

Operational Efficiency & Equipment Performance

Advance operational efficiency by proactively managing equipment performance and optimizing maintenance services

Market trends affecting business



Productivity obstacles

Older buildings and equipment need more servicing. The skills and expertise available to you wane as a workforce ages, leaving you struggling to find talent with the necessary experience. At the same time, manual systems for gathering data and managing service tickets lead to inefficiencies and budget pressures. You need easy-to-use systems that streamline workflow.



Rising costs

Price volatility continues due to increasing demand in tight energy and labor markets. This affects your cost of doing business. Making the most of existing assets and maximizing energy efficiency to manage costs is your best way forward.



Regulatory pressures

Organizations must reduce their carbon footprint, meeting metrics that vary by region, country and building type. They also have to contend with aging equipment and fast-evolving technology, which is driving privacy regulations and cybersecurity requirements. Finding ways to stay compliant and satisfy stakeholders will accelerate your progress.

Challenges are opportunities in disguise

Reframe your outlook with Johnson Controls and your equipment performance goals become more achievable.

Unplanned downtime and delayed time to resolution affect business operations. Lack of skilled maintenance resources and actionable insights lead to teams defaulting to original equipment manufacturer (OEM) recommendations or run-to-fail. Avoid costly unplanned downtime and delays with data-driven guidance to optimize equipment.

New decarbonization targets mean reducing equipment energy costs. Older equipment generates more alarms and needs added servicing. Plus, the equipment and sensors that cut energy use are often connected to multiple vendor cloud platforms, raising cybersecurity concerns. Ensure security is designed into everything you use to protect you.

Tracking and reporting data manually takes time. Energy and equipment health data collection and reporting is time-consuming, and evolving standards make the task more demanding. However, digital solutions simplify the process, enabling you to measure, track and share progress easily.

Building space use and occupancy dynamics. Facility managers must adapt operating schedules according to dynamic changes in occupancy and space use. Working with legacy and often multiple BMS platforms and control systems, and outdated building inventory models makes it harder to execute lifecycle planning. With a 3D building inventory, equipment issues are resolved quickly.

Your gateway to smart facility management

Unlock the performance of your equipment

Johnson Controls is a global leader in smart, healthy, sustainable buildings. OpenBlue is our blueprint of the future — a complete ecosystem of connected technologies, expertise, services and digital solutions. By reading the live activity of a building, OpenBlue adapts to this information, continuously fine-tuning systems until the building performs optimally.

OpenBlue Enterprise Manager is the gateway to unlock your building's performance and deliver outcomes that matter most: Energy Efficiency & Sustainability; Operational Efficiency & Equipment

Performance; Space, Wellbeing & Productivity; and Security, Safety & Compliance.

Leveraging building data to meet your goals

OpenBlue Enterprise Manager gathers and analyzes building data to assess its environmental health and how efficiently building systems are operating. It flags critical issues for action and provides recommendations on how to improve energy efficiency, reduce carbon emissions, optimize space use and equipment performance, and ensure the health and well-being of occupants.





Privacy plays an essential role in everything we do, especially the data that is produced within the building. We have a privacy by design philosophy, which means our commitment to maintaining our customers' privacy and providing world-class data protection underpins the design of all products and services. Data privacy is embedded into every product we offer.

24/7 equipment performance monitoring and alarm management

OpenBlue Enterprise Manager enables the gathering of data from disparate sources to understand building equipment performance. With access to an active dashboard, 24/7 data monitoring and live reporting, you can easily identify building performance gaps and savings opportunities. By ingesting BMS and equipment alarms, we can prioritize and route notifications, and make it easy to create and share operational and compliance reports to help you meet building certification norms.

Proactive and predictive maintenance with actionable insights reduces downtime

Our automated fault detection and diagnostics (FDD) engine identifies current and potential faults affecting equipment performance, energy and comfort. This avoids energy and maintenance cost overruns. Reduce pressure on staff capacity and improve the speed of fault and security incident responses with 2D and 3D graphical views, diagnostics and proactive work orders. Command and control capabilities enable remote setpoint overrides to optimize performance.

Unified operating center to optimize maintenance resource pool and incident response time

You can effectively manage your operations and building assets through a unified and remote command centre. Translate BIM files to 3D interactive digital twins for advanced monitoring to enable your team to easily configure and manage building and equipment operating schedules, and define and manage workflows for standard operating procedures. Save time by validating alarm conditions before dispatch and providing accurate response actions with remote monitoring and connections to live and recorded video streams.



Support sensor points available through respective vendor cloud platforms



Normalization of equipment data for benchmarking across regions



Extensive visualization and trending of KPIs; standard and custom reporting templates



Graphical representation of asset performance and utilization data



Automated identification of data gaps and health issues



API integration with third party ESG reporting platforms



Savings estimates and project tracking for energy conservation measures (ECMs)



3D visualization of issues impacting equipment performance



Connect equipment KPIs to ECMs



Maximise uptime and reduce costs with OpenBlue **Enterprise Manager**

Automated FDD with monetization to prioritize maintenance actions



Work order integration for closed loop action



Manage equipment performance based on connectivity to BMS and equipment over OT protocols



Manage equipment inventory with operational run times and performance history

Drive operational efficiency and equipment optimization with digital solutions

Whatever your industry, portfolio size or the level of support you need, OpenBlue Enterprise Manager offers you a suite of different solutions to help you deliver your goals.

Equipment PerformanceAdvisor



Kick-start smart equipment and facility management. Identify, diagnose and prioritize equipment problems, and plan timely actions to fix issues.



Understand and track equipment performance



Identify baseline operational efficiency to pinpoint optimization opportunities



Communicate results for operational and maintenance purposes

Equipment PerformanceAdvisor Plus



A fully comprehensive solution for enhanced equipment performance. Improve profitability with an optimal asset management system that enables equipment performance, extends asset life, and reduces downtime and service costs.



Comprehensive equipment optimization



Seamlessly boost operational efficiency

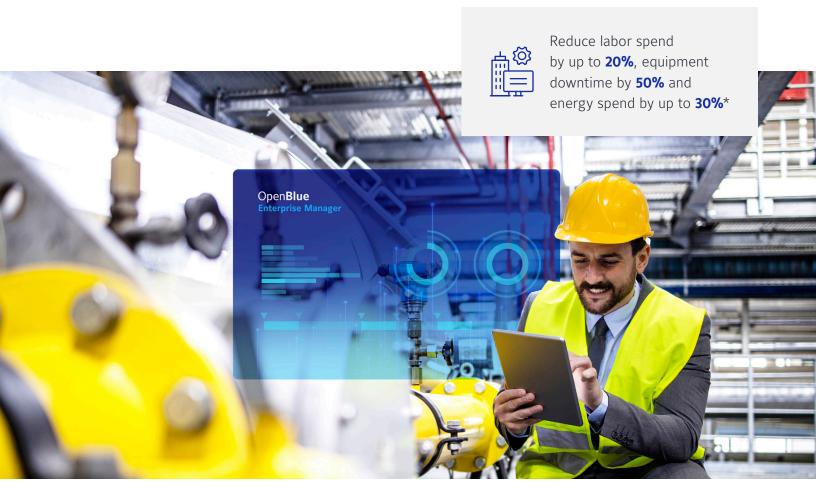


Predictive maintenance and rapid issue resolution

Accelerate your digital transformation with our professional services

Realize the potential of your chosen digital solutions through OpenBlue Enterprise Manager with services designed to help you meet your operational efficiency goals.

Whether you need expert guidance and resources for effective deployment, ongoing technical support, regular insights on your building's performance or tailored proactive and predictive maintenance agreements for equipment optimization, we support you every step of the way.





Zero-trust cybersecurity

Leading active security in all our products. Security is designed into all our products - Johnson Controls hardware, software and hosted services. We work with expert partners in government and industry to maintain our customers' compliance with regulations and build their resilience against the increasing number and range of cyber threats.

Feature spotlight

High impact monetization framework

In a commercial building, heating, ventilation and air conditioning (HVAC) electricity consumption can typically account for around 40 percent of total building consumption and 70 percent of electricity. Improving the performance of your HVAC via control systems can provide immediate reductions in energy use and costs. The return on investment can be measured in months, not years and additional benefits can include:



Enhanced occupant comfort



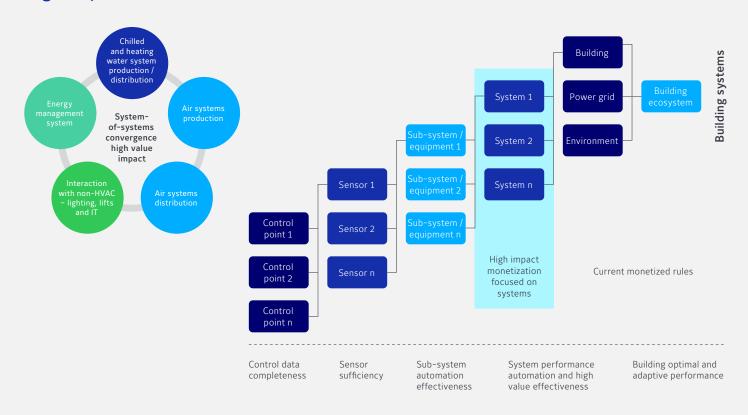
Improved reliability of systems



Reduced ongoing maintenance costs

Our suite of OpenBlue Enterprise Manager solutions help you identify, recognize and prioritize building performance strategies with this high value monetization framework.

High impact monetization framework



Partner with Johnson Controls for optimized building performance

We're leading the building transformation by creating a new class of smart, healthy and sustainable buildings with Johnson Controls OpenBlue. Our award-winning digital platform gathers data from siloed sources to provide a single view and baseline status of your operational technology. It tracks and analyzes operations and gives recommendations to improve performance, and automates commands and work orders so that your building performs optimally.



Our award-winning AI is embedded into the OpenBlue Enterprise Manager suite of digital solutions and workflows. The automated predictive control of setpoints enables equipment optimization and the transition to autonomous buildings.

Explore the OpenBlue Enterprise Manager suite for solutions tailored to your outcomes





About Johnson Controls

At Johnson Controls (NYSE:JCI), we transform the environments where people live, work, learn and play. As the global leader in smart, healthy and sustainable buildings, our mission is to reimagine the performance of buildings to serve people, places and the planet.

Building on a proud history of nearly 140 years of innovation, we deliver the blueprint of the future for industries such as healthcare, schools, data centers, airports, stadiums, manufacturing and beyond through OpenBlue, our comprehensive digital offering.

Today, with a global team of 100,000 experts in more than 150 countries, Johnson Controls offers the world's largest portfolio of building technology and software as well as service solutions from some of the most trusted names in the industry.