WEWORK CASE STUDY

WeWork at Manyata Tech Park saved 19.2% in HVAC energy consumption while delivering unparalleled occupant comfort to its tenants.



THE BACKGROUND

As a service-centered brand, WeWork India understands that comfort and ambiance are critical in promoting its workspaces to potential occupants. Located across 35 locations in India, including Bangalore, Mumbai, Gurugram, Hyderabad, and Pune with a total seat-capacity of 60,000+ desks, WeWork promises a productive and flexible work environment for its tenants. The brand offers state-of-the-art facilities and world-class ergonomics designed to facilitate collaboration, better productivity, and efficiency in a conducive work environment.

THE CHALLENGE

WeWork promises enhanced HVAC standards as a key health and safety measure across its premises. To uphold the brand promise, the Manyata Tech Park location needed a solution that could provide complete HVAC monitoring and control to WeWork's enterprise clients. A building management solution (BMS) that could provide operational visibility to critical rooms was required along with integrations with UPS, VESDA (Very Early Smoke Detector Apparatus), and other functionalities. After a successful pilot, WeWork chose 75F's IoT-powered highly customizable BMS to improve occupant comfort and productivity, and provide highly efficient energy consumption.

AT A GLANCE

Location	Manyata Tech Park, Bangalore
BMS Integrations	UPS, PAC, WLD, & RRS
Area	1,67,000 square feet
75F® Solutions	75F® Dynamic Airflow Balancing 75F® Dynamic Chilled Water Balancing 75F® Outside Air Optimization 75F® Indoor Air Quality Monitoring 75F® Facilisight
Turnaround Days	90 Days from installation to handover



THE SOLUTION

After a detailed understanding of the client's objectives and goals, experts from 75F proposed a highly customized HVAC solution for WeWork's office at Manyata Tech Park.

HVAC Automation & Control

One of the most challenging aspects of managing coworking spaces is balancing comfort and air quality across multiple zones. To address this challenge, 75F installed its award-winning Dynamic Airflow Balancing System and Dynamic Chilled Water System to provide comprehensive integration for enhanced HVAC control. Based on variables such as temperature, airflow, and humidity in each zone, the system now proactively controls the chilled water flow rate, automated response to VFDs for fan motors, and AHUs. Smart Dampers installed across the site are modulated. This ingenious solution is designed to maintain occupant comfort levels utilizing less chilled water, in order to drive better energy efficiency.

Energy Management System

Systems deployed to modulate the Variable Frequency Drives (VFDs) based on inputs from sensors automatically re-aligned the temperature and cooling demand



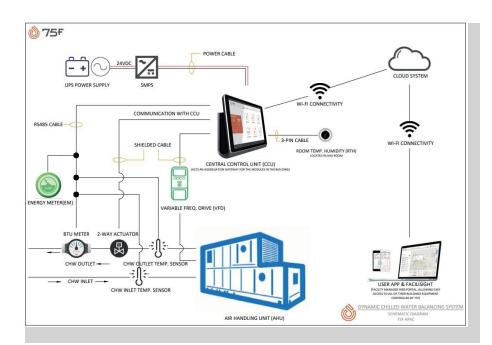
to maintain optimal temperature levels with higher energy efficiency levels. To measure improved energy efficiency, the 75F team installed energy meters and BTU meters at each AHU level. Energy meters have been installed at floor level and DB level to provide SMDB breaker-level energy management.

Outside Air Optimization and Indoor Air Quality Management

In addition to fresh air ventilation, the 75F OAO Application modulated the flow of fresh air into the lounge area. Based on readings from a CO2 sensor as well as occupancy sensors, the installed solution also measured average indoor air quality of the building envelope, and modulated the outside air damper to ventilate the premise with fresh air until healthy levels of indoor air quality were achieved.

Third Party Integrations

75F provided visibility control for various third-party systems installed at the WeWork site, to monitor and control critical hardware and metrics, including VRF (Variable Refrigerant Flow), UPS, VESDA (Very Early Smoke Detector Apparatus),

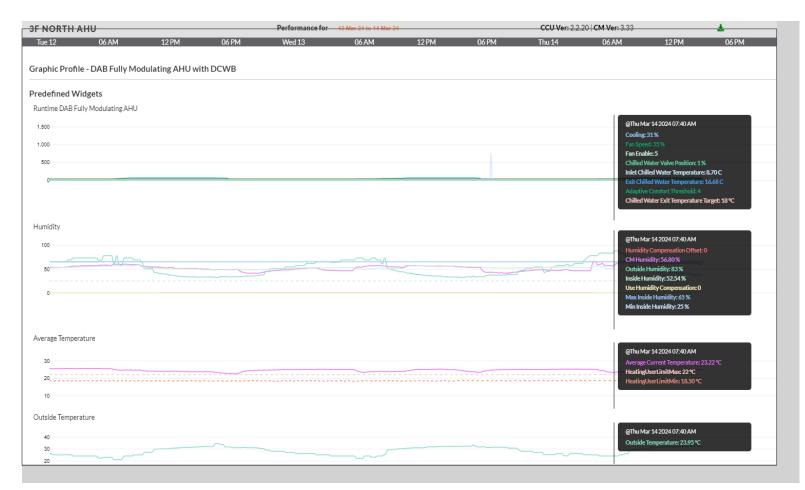




Precision Air Control (PAC) Units, Fire Alarm Systems, Water Leak Detectors, and Rodent Repellent Systems. This monitoring data is configured to be selectively shared with WeWork's enterprise clients in near real-time for their dashboarding and monitoring needs.

75F Facilisight

Facilisight provided multi-site visibility and insights into HVAC and lighting energy consumption. Besides monitoring, managing, and controlling these systems proactively, 75F also empowered the facility management team with one-click full control of the facility. Incident reporting and escalations were managed effectively with custom email alerts. The powerful AI-backed data analysis tool provided a single-pane view of key metrics in real-time to analyze critical factors including heatmaps and occupancy trends for granular reporting. The integration of data extrapolated from the facility with the client's external Enterprise Management System through BACnet communication protocols offered better interoperability, a simplified reporting system, and faster action time.



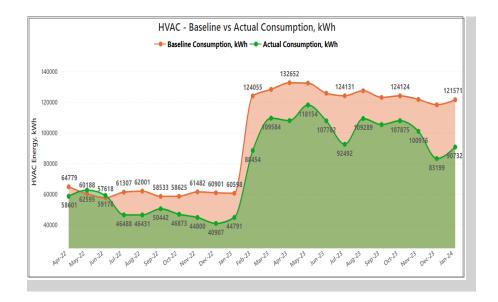


THE RESULTS

The solution engineered to meet WeWork's objectives resulted in reduced energy consumption while ensuring superior indoor ambient quality. Added features such as remote monitoring, live reporting, and insight-driven data metrics with intuitive user interface dashboards, helped optimize operational efficiency and enabled the workspace brand to deliver on its promise to its clients.

Smart Solution for Incremental Energy Efficiency

75F's deployed solution has helped WeWork record savings of up to 19.2% in HVAC energy consumption along with a high-quality ambiance for occupants while achieving energy savings of 4,05,785kWh.



Integration with industry Standard Equipment

The standard profiles of equipment maintained by the 75F team allowed complete transparency of equipment functionality and long-term feasibility before being commissioned from vendors. The readily available templates accelerated equipment integration three-fold and ensured smooth execution of the project timeline.

Flexible Re-zoning Capabilities

The wireless Smart Node/Smart Damper infrastructure provides flexibility to the WeWork facility team to re-zone certain spaces as per their requirements without taking up significant retrofits on the ductworks.

