

Using augmented intelligence to optimize buildings

Regardless of the industry, building operators are responsible for, and motivated by, ensuring their buildings are working effectively. IBM® IoT Building Insights helps them achieve that goal.

What is IBM IoT Building Insights?

The management and operation of buildings are traditionally reliant on after-the-fact reporting. Such an approach typically analyzes historical data from siloed systems, ranging from energy use to occupancy statistics, in the hope that greater efficiencies can be introduced over time. However, with the growth of IoT devices being introduced into buildings and equipment, the challenge of gleaning in-time operational insights is even further compounded by this new deluge of data.

Such challenges present a prime opportunity for building operators to invest in augmented intelligence (AI). IBM IoT Building Insights enables buildings to continually learn, reveal and predict patterns autonomously. This eliminates the need for labor-intensive, after-the-fact analysis and data scientists. The ROI can yield cost savings, improvements in control, greater occupant comfort and optimal efficiency.

Benefits



Identify energy waste

Continuous autonomous learning helps to predict poor performance that leads to energy waste. Issues are ranked in order of importance and in enough time for action to be taken.



View enterprise vitals

Ability to see analysis and predictions per building with the option to roll up to an enterprise view as required. This helps energy managers understand and quickly drill down to systems with issues.



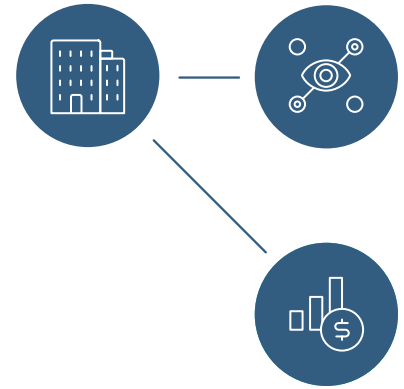
Improve occupant experience

Using AI, IBM IoT Building Insights can learn the behavior of things and people in a building. Quick exposure to outliers and anomalies provides actionable insights which can be addressed prior to them becoming a problem and a distraction to the building users.



Improve decision making

Trust and reliability are critical for improved decision making. Ensuring all sensors are continuously sending data increases the end user's trust in the data insights, protects the enterprise's investment in the offering, and enables proactive maintenance plans.



Industry trends and challenges

- Energy costs and demand for smart buildings are on the rise
- Companies are facing aggressive energy reduction targets
- Increasing IoT adoption is leading to data overload
- Many enterprises use disparate tracking systems across multiple buildings
- Increasing pressure to address environmental concerns

How it works

1. Data connection: IBM IoT Building Insights starts by connecting data from various sources. These include IoT sensors, main meters and sub-meters, as well as data coming from any Building Management System or external system, such as IBM Maximo® or IBM TRIRIGA®. Using this data, the offering begins to learn the behavior of the things and people in the building with respect to energy usage.

2. Understand and learn: A knowledge graph of client buildings and assets is created within the semantic metadata layer. The analysis of the data is unique in the industry as it uses augmented intelligence models and historical data to create a baseline for each building, identify anomalies, predict energy consumption and identify waste (Figure 1).

Learn more

Speak to your sales rep for more information on how IBM IoT Building Insights can help you make better energy decisions, or visit the [IBM Marketplace](#) to schedule a consultation.

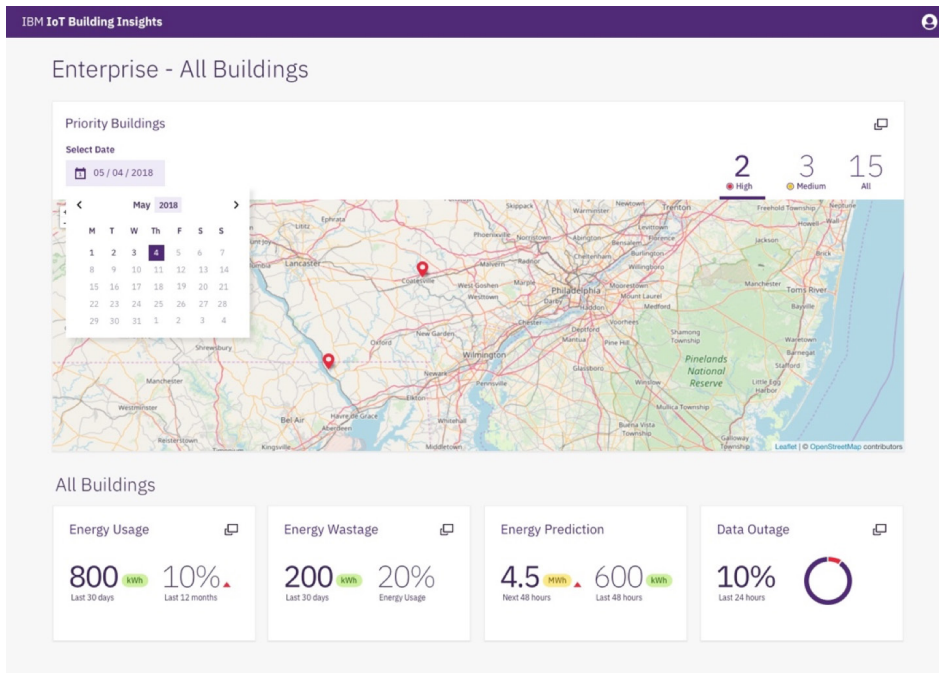


Figure 1:
Enterprise view of energy usage,
historical comparisons, future
predictions and outages.

3. Identify and fix problems: With IBM IoT Building Insights it is easy to determine which sites across your enterprise have energy consumption issues. This is done by scanning a color-coded map and creating a prioritized list of the current 'energy hogs' within an enterprise—those buildings using excessive energy—with just one click.

Visit the [IBM Marketplace](#) to learn more



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