

SERVICE FEATURE

Leveraging Insights For Building Performance

Facilities are critical to the production of goods and services; they provide a safe, healthy and productive work environment for employees and clients. Energy usage and operational data can fuel analytics that identify and promote a sustainable approach. The results help optimize the performance, effectiveness and utilization of these long-term investments.



Maximizing Facility Value

For owners and tenants alike, buildings represent large, long-term capital investments. Protecting and maximizing the return on this investment is a top concern, accompanied by a focus on reducing costs, mitigating disruptions and creating sustainable workflow processes. Our facilities intelligence teams employ analytics to allow stakeholders to learn about and make better decisions about the health and ongoing operational costs of facilities. These decisions allow them to:

- Better protect their investment.
- Promote a productive working environment.
- Support operations.
- Reduce and avoid unnecessary costs.

A data analytics environment also allows stakeholders to better manage sustainability, energy efficiency, and capital improvement efforts, as well as improve return on investment for routine operations and maintenance (O&M).

Integrating energy, facility and business domains has the potential to unlock value and empower positive, impactful and sustainable data-driven decisions that protect investments. Our facilities intelligence services are led by specialists in the

design, development and deployment of data management, data analytics and data visualization environments.

Your current processes and procedures are evaluated systematically based on best practices, benchmarks, experience and industry standards. An integrated team of engineers, data scientists and cybersecurity professionals works to deploy a data analytics environment that leverages your energy, facility and business domain data to align initiatives that promote the long-term goals for your built environment.

Key Factors for Resource Distribution

- Asset priority index (API)
- Facility condition index (FCI)
- Facility utilization index (FUI)
- Operations and maintenance

Inside the Analytics Environment

Our analytics platform collects, stores, models and visualizes energy, operational and performance analytics. The platform contains key performance indicators, functions and algorithms and identifies issues, patterns, deviations and anomalies — as well as opportunities to improve operations, energy and space usage.



Facilities intelligence provides insights and can inform optimization efforts across multiple domains:

- **Energy:** Reducing energy expenses and increasing energy efficiency does more than improve building operations. It also helps identify equipment performance issues and understand the environmental impacts of your energy conservation initiatives associated with preserving a sustainable building environment. Beyond knowing when, where and how much energy a building is consuming, our energy analysis algorithms address concerns about cost allocation, effectiveness of energy conservation strategies and benchmarking against industry peers.
- **Facilities:** Fault detection and diagnosis (FDD) and predictive maintenance algorithms help monitor the operation of building energy and operational systems to automatically identify and report faulty conditions and confirm they are operating according to their design. These algorithms are based on specialized knowledge, and incorporate qualitative models, decision trees, or a combination of techniques for machine learning. These reports help you streamline O&M procedures and costs.

- **Business:** The economic benefits of understanding your facility’s energy and operational performance translates directly into savings, sustainable workflow processes and risk management opportunities. This approach gives you the leverage to curb environmental impacts of operations, plan for facility improvements, enhance vendor/supplier performance, prioritize investments and measure ROI. The knowledge gained helps you hedge potential risks associated with regulatory compliance and other corporate commitments.

Our diverse team of specialists can develop, audit and refine the algorithms that provide you with critical intelligence about your facilities. The analytics environment keeps your data safe and helps you turn information into actionable insights that save time and optimize your facility’s performance, both physically and economically.

Partnerships

We have partnerships with technology firms to enable deeper analysis and more robust conclusions. For facilities intelligence, we partner with SkyFoundry with its SkySpark platform and Clockworks.

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