

### Open**Blue** Enterprise Manager

## What to look for in a smart building solution

A guide to choosing technology that supports your goals

The power behind your mission



### What's on your wish list?

Smart buildings continuously learn, adapt and respond to occupants' needs while reducing energy consumption, improving sustainability and extending asset life.

## As a building owner or manager, you likely have a long smart building wish list.



Technology to not only **control lighting, temperature and air flow** based on occupancy, but also automate operating decisions – making the most of resources including energy, time and money.



Technology to **monitor asset health and maintenance**, empowering your team to fix issues before they become serious problems – improving performance, especially for outdated assets that are still critical to operations.



Technology to **manage space use**, drawing on anonymized data to free up or repurpose meeting and desk space – streamlining people movement and workflows.



Technology to **measure the impact of operating decisions on infection risk as well as energy costs** – creating a safer building that attracts and retains occupants.



Technology to **collect**, **analyze and report on energy and emissions data** – minimizing effort while guiding you to reduce your carbon footprint, meeting regulations and pledges.

Smart building solutions are out there, but the number and variety can be overwhelming. Use the following tips to find your way.



## Survey the playing field

Looking at your peers' priorities can help you get a fix on next steps. According to a commissioned study conducted by Forrester Consulting, developed in collaboration with Johnson Controls, here's where companies are investing:



**89%** to reduce their carbon footprint

**80%** to improve resilience in the face of significant climate or weather events

**75%** to increase energy efficiency in buildings and workspaces

**83%** to enhance sustainability initiatives, improving energy and power management

82% to increase use of renewable energy

75% to develop KPIs to measure their sustainability impact It's clear that most companies are taking efficiency, asset performance and sustainability seriously, making strategic investments and measuring outcomes. And as they invest, they're accelerating their transformation from traditional building systems to connected buildings with more centralized, automated control.

\* Data gathered in a commissioned study conducted by Forrester Consulting, developed in collaboration with Johnson Controls.



## ) Know what to look for as you digitize

Your technology choices should help you:



1. Improve sustainability



2. Ensure asset health



3. Support occupant comfort & wellness



4. Future-proof your building systems investment

Here's what to look for in each solution category...







## 1. Sustainability

**Goals:** Save energy, reduce your carbon footprint and make progress on net zero goals. At the same time, ensure tenant comfort and productivity.

#### Look for:

- Ability to collect, analyze and report utility-grade data from your current energy meters and sensors.
- · Analytics and data-driven projections to establish realistic KPIs.
- Programs to monitor consumption and forecast demand, drawing on external factors as well as systems data—and delivering alerts to help you avoid unplanned spending.
- The option to automate decisions related to energy use.
- Fault detection and suggestions for correction.
- A centralized platform where you can compare building and asset performance.
- Greenhouse gas accounting, with options to view results for the timeframe and locations you select.

Key takeaway: Smart building technology should help you centralize siloed data to simplify monitoring, tracking and reporting.





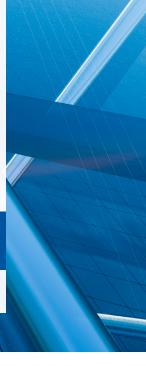
## 2. Asset health

**Goals:** Optimize asset performance and reliability while reducing the cost of operations through proactive and predictive maintenance.

### Look for:

- •Remote real-time monitoring to identify assets that are deviating from performance baseline standards.
- Advanced algorithms for proactive and predictive fault detection, identifying affected spaces.
- Easy system navigation to drill down to problem sources and the root cause.
- •Cost calculation of open faults.
- •Recommended corrective action-a de facto punch list.
- · Automated work order management based on output from asset health monitoring.

**Key takeaway:** Smart building technology should clearly identify potential issues, recommend solutions– and make it easy for facilities teams to act.





## 3. Occupant comfort and space management

**Goals:** Balance energy spending with indoor air quality, improving comfort, productivity and the value of your space.

#### Look for:

- Air quality monitoring to help prevent and control disease, with streamlined data collection, analysis and reporting.
- The ability to monitor occupancy and use, supporting decisions on people movement and repurposing space.
- •Central dashboard with at-a-glance metrics to show how building operating decisions affect infection risk, energy costs and sustainability.
- Solutions that support the hybrid workplace, making meeting spaces more productive.

**Key takeaway:** Smart building technology should empower your team to make data-driven operating decisionsand gradually shift toward autonomous operation.







## 4. Future-proof technology

**Goals:** Future-proof your workplace, ensure data security, and deliver continuing ROI with smart building technology.

### Look for:

- Advanced smart edge solutions to connect devices, equipment and control systems, simplifying integrations as technology changes.
- Digital twin technologies that enable an immersive analysis of your locations, events, assets and people, predicting outcomes in real time.
- Tools to monitor and continuously improve the quality of data and analytics.





Key takeaway: Smart building technology should empower you to stay on top of change.



## Solve for all goals at once with a digital platform

Analytics and Al solutions have historically focused on solving one goal at a time, with progress on one goal often coming at the expense of another. A purposebuilt digital platform that unites building systems and other data sources lets you monitor multiple factors and take coordinated action.

For example, the number of people occupying a space dictates energy and airflow needs. As people fill the room, they use more lighting and need to optimize airflow. And when they leave, the lights go down and airflow is minimized. Sensors do the job of detecting room occupancy and sending data back to building control systems to make these environmental changes in real time. This approach to space management helps building managers meet multiple goals with one solution.



#### Derwent London London, United Kingdom

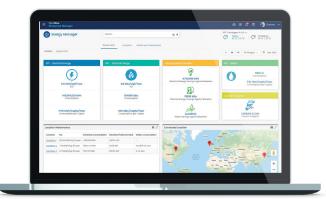
When Derwent London developed the White Collar Factory in London, it installed cutting-edge technologies including the OpenBlue suite of solutions to run the building efficiently and help reduce carbon emissions to net zero by 2030. Johnson Controls experts worked with Derwent London to ensure tenants have access to the data they need to minimize energy use and improve people's workplace experience.



# Solve for all goals at once with a digital platform

To balance short-term business needs with longer-term goals, look for a digital platform designed from the ground up by industry experts with decades of experience developing building control solutions.

Your digital platform should integrate easily with existing energy management and building automation systems—while also giving you the flexibility to fine-tune AI algorithms based on your organization's unique needs and requirements.







#### **BEEAH Headquarters** Sharjah, United Arab Emirates

The BEEAH Headquarters is a remarkable example of what can be achieved with visionary thinking. Featuring intelligent edge systems and software designed to optimize energy efficiency, the building is the first fully AI-integrated building in the Middle East. It is equipped to be net zero and operates to LEED Platinum standards.



## Partner with the experts

OpenBlue solutions from Johnson Controls build on the Microsoft Cloud platform to deliver measurable improvements no matter where you stand on your digitization journey.

We draw on nearly 140 years of buildings experience and innovation to bring you solutions that cut energy use, optimize asset performance and enhance occupant wellbeing. You can rely on us for the sensors, software and algorithms that gather data about building operations, as well as the insights our Microsoft-based solutions generate to achieve decarbonization goals and protect our planet.

Whether you're ready for a small step or a big step toward digital transformation, start with OpenBlue solutions from Johnson Controls. Keep the people who use your buildings comfortable, confident and engaged, keep your data safe, and reach every bottom-line and sustainability target faster.

Talk with us to get started today.



#### Fiserv Forum Milwaukee, Wisconsin

When the Milwaukee Bucks basketball team built its new arena, its owners partnered with Johnson Controls to develop the gold standard in sports and entertainment venues. The Fiserv building system provides real-time data that enables facilities managers and leadership to make informed decisions on site and on the go about safety and security, critical operations and system uptime, unified by a single mobileoptimized platform.

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#### **About OpenBlue**

OpenBlue is a complete suite of connected solutions that serves industries from workplaces to schools, hospitals to campuses, and beyond. This platform includes tailored, AI-infused service solutions such as remote diagnostics, predictive maintenance, compliance monitoring, advanced risk assessments, and more. A dynamic new space from Johnson Controls, OpenBlue is how buildings come alive.

#### **About Johnson Controls**

At Johnson Controls, we transform the environments where people live, work, learn and play. From optimizing building performance to improving safety and enhancing comfort, we drive the outcomes that matter most. We deliver our promise in industries such as healthcare, education, data centers, and manufacturing. With a global team of over 100,000 experts in more than 150 countries and over 130 years of innovation experience, we are the power behind our customers' mission. Our leading portfolio of building technology and solutions includes some of the most trusted names in the industry, such as Tyco<sup>®</sup>, YORK<sup>®</sup>, Metasys<sup>®</sup>, Ruskin<sup>®</sup>, Titus<sup>®</sup>, Frick<sup>®</sup>, PENN<sup>®</sup>, Sabroe<sup>®</sup>, Simplex<sup>®</sup> and Grinnell<sup>®</sup>. **Follow @johnsoncontrols on twitter** 

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