ADOBE CASE STUDY

Adobe partnered with 75F to save up to 2,95,583 kWh within the first 5 months of operations.



THE BACKGROUND

Adobe helped pioneer the paper-to-digital transformation with the invention of PDFs. Today, the organization is revolutionizing the way people and businesses communicate and collaborate. Sustainably has been a core value at Adobe since its inception and operational sustainability is a hallmark of the business, inspiring Adobe to invest in LEED-certified offices and set a 100% renewable-energy goal. Now and in the future, Adobe wants to consistently reduce its impact on the planet.

THE CHALLENGE

Adobe's Sector 25A office is a state-of-the-art LEED Platinum-certified facility spread across a lavish area of 2,34,000 square feet, equipped with modern facilities and surrounded by pleasing greenery. The Adobe facility management team had a building management system (BMS) to monitor key operational parameters of its facilities, however the team was concerned about high energy consumption across its HVAC operations. The team also needed greater energy savings and better control of systems. The Adobe facility was also experiencing frequent hot and cold spots in zones next to the building's glass facade due to sunlight. As a result, Adobe was looking for a solution that could serve as a multi-faceted IoT BMS Solution, with customized dashboards and better insights into equipment performance and energy consumption.

AT A GLANCE

Location	Adobe, Sector 25A, Noida
Area	2,34,000 Sq. Ft
75F® Solutions	75F® Dynamic Chilled Water Balancing 75F® Dynamic Airflow Balancing 75F® Facilisight
Turnaround Days	29 days from Installation to handover



THE SOLUTION

We worked with the Adobe BMS team to run an on-site pilot project. Based on highly satisfactory results from the pilot, the client replaced its existing BMS with 75F's IoT powered BMS to save energy, eliminate thermal discomfort, deliver end-to-end automation, and access completely customizable energy dashboards.

HVAC Automation & Control

75F's Dynamic Chilled Water Balancing Solution was deployed at the Adobe 25A site to optimize the HVAC system with intelligent controls and deliver energy savings. 75F Central Control Units (CCUs), installed at each AHU, acted as the cloud gateway and controlled the chilled water actuators at the AHUs. The Chilled water ΔT was managed to match the design set point and ensured no extra flow through the Chilled water line, thereby driving savings. The Chiller Management System provided insights into factors such as Chiller inlet and outlet water temperatures, compressor current, suction temperature, suction pressure, and discharge pressure.

Dynamic Airflow Balancing (DAB)

The DAB used Big Data and Artificial Intelligence to radically improve building control effectiveness. This technique led to optimal occupant comfort. The damper modulated as per the specific comfort requirement of any zone and all 75F

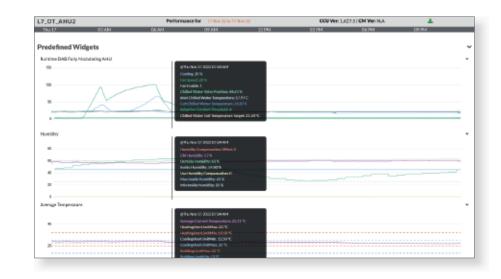
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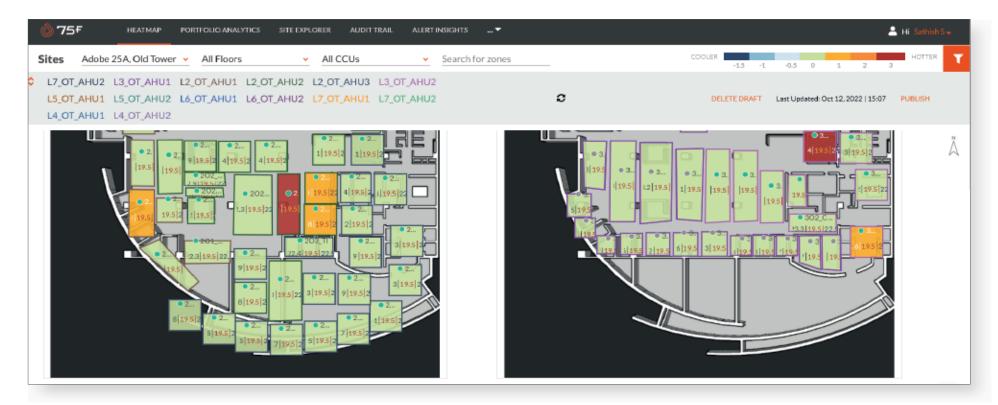
controllers communicated constantly and controlled the HVAC equipment effectively. The CCU received feedback from the controllers and sensors including current/desired damper position, and current/desired zone temperature, and sent commands through AI & ML algorithms to any individual zone damper to modulate as per the specific zonal requirement. Additionally, 75F smart dampers installed in adjacent meeting rooms and cabins provided Adobe with better temperature level controls eliminating hot and cold zone issues.

75F Facilisight

75F's Facilisight, a suite of web and mobile-based apps, enabled remote manageability, end-to-end automation, and simpler facility management with overall visibility and insights into HVAC operations and energy consumption for Adobe. The native dashboards gave them complete visibility of energy consumption across both their buildings. Facility teams now have the ability to monitor and control actuator and damper positions, air flow, as well as AHU status remotely. Adobe can compare site-wise energy consumption against benchmark values. In case the actual consumption crosses the benchmark value, a notification is immediately sent to the facility manager to take corrective action.







THE RESULTS

Incremental Energy Efficiency

The Adobe 25A facility team achieved energy savings of 2,95,583 kWh within the first 5 months of operations helping them prevent emissions totaling 2,34,692 tons of carbon dioxide (CO2) into the environment.

Fast and Easy Installation

The deep knowledge and rich expertise of 75F empowered the facility management team with quick installation, at zero downtime. The entire installation and commissioning took only 29 days. The state-of-the-art building management solutions deployed at Adobe provided a fully automated, comprehensive energy management control system with unique AI backed learning capabilities for incremental energy efficiency savings in line with the sustainability goals set by Adobe.

Flexible Rezoning Capabilities

The Wireless Smart Node and Smart Duct Damper infrastructure provided flexibility to the Adobe facility team to rezone certain spaces as per their requirements without taking up significant retrofits on ductworks.

Managed Services

75F's Managed Services team took control of the site post commissioning and made sure that the site operated at peak energy efficiency levels.

