



PREDICTIVE MAINTENANCE IN COMMERCIAL REAL ESTATE PORTFOLIOS

Modernizing Building Equipment Maintenance
with Intelligent Automation

Honeywell



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BUILDING MAINTENANCE ISN'T EASY

Most industries are plagued by the quandary of building asset maintenance. It's a double-edged sword: organizations either pay expensive building maintenance contracts or save that money and apply it toward fixing issues as they arise – which means replacing assets that haven't been well-kept.

Both options have gaps. Historically, there has never been a perfect solution. The average commercial building requires dozens of systems to run, and that creates complexity – particularly because there is often very little standardization across those systems.



More than
80%

of companies have experienced an **unexpected outage** within the past three years.¹



The **average cost** of unplanned equipment failure is

\$260,000

per hour.¹



The average equipment outage lasts **four hours**, costing a company

\$1,040,000

each time.¹

IT'S EVEN MORE COMPLICATED FOR COMMERCIAL PORTFOLIOS

Balancing operational costs against occupant satisfaction and asset efficiency is challenging for facility leaders in any sized building. But leaders of commercial portfolios often manage a combination of mixed-used, multi-tenant sites, and many corporate real estate portfolios include a wide variety of building types and uses – adding to the complexity.

In multi-tenant high-rise buildings, for instance, fluctuations in temperature can affect employee comfort and productivity for multiple businesses at once. A first floor coffee shop providing a warm respite to patrons passing by outside; an open, shared workspace on the third floor; and a corporate tenant occupying the top 6 floors of a high-rise can all be affected simultaneously by a breakdown in critical building systems.

Global organizations face even more challenges. Consider a business that has mixed-use facilities – and then factor in dozens, or hundreds of sites around

the world. Multiple buildings that have different purposes may have specialized requirements (and regulations) that must be managed individually.

So in this complexity, which do you choose: To pay service companies throughout the year knowing you're often paying technicians to service well-functioning equipment or to save those ongoing costs and risk breakdowns that effect the occupant workday – and reduce asset lifecycles? Neither option provides benefit for both business continuity *and* the bottom line.

***Challenging maintenance conditions and asset requirements typically result in high overall maintenance costs – ranging between 20 and 60 percent of overall OPEX spend.**

HONEYWELL FORGE PREDICTIVE MAINTENANCE

Honeywell Forge Predictive Maintenance is the missing component in building management. As a data analytics solution, it renders scheduled maintenance obsolete by identifying equipment faults before malfunctions occur, to reduce unnecessary OPEX spending. Now, organizations can move from risky reactive maintenance and costly preventative maintenance to a proactive maintenance approach – without expensive service contracts or damaging downtime scenarios.

Honeywell Forge Predictive Maintenance is a cloud-based solution that collects data from building assets and uses machine learning to understand how equipment is running against optimal performance. It then prompts predictive alerts that identify component faults before failures occur. As a result, Honeywell Forge Predictive Maintenance improves maintenance efficiency, asset performance and – in the long run – longer asset lifecycles.

A BUILDING MANAGEMENT SOLUTION THAT SCALES ACROSS NUMEROUS BUILDINGS



CONNECT SYSTEMS SECURELY

Establish a single, secured connectivity strategy between all systems and buildings



COLLECT INTELLIGENCE

Normalize, visualize, scale, and extend—no system is too large or diverse.



OPTIMIZE OPERATIONS

Unlock key insights and centralize control across your entire operation.

WHAT CAN YOU EXPECT FROM HONEYWELL FORGE PREDICTIVE MAINTENANCE?

When commercial real estate organizations use Honeywell Forge Predictive Maintenance, they get a powerful solution to help transform maintenance models, and outcomes for all their properties, reducing maintenance and energy costs at scale.

- Automatically discover all on-site systems
- Connect to any system, agnostic of make or model
- Collect all IoT data to unlock insights
- Extend equipment lifecycles
- Improve business continuity
- Centralize control with unified data
- Shift from reactive to proactive—and save CAPEX and OPEX

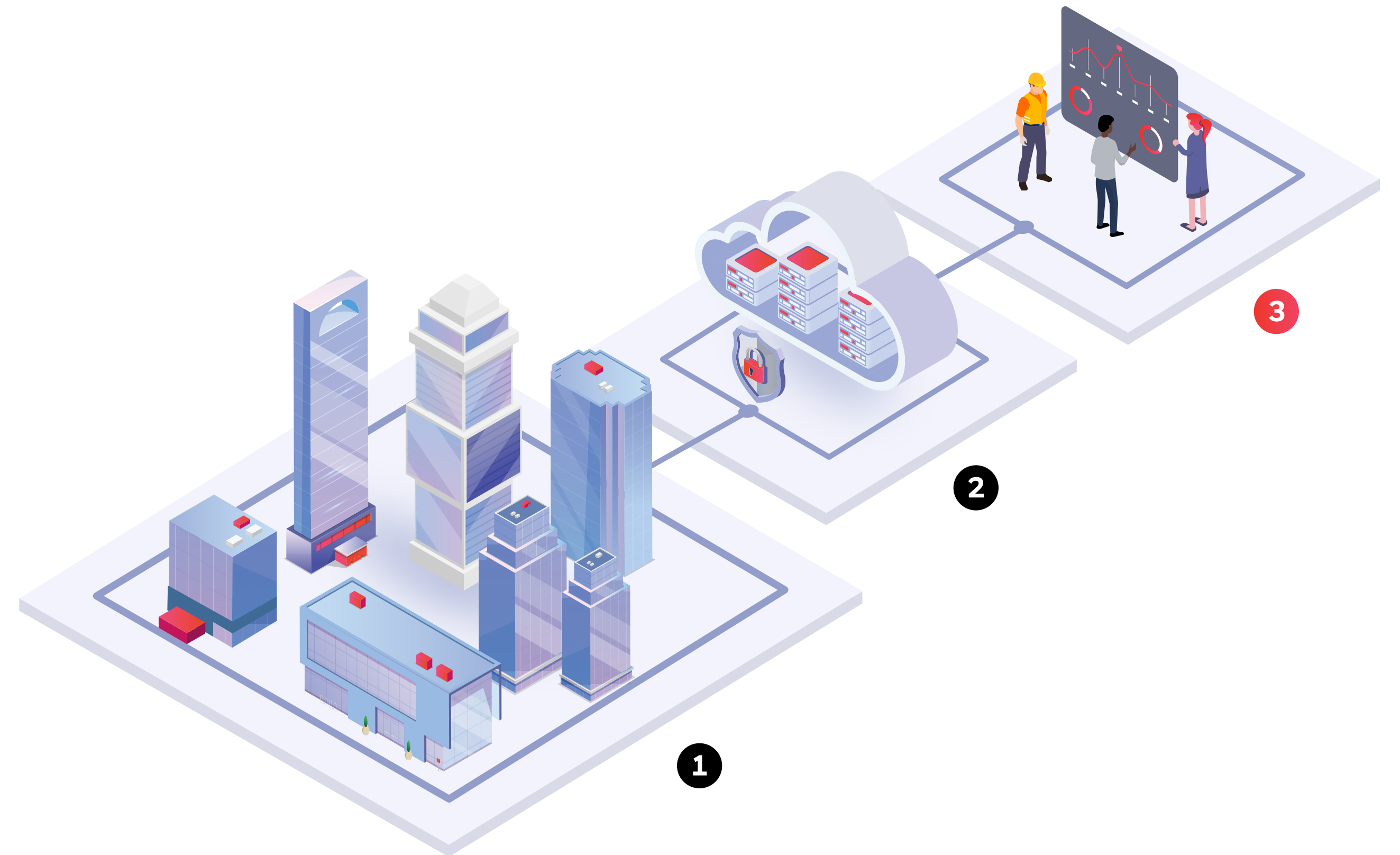
HONEYWELL FORGE CONNECTS ALL YOUR BUILDING SYSTEMS

Honeywell is an established leader in the building operations technology space and has been for more than 130 years. Honeywell hardware, software, and services have been used by thousands of companies, for decades. Sold as a software-as-a-service multi-tenant solution, Honeywell Forge Predictive Maintenance brings Honeywell's unique data models into the cloud – and helps organizations take full advantage of IoT for building maintenance on a global scale.

A FAST, SIMPLE WAY TO CONNECT DIVERSE BUILDING SYSTEMS

Honeywell Forge Predictive Maintenance takes advantage of Honeywell Forge Connect. In turn, Honeywell Forge Connect is built on the trusted Niagara Framework, an open architecture that allows almost any system and solution to connect, manage, and control any device using any protocol. As a result, Honeywell Forge Predictive Maintenance gives organizations a streamlined way to use existing devices and building optimization suites or deploy new solutions while centralizing the remote management of their facilities, or series of facilities.

Honeywell Forge Connect is also supported by a global network of trained Honeywell technicians – and backed by a company that has been a leader in building management solutions since 1906.



- 1 Buildings and equipment generate data
- 2 Data analyzed in the cloud
- 3 **YOU CAN MAKE BETTER DECISIONS**

COMMERCIAL USE CASE: BUILDING GREATER OPERATIONAL AGILITY ACROSS AN ENTERPRISE

THE SITUATION:

Imagine a large commercial real estate enterprise that is operating dozens of office buildings for hundreds of tenants, as those companies begin to implement flexible reentry strategies for their employees. With occupancy in every building fluctuating day to day, HVAC demand distributing the correct temperature, ventilation and circulation of indoor air is unpredictable. So how can they track and manage the proper maintenance schedules to maintain uptime without overspending? Either way, it's a game of guesses with little to no visibility across the portfolio.

THE SOLUTION:

Honeywell Forge Predictive Maintenance removes guesswork from the equation. Machine learning algorithms monitor data flowing from each equipment asset in every building to alert maintenance teams when potential faults are found. And that data streams into a single dashboard where portfolio leaders get top to bottom visibility for all of their sites – on any device.

THE RESULTS:

With the solution in place, maintenance staff and service workers stop hunting for issues and servicing equipment that's working well. They are notified when a potential problem exists so they can go right to the problem, with the right tools, at the right time and correct the issue before it affects occupant comfort and productivity in the building.



Centralized management of diverse, critical systems across sites



Transformation and scaling of modernized maintenance strategy



Improved comfort and productivity with uptime protected



Improved accountability in maintenance service agreements



Cost savings through reduced manual asset monitoring, improved asset efficiency and extended asset lifecycles

COMMERCIAL USE CASE: REIMAGINING COMMERCIAL REAL ESTATE

THE SITUATION:

A global corporate company with hundreds of buildings around the globe is consistently looking for ways to cut costs in operations. They look to their real estate leadership team to audit their costs in all their buildings which range from office space, manufacturing plants, distribution centers and more. With a diverse real estate landscape and various assets to track and maintain, their lack of visibility from the top makes knowing where to start nearly impossible.

THE SOLUTION:

Honeywell Forge Predictive Maintenance connects all their various systems and uses machine learning to track and analyze asset performance throughout every building. This enables real estate leaders to view and compare maintenance performance data across the portfolio from a single dashboard. Now they can compare performance of assets and teams to quickly identify potential areas of improvement.

RESULTS:

With the solution in place, corporate leaders gain full visibility into their diverse set of buildings and can better control maintenance and performance issues, before it affects employee comfort, productivity, and the bottom line.



Top to bottom visibility and centralized management of diverse, critical systems across sites



Improved employee comfort and productivity with uptime protected



Cost savings through improved operational performance, asset efficiency and extended asset longevity



Increased clarity and transformation with modernized maintenance strategy

GET STARTED TODAY

To learn more about how to optimize your building systems
with Honeywell please contact:

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