

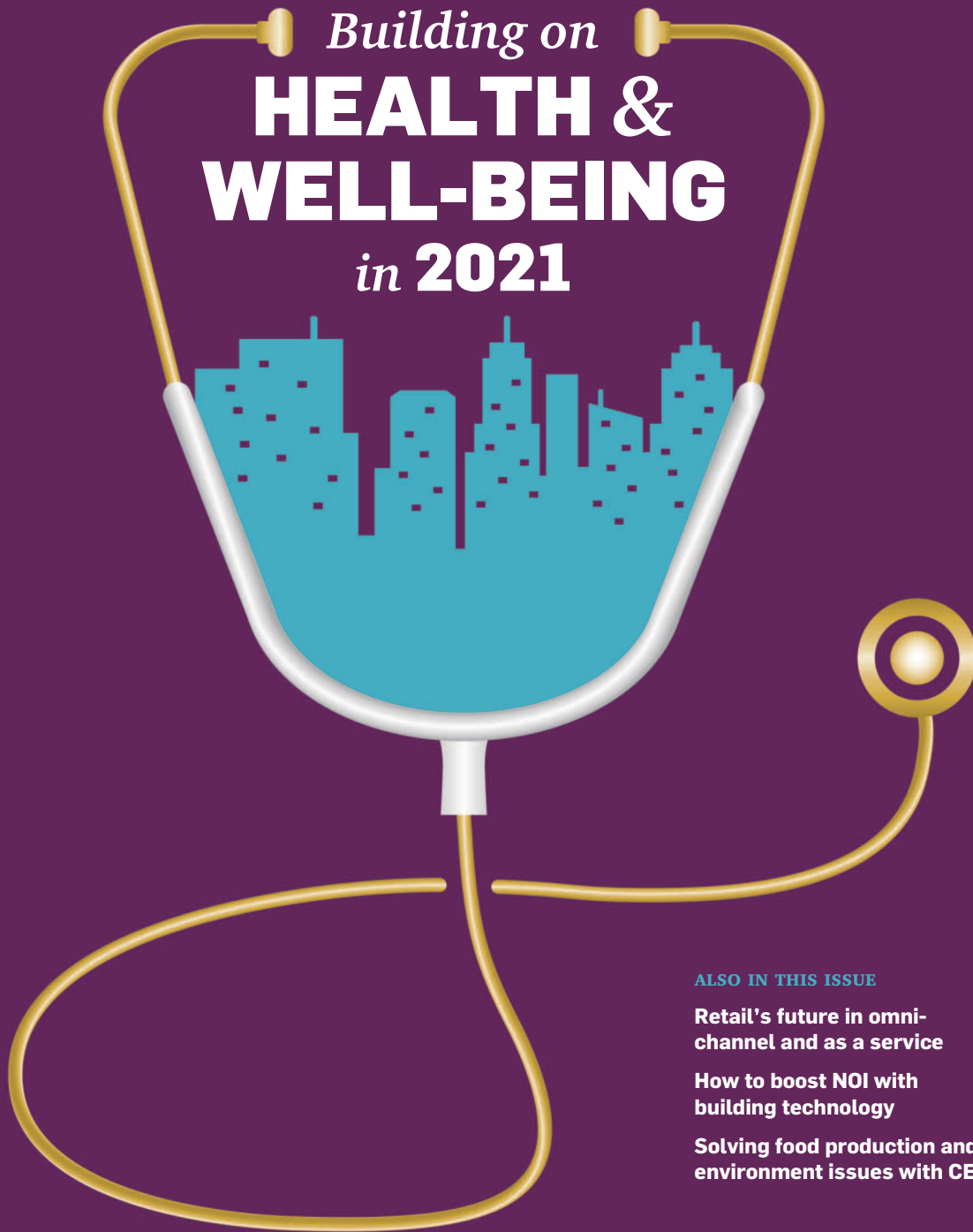
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SPRING 2021

BEST PRACTICES SHARED | VALUE ADDED

dialogues

Building on
**HEALTH &
WELL-BEING**
in 2021



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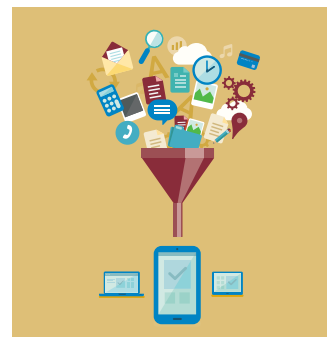
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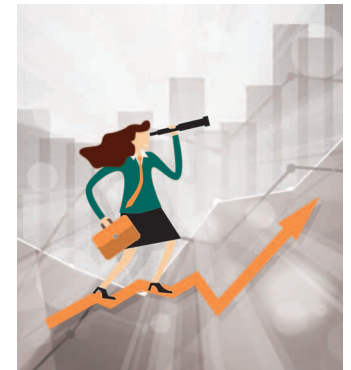
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Boosting NOI *with* BUILDING technology

A strategic approach to managing building technology can increase revenue, reduce cost and risk, and improve tenant experience.

By Bob Geiger,
Partner Engineering and
Science, Inc.

Recently, a real estate investment management firm targeted a brand new, Class A, multifamily complex in Columbus, Ohio. The development was well constructed and appointed, with sought-after amenities such as a clubhouse, fitness center and business center. However, despite its construction in 2019, the property's technology systems were lacking or obsolete: no security cameras, no Internet connectivity in common areas, and technology infrastructure limited to a single Internet service provider.

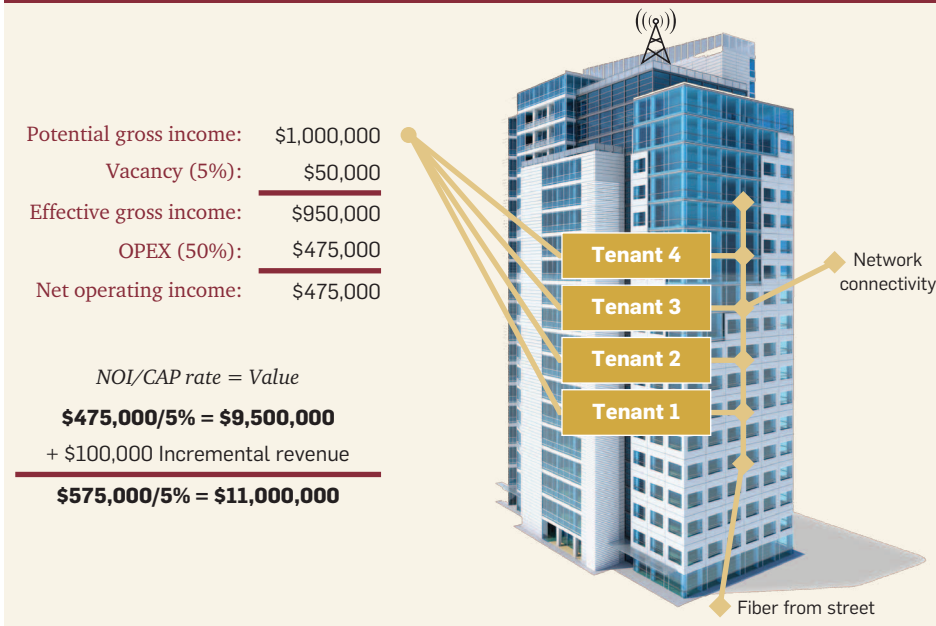
These deficiencies are often easily overlooked because many technology systems are outside the scope of standard due diligence assessments. This results in a property that is not secure, not competitive and underperforming. To bring it to market standard requires a significant amount of capital and time.

When it comes to acquiring and managing commercial real estate,

nowhere is the gap between criticality and prioritization larger than in the realm of building technology.

Technology — including connectivity and cellular coverage, building management and security systems, elevators, parking management, digital signage and more — is fundamental to the performance of a building. It affects every metric from NOI to tenant satisfaction. Despite this fact, few CRE investors or operators have a strategy to proactively assess or manage building technology in their portfolios.

Compared to the structured and standardized CRE environment, the evolving world of building technology can seem like a wild frontier. Building technology creates administrative headaches, incurs unforeseen costs, and exposes property owners and occupiers to risk. But it also presents tremendous opportunity: additional revenue, improved tenant experience, and cost and risk reduction (see Exhibit 1).

Exhibit 1: Potential NOI effects from technology impacts

“ Building technology creates administrative headaches, incurs unforeseen costs, and exposes property owners and occupiers to risk. But it also presents tremendous opportunity: additional revenue, improved tenant experience, and cost and risk reduction. ”

Owners, investors and asset managers can minimize tech challenges and boost NOI by developing and implementing a comprehensive technology strategy for their portfolios. A technology strategy allows operations to be streamlined, access and data to be monetized, and technological innovations used to stay competitive.

Getting started

A building technology strategy begins with a clear understanding of an asset's current position. As a baseline, perform a building technology assessment (BTA) using qualified inspectors to examine existing technology systems within each building. Often, these inspections are conducted with the help of a building technology consultant (BTC). Inspectors should provide an inventory and analysis with suggestions to improve efficiency, reduce risk and increase revenue.

Unlike other CRE assessments, such as property condition assessments, there is no recognized industry standard for BTAs. Custom scopes can be developed according to the asset and its objectives, but generally, inspections include the following:

- connectivity
- safety and security systems
- energy and building management
- emergency response
- rooftop management

Once complete, the BTC can discuss the report and refer technology

resources to support implementation of any improvements the owner elects to make. Note that the BTC should be “provider agnostic” in order to ensure the widest range of options and best outcomes with provider referrals.

If the building owner or operator chooses not to implement any of the suggestions contained in the report, the inventory component of a BTA is still a valuable tool for asset valuation as well as communicating and negotiating with technology providers.

Partnering with a building technology consultant

One of the barriers to effectively leveraging building technology is communication. Technology providers don't speak real estate, and many CRE owners don't speak tech. Bridge the gap with a building technology consultant (BTC) who understands your business objectives and the technologies available to support them. Whether assessing the tech infrastructure of a potential acquisition or seeking to optimize technology in an existing portfolio, discuss your overall strategy with your BTC, including financial targets, projected hold periods, positioning and any known challenges to reaching those goals.

Exhibit 2: Building technology impact by asset type

	Office	Industrial	Retail	Multi-family	Medical office	Self-storage
In-building network	High	Low	Low	High	High	Low
Rooftop leasing — solar	Low	High	Low	Low	Low	High
Rooftop leasing — telecom	High	Low	Low	Low	Low	Low
5G small cell	High	Low	Low	Low	Low	Low
Digital signage	Low	Low	High	Low	Low	Low
Cybersecurity	High	High	Low	Low	High	Low
Physical security	High	High	Low	High	High	High
Building operation	Low	Low	Low	Low	Low	High
Energy management	High	Low	Low	Low	Low	Low
Automation	High	High	Low	Low	Low	High
Tenant experience	High	Low	High	High	Low	Low
Scale:	Lower impact		Higher impact			

When developing a technology strategy, CRE owners and building tech consultants must consider many variables, such as asset type, property use, business objectives, existing technology in place, budget, projected hold times and more. This exhibit illustrates how some systems or applications will have greater impact on one asset type versus another.

Boosting revenue

The most exciting aspect of proactively managing building technology is identifying new opportunities for revenue (see Exhibit 2). While vacancy rates may rise and fall, technology can provide income streams that are largely independent of the local real estate market. Not all technology tenants are feasible in all buildings, but a BTA will identify which of these “hidden rent rolls” is possible for a given portfolio:

- **Rooftop leasing:** Rooftop space may already be leased to a cellular provider. Is that provider paying the best market rate? Can the roof accommodate multiple carriers? Is the building owner or agent

equipped to effectively negotiate with carriers? What about solar rooftop leasing?

- **5G opportunities:** 5G wireless technology requires a vast increase in cell sites. Cell sites must be under 150 feet, so a high rise is not necessary to attract carriers. As 5G networks expand, the opportunity for real estate owners is lucrative.
- **Wi-Fi network offerings:** A centralized, secure Wi-Fi network that is accessible throughout the entire property allows the owner to improve tenant experience and charge a small technology premium. Add a cell signal booster capability and these amenities can be further

monetized by collecting revenues from cell carriers. Many CRE owners miss this opportunity to provide better amenities to their tenants while leveraging their position as gatekeeper to Internet service providers.

- **Fiber management/wholesale access:** Consider the possibilities of having a fiber-based infrastructure running through the entire property that can provide as much as 1,000 Mbps of speed to each residential or commercial tenants. Including an HDTV streaming option to super-fast Internet could be cheaper than the price tenants could procure on their own. These types of connectivity packages can generate a substantial amount of revenue, improve tenant experience, make the building move-in ready, and help differentiate the property from its competition.

Beyond access and data, a BTA may identify other ways to leverage technology to increase revenue. Owners of the AT&T Tower in Nashville chose to include a technology assessment as part of their overall repositioning strategy. In addition to technology tenants, they identified three key opportunities to boost revenue. First, they automated their parking structure to enable monetization of off-hours community parking. Then, they converted unused office space into tech-enabled community conference rooms available both as tenant amenities and as event rental space. Finally, they identified energy efficiency upgrades, including submetering, that boosted NOI and helped tenants meet sustainability goals. These three initiatives resulted in a gross annual income increase of \$1.2 million.

The tenant experience

In today's highly competitive rental market, building technology can give owners an edge with amenities that attract and retain tenants. Furthermore, offering turnkey technology increases occupancy by reducing the time required to deliver space to new tenants.

Connectivity and cell coverage are make-or-break amenities for both residential and commercial tenants. New screening technologies allow owners, or would-be owners, to evaluate and map cell coverage and capacity. The value of this information was recently highlighted by a retail mall that was struggling with foot traffic in its food court, until cell coverage mapping revealed a dead zone — the very spot where shoppers frequently sit and use their cell phones. By rectifying this issue, management improved shopper experience and a key metric used for leasing efforts.

Centralized networks in both multifamily and office properties allow landlords to offer turnkey, Internet-ready spaces. Particularly in office properties, communications and Internet infrastructure are often a major hindrance to occupancy. By offering centralized, secure Internet access, the tenant experience can be improved and the move-in process accelerated. For multifamily owners, new approaches to centralized networks mean tenants can log in and stay logged in anywhere on the property, from poolside to parking garage.

Protecting safety and security

Cybersecurity is an increasing concern for landlords, whose technology systems and practices heavily impact the cybersecurity of their tenants. From data

“ To remain successful in the increasingly technological world of real estate, CRE players must prioritize building technology as a critical component to building performance. ”

(emails and digital files) to networks (such as common area Wi-Fi) to any “smart” systems with Internet connections (kiosks, parking monitors, comm systems) — even network closets — buildings present numerous access opportunities for cybercrime. A BTA will help identify and secure vulnerable entry points.

Efficient building technology is also central to physical security, including safety and disaster planning/response. Many buildings are at best equipped with silos of traditional, inefficient safety systems. An integrated technology strategy includes evaluation and optimization of the tech systems that enable critical response components such as situational awareness, coordinated access control and communication. In addition to protecting employees, tenants and property, security upgrades may qualify the building for reduced insurance rates.

Improving operational and building efficiency

Most modern commercial buildings contain as many as 20 or more computerized systems, each with its own network and service provider. Like mechanical, engineering and plumbing (MEP) systems, computerized systems have maintenance needs. Obsolescence is often a greater concern than remaining useful life. A reactive

approach to managing technology wastes resources and results in poor tenant experience, costly and defensive negotiations with tech providers, and frequent overspending. A BTA can provide a framework to begin planning and budgeting for proactive management of technology systems. Furthermore, it can identify opportunities to streamline, consolidate or automate systems to improve building efficiency. The cost of upgrading technology for building efficiency is often offset by reduced costs or even monetization opportunities.

Conclusion

To remain successful in the increasingly technological world of real estate, CRE players must prioritize building technology as a critical component to building performance. Fortunately, implementing an integrated technology strategy not only benefits tenants, but also simplifies and streamlines the operation of the portfolio and adds significant value to assets. By identifying opportunities to monetize technology at buildings, investments in a technology strategy may offer an impressive ROI of their own. ♦

Bob Geiger is Executive Director of Partner Engineering and Science, Inc.