-enabled smartphones and mobile devices, Wi-Fi and faster cellular technologies, and automated maintenance and robotic capabilities.



SHIFTING THE BUILT WORLD'S PARADIGM



Business needs

Buildings that are more energy-efficient and less costly to manage, the ability to effectively monitor systems and buildings, improved wireless communications, enhanced worker productivity, and a reputation of sustainability and environmental responsibility.



Human needs

A shared sense of purpose among individuals that enables them to work together toward a more sustainable environment.



Community needs

Build relationships between local communities and businesses, and create a reputation of sustainability and environmental responsibility.

A shift in focus: The evolution of prioritizations in the built world

HEALTHY BUILDINGS: 2020

The COVID-19 pandemic has demonstrated the importance of health over profit. Today businesses are emphasizing health and well-being through the use of data analytics, automation, and updated wellness strategies for employees and occupiers. They are also integrating IoT technologies and devices, such as connected infrared temperature detectors to monitor the health and behavior of occupiers. Developers and builders are integrating IoT technologies to improve ventilation inside the building, as well as implement smart windows, AI-powered cleaning robots, and touchless controls for lighting and elevators.



Perhaps most important is that healthy buildings now have the ability to collect information on the behavior of people working inside to help inform decision-making in a crisis.

SHIFTING THE BUILT WORLD'S PARADIGM



Business needs

Monitor and safeguard occupants from physical harm and disease, enhance business continuity plans, establish a formal remote-work program, and implement technologies and processes for cleaning and worker safety.



Human needs

Feel safe and healthy in the workplace, and maintain a remote-work program that protects data privacy remotely and in the office.



Community needs

Create and maintain safe environments for workers and the public, create and sustain a healthy community.

A shift in focus: The evolution of prioritizations in the built world

TRUSTED BUILDINGS: 2021

Going forward, trust will be the most important factor for building occupants. Having a “smart” building will be meaningless if the people don’t trust that this intelligence is being used with their best interests in mind. It’s also critical that the building truly enables the sense of purpose within the space.

Deep trust with occupants will require a commitment that doesn’t stop at the building entrance. The connection should reach deeper into the tenancy as a means to promote stickiness of lease renewals, no matter the circumstance. Successful real estate organizations will centralize trust into their business strategies and establish an occupant-centric approach to building management that enables them to extrapolate data to understand how occupants use and interact within a building.



SHIFTING THE BUILT WORLD’S PARADIGM



Business needs

Develop a strategy for an ingrained sense of trust and buildings that provide enterprise-wide continuous monitoring, scoring, and calibration.



Human needs

Trust a building just as they would a favorite consumer brand, as well as trust that their private information is respected and protected.



Community needs

A net-positive impact on the environment and sustainability, as well as programs to help improve local communities.



About CohnReznick

As a leading advisory, assurance, and tax firm, CohnReznick helps forward-thinking organizations achieve their vision by optimizing performance, maximizing value, and managing risk. Clients benefit from the right team with the right capabilities; proven processes customized to their individual needs; and leaders with vital industry knowledge and relationships. Headquartered in New York, NY, with offices nationwide, the firm serves organizations around the world through its global subsidiaries and membership in Nexia International. For more information, visit cohnreznick.com

Contact

Julie Miner, CPA, CISA, CRISC
Partner, Real Estate Advisory Services Leader - Americas
312.508.5941
julie.miner@cohnreznick.com

To learn more, visit cohnreznick.com/buildingtrust



CohnReznick LLP © 2020 | This has been prepared for information purposes and general guidance only and does not constitute legal or professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (express or implied) is made as to the accuracy or completeness of the information contained in this publication, and CohnReznick LLP, its members, employees and agents accept no liability, and disclaim all responsibility, for the consequences of you or anyone else acting, or refraining