

PROPERTY MANAGEMENT

Quarterly

From silos to shared: Smart technology makes its mark

It can be a daunting challenge to bring a 15- to 20-year-old building up to the level needed to meet the ever-changing expectations of your occupants. And, if you're hoping to attract preferred high-end, long-term office space clients, it can be even more difficult.

When a major mechanical system exceeds its useful life, it can trigger the need to consider any replacement from a broader, integrated systems perspective. Rather than taking a siloed approach to managing systems in today's buildings, an effective new approach is to develop a building operations strategy horizontally across all these systems.

• From silos to shared information.

The challenge is to understand the wave of emerging digital technology in the building systems market. Traditional building systems (heating/cooling, security or lighting) can be isolated, stand-alone systems and the value of information usually remains locked within each. This island effect blocks the building owner and operator from being able to view important information from the various building systems in aggregate. This creates a challenge to optimally maintain the building throughout its life cycle.

The advent of the Internet of Things is unlocking these islands of building information as many of today's systems now are designed to be digitally connected. This is valuable in the ability to share information and enhance the aggregation of various building systems to obtain more value from building management information.

Approximately 90 percent of a building's overall expenses occur during its operation. As building systems need to be replaced, there is an opportunity to consider a more efficient long-term approach.

• **Life-cycle planning.** Even though building owners are striving for a payback over a certain period, we realize that the attention often is pulled more toward just the initial cost. We recommend taking a broader look at the longer-term life-cycle benefits. Through the use of building analytics, you will be better able to manage your budget and expectations for this process.



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When considering next steps and your best options to move toward a more intelligent building, start with prioritizing what will make the biggest impact on the customer satisfaction and loyalty of your occupants.

• **Comfort, safety and performance.** We define "smart" buildings as the integration

of technology to enhance the comfort, safety and performance goals of a building.

Striving for LEED certification has been an important milestone to define a framework to manage the energy of a building system. Today, a LEED certified building is not necessarily good enough. WELL Buildings are driving even more toward the occupants of the building and the IoT provides new opportunities to enhance the comfort, safety and performance of buildings worldwide.

Consider this example: A 30-something executive needs to arrive at her office early in the morning for a live teleconference on the East Coast. When she arrives in the parking garage at 5:30 a.m., she feels safe because, although she is arriving earlier than most of her co-workers, security cameras are activated and good lighting illuminates the parking garage.

She enters the building quickly and easily, where she is immediately recognized through her access card. Once inside, the room temperature and lighting for the conference room will adjust to their prescheduled settings and all the necessary audiovisual and communications systems are on and ready for the meeting.

When smart building systems like this enable an executive to put her best foot forward for an important meeting, a higher level of value is created that will stand out in today's highly competitive marketplace.

Do these investments pay off? Yes. When you can differentiate your prop-



Haselden Construction

"Smart" buildings integrate technology to enhance the comfort, safety and performance goals of a building in order to impact the customer satisfaction and loyalty of its occupants. Pictured above, the University of Wyoming's \$68 million research facility, which opened in 2017, features technology systems that enable smart building systems.

erty and exceed a client's expectations by setting the tone for a productive meeting, it is good business.

Remember, it's the people who make it a "smart" building. Utilizing the comfort, safety and performance considerations will help you determine where and how you can really add value to your building operations systems. If a feature doesn't have at least one of these benefits, it's probably not the best use of your limited budget.

• **Next steps.** When looking at preventive maintenance and the best use of your building upgrade budget, here are some steps to consider:

1. Find a trusted partner with mechanical, electrical and technology expertise to help evaluate your systems and recommend the best ways to take your building to the next level.

2. Conduct a complete building systems assessment.

3. Analyze the results and develop your strategy.

Long-term life-cycle planning for your building operations and upgrades provides many benefits. By bringing different systems onto a common communication

platform you can:

• Provide proactive, centralized monitoring and control by bridging independent system data into coordinated building metrics.

• Collect user data and feedback to steer the comfort and safety of your environment.

• Analyze the collected performance data to improve asset management.

• Add value through energy efficiency, lower maintenance costs, better security and risk management and increased communication and data sharing.

In summary, the days of ensuring building health solely through antiquated systems are being replaced with IT-centric property managers monitoring IoT field devices and leveraging analytics in more complex and competitive market. Today's quality tenants are much savvier in the expectation of what a building can provide their people in comfort, safety and performance that will help drive their bottom line. For both new and existing buildings, consider partnering with a well-rounded specialty contractor with expertise across all systems and technology for achieving your goal. ▲