Multi-site property management using the BitBox IoT platforms offers a sustainable and affordable solution to this all too common problem. With a single BitBox appliance in each building, property owners and operators can take in all existing data sources from hundreds of protocols and subsystems. The data is then securely transferred to the BitEngine where its organized into a data collection that can then be used for meaningful analytics by stakeholders. As buildings change equipment or infrastructure, data sources can be added to the building ecosystem by merely connecting the new data source to the existing BitBox. Configuration of the new data can be done back at HQ via the Cloud. A key advantage to the IoT platform approach is that different buildings can have different systems, protocols, and technology, and the BitEngine rationalizes it all.

**Operational Expense Mitigation**
A full portfolio view of all systems allows for a clear picture of out of tolerance equipment detection, and remote troubleshooting limiting HOT/COLD calls and needless truck-rolls. Additionally, capital improvement projects can be more accurately provisioned based on trended energy spend and maintenance history.

**Smart Building Data Integration**
Smart Building technology generates a significant amount of data, but the value of the data can only be harnessed when fully integrated with other systems. Technology, like location services and personal control easily can be combined with services like wayfinding, room reservation systems, and environmental systems.

**Sustainability Benchmarking**
Sustainability monitoring often involves consolidating many sources of data into a report or consolidated view. Whether for compliance or green initiatives, the BitBox PaaS handles this with ease by collecting all information and allowing report generation or dashboard visualization through UX tools via the BitAPI.

**Micro Service Integration**
The field of building AI and analytics tools has grown in mass over the last few years. These software tools have the power to perform tasks such as space utilization analysis, energy benchmarking, and consistent commissioning and optimizing; to name just a few. The struggle to use these tools, however, is having the data on hand to feed to these services. The BitBox PaaS sports the BitAPI which allows hundreds of these microservices to feed off of this data-collect to generate actionable outcomes.
**Collect**

One BitBox per building gathers data from Modbus, BacNet, SNMP, IoT, serial devices, or other connected sub-systems. Wire and go. Zero on-site software configuration. Add or change equipment as needed and configure it in the cloud.

**Organize**

Provision all BitBox equipped sites in the cloud, and organize all your data in the BitEngine into a unified data-collection. Additionally, you can choose to house your data in AWS, Azure, GCP, Digital Ocean, or company-owned infrastructure.

**Deliver**

The BitAPI, driven by the BitEngine, provides a web-accessed dashboard allowing for a centralized view of all sites and performance criteria with simple to configure alarming capable of sending SMS and email messages of out of bounds conditions that need to be addressed.

The BitAPI allows for a secure GRPC or REST API connection to any third party applications, analytics providers, or cloud platform allowing for tight automated workflow integration as well as custom application development.

**Regional Facilities Manager**
- Hot/cold call mitigation
- Excess energy spend through outlier detection
- Work order management
- Alternative / emergency energy management
- Space utilization

**Employees**
- Conference room reservation system
- Personal workspace control
- Parking finder

**Sustainability Manager**
- Sustainability dashboarding
- Compliance monitoring
- O+M activities

**Service Contractors**
- Work order dispatch
- Remote diagnostics and troubleshooting