CASE STUDY

Media company uses Lucid's BuildingOS to target energy savings of 27% in three buildings

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BuildingOS allowed the company to easily consolidate building data from numerous hardware systems in order to track portfolio-wide energy use, identify sources of energy waste, and share data across sustainability and facilities teams.



BuildingOS Portfolio Drift App

Problem: Lack of Data Access

• No knowledge of the building portfolio. Only one person had access to sub-meter data, and information wasn't being recorded or shared across departments.

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• No knowledge of baseline performance. No exhaustive energy audits had been done in the past, so no one at the company knew what strategies and efficiency projects were working and not working.

• No ability to calculate the ROI of efficiency investments. Additional budget from the operations team was difficult to justify for retrocommissioning projects.

• Disparate systems were siloed and individually accessible. Energy data was managed by manually logging into each system one at a time.

Solution: Integrate all buildings into BuildingOS and Analyze Data

• BuildingOS gave the media company insight by visualizing their energy consumption. Using the Load Profile Analysis and Heat Map Analysis apps in BuildingOS, the company discovered that their HVAC controls were set to run continuously throughout the night, in case a building occupant was there after hours. After collecting enough baseline data to identify a pattern, they used this information to change the central building controls to run during regular work hours, but added a temporary control override device on each floor that would allow occupants to temporarily turn on the AC without overriding the central building schedule. That way, the AC could be used on an ad-hoc basis at night, but only when someone is actually using the space.

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BuildingOS identified savings opportunities equivalent to 27% of energy spend in 3 buildings, and saved the company \$90,000 using low-cost interventions



Improperly scheduled building seen with Heat Map



Optimized building schedule seen with Heat Map

• The media company also wanted to prove the savings accrued from their sustainability projects. They used the Trend Analysis app in BuildingOS to measure the impact of their HVAC control project.

• Before the HVAC intervention, the three buildings were using a total of 5.3 million kWh annually. After the controls upgrades were installed, the buildings were using 3.9 million kWh annually, a reduction of 1.4 million kWh, or 27.3%. Most of the savings occurred during the night since that is when the HVAC system had been running uncontrolled.

• Total savings during the first 12 months amounted to over \$90,000 for the three buildings, with an ROI of only a couple months. Factoring in all project costs, the company still saved over 25% net of the cost of the intervention. Now they are proceeding to implement HVAC improvements in 15 other buildings.

Results: Large-Scale Savings from Energy Efficiency Upgrades Found Through BuildingOS

• BuildingOS identified savings opportunities equivalent to 27% of energy spend in 3 buildings, and saved the company \$90,000 in avoided energy bill costs on an annual basis.

- BuildingOS enabled the sustainability and facilities teams to harness their energy data to find operational inefficiencies and take immediate action.
- BuildingOS helped the company justify the cost of further retrofit projects by proving the energy savings from a pilot project using real data.
- The company is using BuildingOS to create a verifiable 5-year plan for their efficiency reduction goals, something that before was impossible.





Screenshot of company's Trend Analysis App