



True Analytics™

enables

- Energy & Operational Cost Savings
- Improved Occupant Comfort
- Extended Equipment Life Cycles
- Portfolio Performance Management



"Ecorithm's technology provides unparalleled insight into the operation of our facilities that was not possible before. Ecorithm's intelligent analytics are helping us understand and solve HVAC balancing issues and drive decision making as we implement new control strategies."

"Ecorithm simply helps us understand our facilities better. We continue to make our operational strategy more effective, ultimately leading to energy savings and occupant comfort."

Matthew Wallerstein

Construction & Asset Manager

Ray Hunting

Senior Controls Engineer



WHO WE
WORK WITH

"Ecorithm's analytics empowers our engineers with clear feedback on building performance."

"Finally, advanced technology has come to building operations! Ecorithm's software filters out the noise of building operations to quickly and easily identify performance issues."

Jordan Sager

Program Manager

Scott Frank

Senior Partner



UNIVERSITY OF CALIFORNIA
SANTA BARBARA



Ecorithm transforms the way buildings are operated, bringing an unprecedented level of visibility into the performance of mechanical systems.

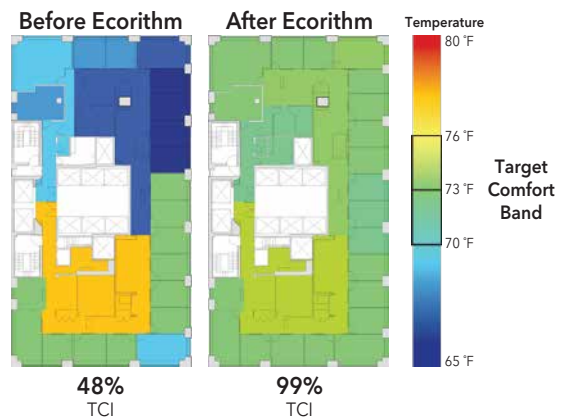
For operators, Ecorithm's True Analytics™ platform is like an extra set of eyes and ears, identifying problems early and immediately pinpointing root causes.

For portfolio managers, the True Analytics™ platform is an extremely fast and cost-effective way to reduce operating costs and advance sustainability goals.

This is all possible thanks to Ecorithm's unique technology originally developed to predict and prevent system failures in jet engines.

Thermal Comfort Index (TCI)

Average Space Temperature Over 1 Month



In the example above, the entire floor improved from 48% to 99% Thermal Comfort Index, a measurement of the percentage of time each zone is within the target comfort band during occupied hours.

BUILDING CHALLENGES: COMPLEX, UNCOMFORTABLE, INEFFICIENT

- The U.S. Department of Energy reports that commercial buildings account for 46% of building energy use, 30% of which is wasted
- According to a recent BOMA study, "What Tenants Want," most building occupants claim to be uncomfortable in their work environment and worker productivity can suffer
- Building operators lack the tools to fully understand the impact of maintenance on operations and comfort, or to benchmark their asset relative to the industry

SOLUTION

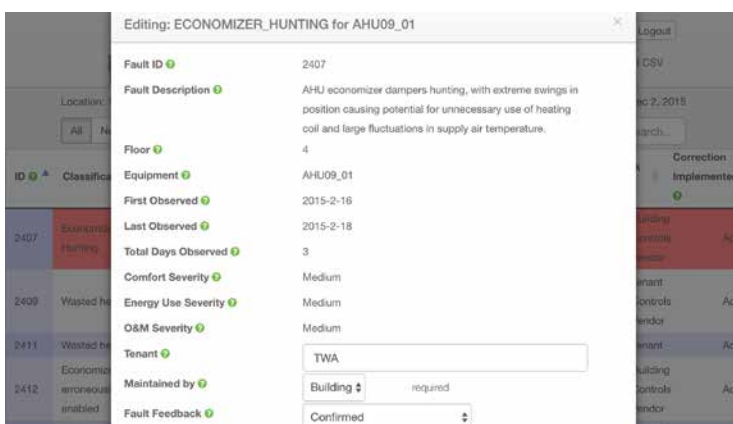
TRUE ANALYTICS™ PLATFORM

Ecorithm's cloud-based software automatically produces specific and actionable insights from building management system (BMS) data. This allows operators to move from reactive to proactive maintenance via an easy to use, intuitive web interface.

TRUE INSIGHT, PORTFOLIO-WIDE

Ecorithm's True Analytics™ platform also serves as a benchmarking and visualization tool, enabling users to gain insight into system health for more robust building and portfolio-wide performance management.

View Finding Detail and Track Progress via Ecorithm's Intuitive Web Interface



The screenshot shows a web interface for editing a finding titled 'ECONOMIZER_HUNTING for AHU09_01'. The interface includes a sidebar with a list of findings, a main content area with a table of details, and a right-hand sidebar with a 'Correction Implementer' dropdown.

Field	Value
Fault ID	2407
Fault Description	AHU economizer dampers hunting, with extreme swings in position causing potential for unnecessary use of heating coil and large fluctuations in supply air temperature.
Floor	4
Equipment	AHU09_01
First Observed	2015-2-16
Last Observed	2015-2-18
Total Days Observed	3
Comfort Severity	Medium
Energy Use Severity	Medium
O&M Severity	Medium
Tenant	TWA
Maintained by	Building Controls
Fault Feedback	Confirmed

Ecorithm provides full-building, root cause diagnostics with unprecedented accuracy via a highly informative, interactive application.

HOW WE OPTIMIZE YOUR BUILDING

- We integrate with existing BMS systems for data collection with no hardware required
- Our patented analytical approach has been developed over 40+ combined years of engineering research
- Our physics-based algorithms deliver more accurate characterization of system behavior, zeroing-in on root causes and differentiating between persistent issues and false alarms
- Our machine learning improves the solution every day in every building - automatically

CASE STUDY EXAMPLES

ECORITHM IMPROVES PERFORMANCE OF ALREADY HIGH PERFORMING BUILDING

- Uncovered persistent and impactful findings at LEED Platinum building with Energy Star score of 98 and a Network Operations Center
- Customer verified superior results versus those of other analytics offerings - perfect accuracy with no false alarms from over 100 findings
- Recommendations were implemented immediately for significant cost savings and improved tenant comfort

MAJOR PLANT RENOVATION COSTS AVOIDED AT RETRO-COMMISSIONED OFFICE TOWER

- Automatically determined root causes of several high-impact problems that were either mis-diagnosed or overlooked by two retro-commissioning engineers
- Provided dramatic new insights on tuning parameters for BMS commissioning as an alternative to expensive retrofit work

GET IN TOUCH

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