How building analytics adds value to your BMS

Building analytics transforms raw building data into fact-based insights to facilitate better decision making.

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Remove inefficiency and cost by combining building analytics with your BMS

Today's buildings generate vast amounts of data. By capturing and analysing this data, property managers can gain a deeper understanding of how your building functions, leading to greater operational control and improvements to efficiency, tenant comfort and shareholder returns.

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A BMS monitors day to day operations

Historically, facility managers have relied on building management systems (BMS) to manage the day to day operations of their facilities. If an issue occurs and it is not highlighted by the BMS, FM's would not be aware of it until they receive a large utility bill or a tenant complains.

A BMS monitors building systems such as lighting, lifts, security, fire and metering and individually controlling the heating, ventilation and air conditioning (HVAC). What it can't do however, is piece together the bigger picture of a large building's data set that represent the complex equipment and systems that affect overall building performance.

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Building analytics optimises performance

Building analytics enhances BMS technology by providing much more proactive and meaningful data that can be used to optimise equipment performance and lifespan, remove inefficiencies and reduce energy consumption and cost.

Combining your BMS with advanced building analytics will help you make faster, more informed decisions, leaving more time for other priorities, and to create value for your tenants and shareholders.

CIM's PEAK platform collects and analyses BMS data as well as granular equipment sensor data, HVAC, lift and electricity usage feeds. It combines this information with weather data, car park data and people movement data to provide a new level of insight for customers.

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Purpose

BMS

Designed to operate systems to provide specific building conditions.

PEAK

Designed to holistically analyse how building systems perform based on factors such as energy intensity and desired tenant comfort levels.

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Design

BMS

Operates within the design constraints of the building.

PEAK

Identifies system design issues with both the controls and mechanical design and suggests how to improve or rectify them.

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Fault detection & diagnosis

BMS

Only identifies issues once they've occurred.

Raises faults when alarm thresholds have been reached or systems suffer critical breaches.

PEAK

Identifies any reduction in system performance and notifies you of issues before they turn into faults.

Doesn't wait for alarm levels to be reached or breached. It analyses systems at the component level to identify any issues that need fixing to enable the system to run most effectively.

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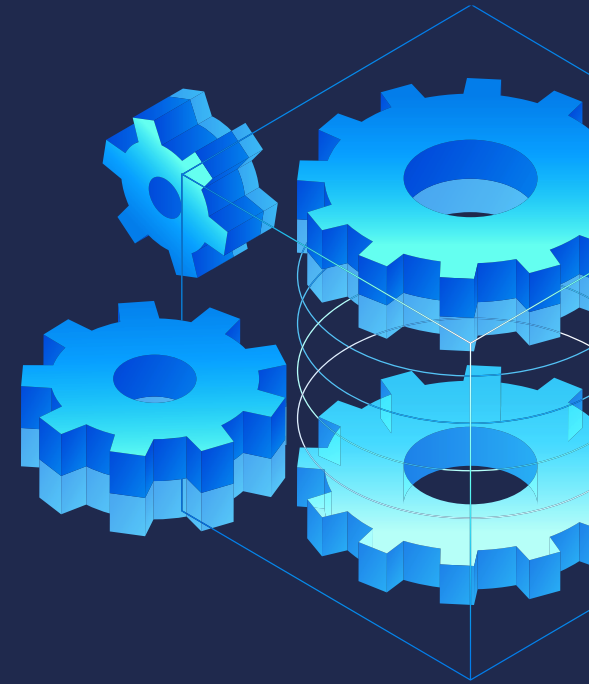
Manual changes

BMS

Regards user adjustments to set-points as a fix to a problem.

PEAK

Identifies when manual adjustments to set-points or equipment create an imbalance to the entire system.

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Building data quality

BMS

Collects data based on points to determine it's next control requirement.

Can only collect data from systems connected to the BMS.

Displays current information about building operations with historical trends.

PEAK

Calculates virtual points even when meters are not available, allowing for a more in-depth unit analysis.

Analyses current and historical data and presents it in an intuitive interface so the user can view a holistic representation of system operations in real-time.

Makes the system easier to interpret enabling faster decision making based on component-level facts.

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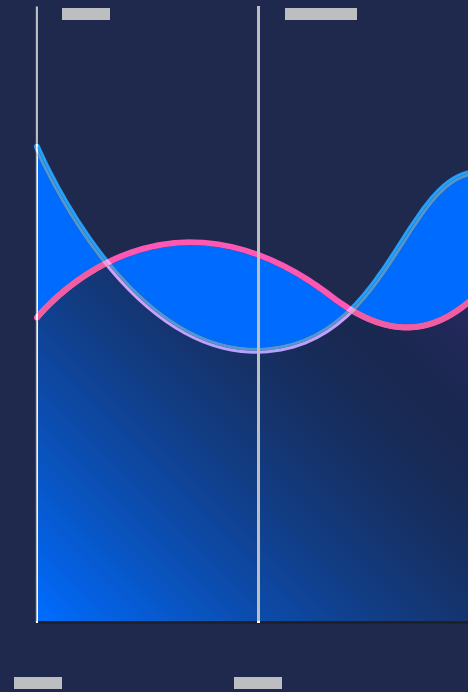
Fault prioritisation

BMS

The alert system triggers faults based on breaches of thresholds and set-points.

Fault volume—the volume of "faults" triggered within a complex multi-point system—can become overwhelming to the point they are ignored until an issue is raised by tenants.

PEAK

Enables proactive identification, prioritisation and impact assessment by analysing fault frequency and duration as well as other factors such as the building's energy cost, tenant comfort and equipment lifecycle impact.
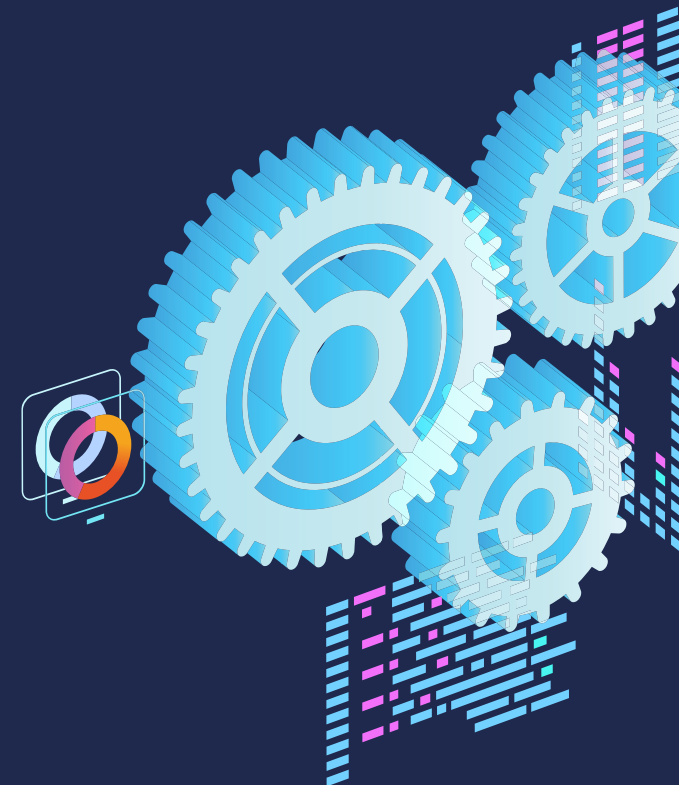
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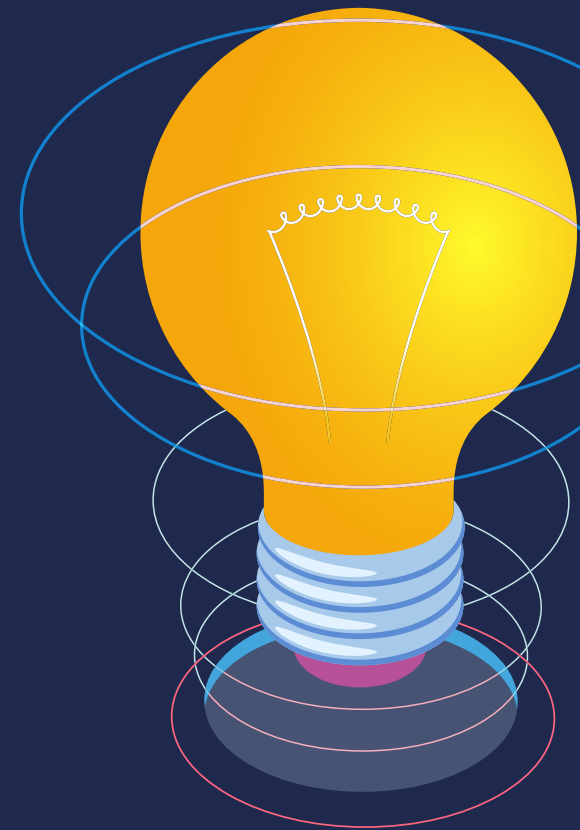
Control logic

BMS

Operates within the barriers of the programmed control logic.

PEAK

Analyses the control logic on each controller to ensure it is operating most efficiently. It also flags any faults and suggests solutions to fix these faults.

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Independence

BMS

At times a BMS provider may push to upgrade the existing system.

PEAK

Analyses the existing BMS to ensure the most benefit is being generated before upgrades are required.

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The PEAK platform

CIM's award-winning PEAK platform integrates building intelligence, machine learning and technical engineering support to improve efficiency, sustainability and comfort across property portfolios.
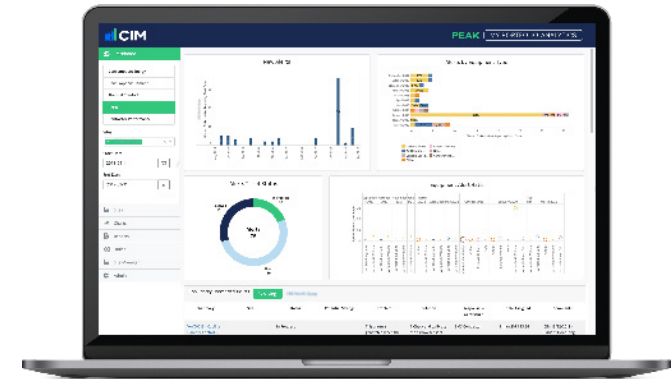
Building analytics

PEAK unleashes the power of existing building data, machine learning and automation to give property owners and operators more visibility and control over assets.

Machine learning

Our data science team augments existing technology and human intelligence through advanced analysis of PEAK's historical and live building data, finding actionable insights

Technical engineering support

Our mechanical, mechatronic and electrical engineers provide customers with dedicated expert support across every site and portfolio to quickly resolve issues and run better buildings.

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Customer outcomes

Energy & OPEX savings

Better Environmental ratings

Technical engineering support

Greater team performance

Improved tenant comfort

Data-driven maintenance

Reduced carbon emissions

Extended equipment lifespan

Increased asset profitability

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Contact CIM to learn how we can help you achieve more from your BMS and technical systems.

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