Honeywell Forge | HCE | IX ROOM, CONNECTED BUILDINGS | SCRIPT

Scene	<u>Voiceover</u>	Visuals & Interactions
Welcome	[EVENT HOST WELCOME] Hi, everyone! Thanks for joining and welcome to the Immersive Experience Room! As you can see, we're surrounded by 360 degrees of screens and sound where we guide our customers through scenarios relevant to their respective industrial environments. Let's begin with a brief introduction to Honeywell Connected Enterprise – the software arm of Honeywell. [VIDEO PLAYS]	WELCOME TO THE IX ROOM
Introducing Connected Building	[HCE INTRO VIDEO PLAYS – ENDS ON MENU SCREEN]	
HCE Verticals	As you heard, Honeywell Connected Enterprise serves various verticals and their common need for visibility. Optimizing industrial performance across a portfolio requires real-time insights that just aren't readily available. Honeywell Forge Performance Plus for Commercial Buildings is intelligent operations software that can help provide these real-time insights needed to thrive, supported by our cloud-first strategy. Now, we'll dive into your industry to see how Performance Plus works for commercial buildings. [TRIGGER REAL ESTATE]	REAL ESTATE WAREHOUSES & DIST CENTERS OT CYBERSECURITY

[INDUSTRY OVERVIEW, PROBLEMS & OUTCOMES]

Let's consider some emerging pressures and constraints impacting commercial real estate today:

[Trigger INDUSTRY TRENDS, L to R]

- Expect the unexpected. Equipment failures are inevitable, it's just a matter of when.
- Insult to injury. Addressing these unpleasant surprises comes with a premium.
- Our planet also pays the price when building operations are underperforming. So, operators are required to pay it back in penalties.
- ...and they'll continue to count the cost.

[Move to PROBLEM STATEMENT]

To summarize the problem these trends represent to the state of the industry...

[Trigger PROBLEM STATEMENT]

Dive into

Buildings

Connected

Customers seeking to maximize portfolio value and ROI need to balance...sustainable operations...with safe, healthy, and comfortable occupant experience...to drive high tenant retention, energy efficiency, and compliance.

To optimize, volumes of complex data...from different systems across the portfolio...must be gathered, analyzed, and simplified...to produce actionable insights.

[WALK TO OUTCOMES]

Here are some key business-level outcomes that customers often want to achieve and sustain:

[Trigger OUTCOMES, pause to view]

It's all about coordination and precision marking...measuring...and monitoring.

So, now we'll step into a day-in-the-life scenario to consider how Performance Plus connects an operations team.

[NEXT SCENE]



INDUSTRY TRENDS

- More than 80% of companies have experienced an unexpected outage within the past three years
- The average cost of unplanned equipment failure is \$260,000 per hour
- 37% of global energy related CO2 emissions come from
- 30% of energy used in commercial buildings is wasted





OUTCOMES

- Deploy a system of record
- Improve portfolio time-to-value
- Reach sustainability targets
- Improve experience and comfort
- Reduce maintenance time
- Protect operational technology from cybersecurity threats

[SCENARIO 1: CHILLER FAILURE]

[WALK TO FACILITIES MANAGER]

A facilities manager's most significant pain point is gathering and reporting data - for troubleshooting and sharing with the portfolio manager.

Like many of our customers, she likely adopted Performance Plus based on an established relationship with Honeywell, or because of Honeywell's hundred-year-old, worldwide legacy of trusted OT expertise.

Shortly after implementing Performance Plus, the facilities manager receives an alert about an ongoing complaint - that the building isn't cooling - an expensive problem.

She opens Performance Plus to investigate.

[PLAY movie]

This is when operators first clearly see and understand how their sites are performing.

From energy usage...to cost targets...to occupant comfort...it's all visible under one dashboard.

She can look at her active service cases and drill down into the details to find the root cause.

She finds the chiller alert is a high priority.

Within the Site Performance module, she can view historical and near real-time values for the chiller and remotely control set points.

Conducting root cause analysis allows her to quickly understand the nature of the problem and assign it to the right team.

After receiving several other alerts, she's probably thinking, "What an overwhelming mess!"

But these alerts and diagnostics will help her avoid this kind of downtime and damage in the future.

Going forward, predictive maintenance will help her prioritize by urgency and value, and schedule repairs when no one is in the building.

And, it's all documented under one system of record.



Scenario 1: Chiller failure

So, now to deal with the chiller.

She places a work order, and the maintenance tech receives her service request on his mobile device.

[NEXT SCENE]

[SCENARIO 2: MAINTENANCE REQUEST RECEIVED, MAINTENANCE ENGINEER]

Here, outside the building the facility's geofence recognizes the maintenance engineer upon arrival.

Sine's visitor management system allows him to access the premises without leaving his vehicle.

From the Sine dashboard, building managers can actually identify visitors before arrival, audit contractor permits, and see exactly who's on-site with the live activity feed.

They can also send out alerts and notifications and provide visual diagrams for navigation.

Sine can also monitor occupant capacity and automate reporting on a facility's occupant data.

And the system integrates with standard business tools including access control systems, active directories, Microsoft Teams, and Slack.

So, for the maintenance engineer to check-in:

[1.Trigger - MAINT. ENGR - BEGIN CHECK-IN]

The Sine Pro mobile app sends a notification.

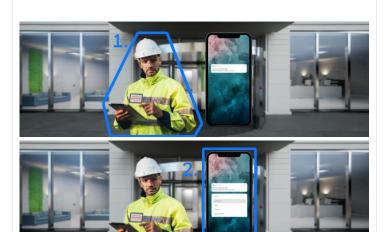
[2. Trigger - MOBILE - CHOOSE VISITOR CHECK IN]

The system confirms his permit and health status, and notifies the Facilities manager.

[3. Trigger - MOBILE - Notify FACILITY MGR]

...and, he's on his way to the chiller room.

[NEXT SCENE]





CHILLER ROOM

[SCENARIO 3: SITE PERFORMANCE, MAINTENANCE ENGR]

And here we are in the chiller room.

Without records or proper expertise, inspections and troubleshooting can be tedious and time-consuming, and problems can go unresolved. (It's expensive.)

Our maintenance tech opens Performance Plus:

[TRIGGER DEMO w/ MAINT ENGR]

Notice that the facilities manager and maintenance engineer are accessing the same screens.

He's relieved to find complete history and diagnostic details.

The site performance module promotes safety, inclusive employment, and training opportunities regardless of skill sets.

He can see trending historic data and drill down into the root cause.

He spots a forgotten manual override setting that keeps the chill water pump running hard and prevents the system from cooling.

It also uses up a lot of energy and costs a fortune.

So, he uses the system to identify and remove all manual overrides and allow predictive maintenance to run the system.

Going forward, the software will govern performance and maintenance metrics to cut energy and labor costs.

Now, let's look at how Performance Plus has brought results to actual customers.

[NEXT SCENE]

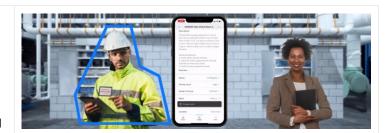
Real customer data

Scenario 3:

Inspection rounds

[REAL CUSTOMER DATA]

Here are some of the customers we've helped to optimize and automate operations, energy, and comfort.



Mouwasat improved asset availability by 5% monthly and average comfort levels by 18% annually across four hospitals.

And, Globalworth reduced annual electricity consumption by 20% across six sites.

Here's what Bluewater Health had to say about their experience with Honeywell's predictive maintenance.

[TRIGGER - BLUEWATER HEALTH VIDEO]

Companies who invest early in predictive maintenance are steering the direction of the industry.

[MOVE TO ENTERPRISE VALUE]

The chiller incident showcases how Sine and Performance Plus streamline and optimize operations at a single site.

But portfolio managers share the same depth of awareness across all properties on one dashboard, allowing them to speak with authority to building owners and investors.

[TRIGGER - ENTERPRISE VALUE]

Performance Plus empowers portfolio managers with the insights to speak directly to all these building metrics.

[NEXT SCENE]



Click to trigger movie



Click to close movie



ENTERPRISE VALUE

- Active service cases
- Sustainability targets
- CAPEX performance tracking
- Space optimization
- Occupant satisfaction index
- Cybersecurity protection readiness index

GLOBE VIEW SCENE

Scaling the Solution

Performance Plus also scales for industrial and warehouse assets.

This is the power of Honeywell Forge Performance Plus for Buildings – near real-time occupant, labor, system, and asset data, all in one dashboard designed to highlight what people like the facilities



manager need most - to optimize and report on property value and occupant experience.

[NEXT SCENE]

Wrap Up & Thanks for your time and attention!

END OF VIDEO SCRIPT

LEGAL CITATIONS

The information provided in this presentation provides a general guideline of what Honeywell software users can expect. Any case studies, testimonials, examples, and illustrations cannot guarantee that the user will achieve similar results. Your results may vary significantly based on individual factors.

BUILDINGS CITATIONS

- More than 80% of companies have experienced an unexpected outage within the past three years
 - https://www.forbes.com/sites/forbestechcouncil/2022/02/22/unplanned-downtime-costs-more-than-you-think/?sh=7c115cf236f7
- The average cost of unplanned equipment failure is \$260,000 per hour
 - https://www.automationworld.com/factory/plant-maintenance/article/21722807/connecting-maintenance-finance-and-safety#:~:text=In%202016%2C%20the%20average%20cost,or%20%243%20million%20per%20hour. (Originally from a 2016 Aberdeen Research report)
- 37% of global energy-related C02 emissions come from buildings
 - United Nations 2021 Global Status Report for Buildings and Construction
- 30% of energy used in commercial buildings is wasted
 - https://www.energystar.gov/ia/partners/publications/pubdocs/C+I brochure.pdf