

Firstsource Solutions CASE STUDY

Improving comfort & productivity while saving on energy



“ Since we installed 75F’s solution we’ve achieved significant savings on our energy bills and have noticed a considerable improvement in comfort levels. Moreover, 75F’s solution helped improve the productivity of my team. ”

Manjunath Srivatsa | Sr. VP - Administration & Security



THE CHALLENGE

Firstsource Solutions, the trusted outsourcing partner for world’s leading brands, is known for delivering excellence in customer experience. With employees as their key strength, Firstsource Solutions looks to provide a comfortable, world-class working environment.

However, First source Solutions’ Malad Paradigm office in Mumbai faced significant temperature differences in different parts of the office – which was compromising employees’ comfort and in turn output. The facilities team spent considerable time and energy responding to regular complaints about hot spots and overcooling and were on the lookout for a permanent solution.

At the same time, as a responsible corporate citizen, reducing carbon footprint and being more sustainable is paramount to Firstsource. They embarked on a mission to conserve energy some years ago and are constantly looking for ways to further their efforts to improve energy efficiency in their facilities.

It was important to the facilities team that they resolve their comfort issues without compromising on energy efficiency; a solution they were struggling to find until they met the team from 75F.

AT A GLANCE

Location	Malad Paradigm, Mumbai
Project	Dynamic Airflow Balancing + Dynamic Chilled Water Balancing
Area	100,000 sft.
Installed Units	18 Nos. AHUs with constant airflow, no VFDs 2 nos 190 TR Chiller units, operating in standby mode
Previous Conditions	All HVAC systems were manually operated. No centralised monitoring and control in place. Frequent cold spots & hotspots in workstations

THE 75F SOLUTION

Dedicated to offering a comfortable environment to their employees while saving energy, Firstsource Solutions deployed 75F's Dynamic Airflow Balancing™ and Dynamic Chilled Water Balancing solutions across their Malad Paradigm facility. 75F installed a variety of automation controls at Firstsource to best suit their layout and needs. The 75F Facilisight™ suite of web and mobile apps is the central control hub, bringing cloud-based control solutions with remote monitoring, deep analytics and smart automation for optimal control of comfort and efficiency

75F's solutions collect 650 data points every minute and transmit the data to the wireless Central Control Unit™ (CCU), where it is sent to the cloud for processing. 75F's proprietary algorithms determine the optimum settings for the next day's strategy, factoring in everything from the local weather to Firstsource's geographical orientation to determine the best control strategy. The system learns the building such as occupancy patterns, the angle of the sun, etc. thereby eliminating the need for manual intervention and control.

THE RESULT

Firstsource benefited from an extremely fast, non-intrusive installation, ensuring minimal disruption to the workforce. Facility managers at Firstsource can see real-time data for each system, making diagnostics as easy as grabbing a mobile phone or a laptop (instead of populating and referring to lengthy excel sheets). Finally, the employees at Firstsource now enjoy consistent temperatures at all times making them more productive, comfortable and healthier, all while the company is saving energy.

Energy Efficiency & Cost Savings

75F's solution at Firstsource achieved **45.63%** on the AHU energy consumption while optimising the comfort of the occupants. These savings were realised by:

- 1. Optimized AHU operation via VFD**, based on occupancy, zone temperatures, operation schedule, ambient conditions, etc.

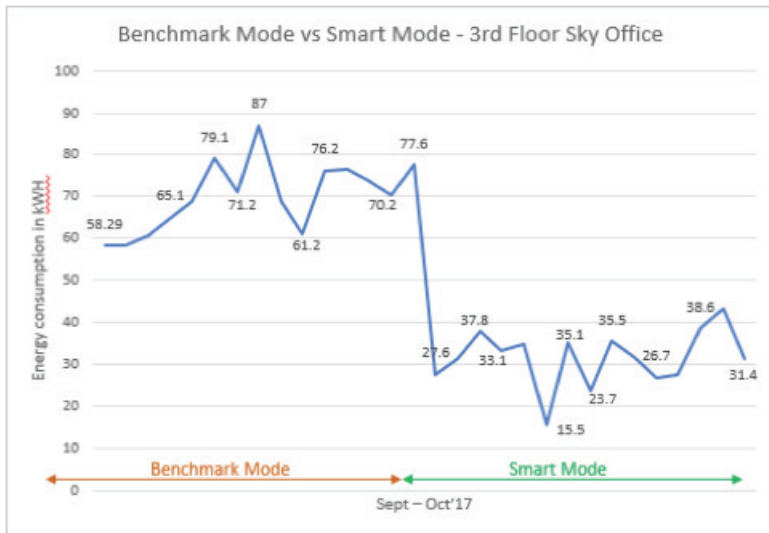


Live Heatmap showing 75F system's operation at Malad Paradigm facility.

2. Dynamic Airflow Balancing & Independent Zone, System and Vacation Schedules:

Provides optimal airflow and cooling for the appropriate amount of me where and when it is needed, maintaining comfort while saving energy. 75F Solution at First Source delivered approximately 45.63% reduction in their AHU Energy consumption.

3. Occupancy Scheduling & Detection: Proactively adjusts cooling based on occupancy thereby reducing wastage and saving energy.



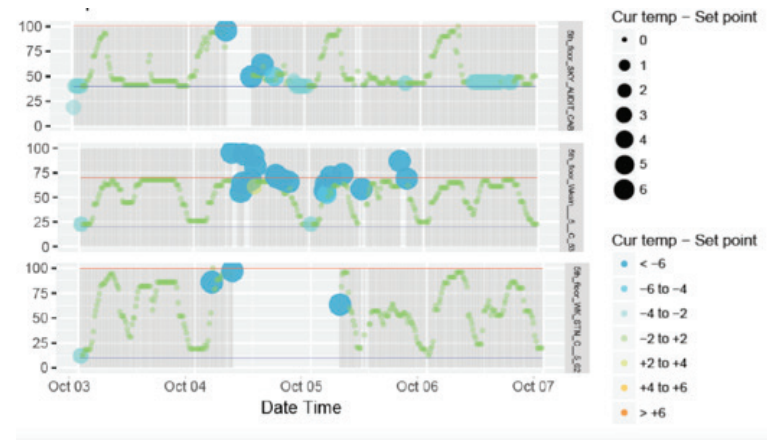
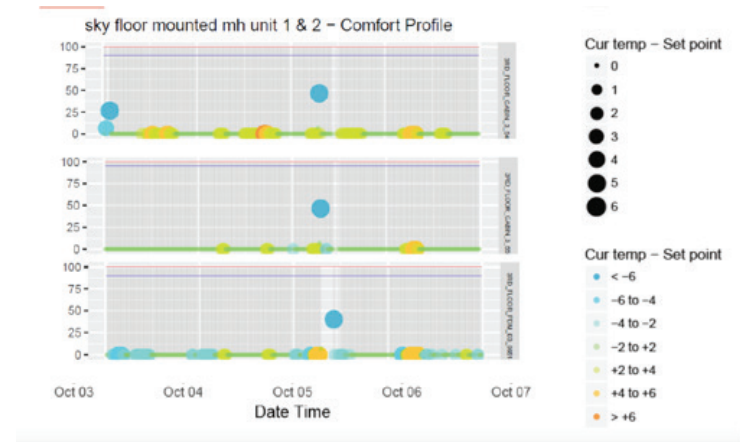
Energy Consumption Graph from date of commissioning Smart Mode After installation of 75F's system
Benchmark Mode: Before installation of 75F's system

Optimized Comfort and Improved productivity

75F's solution at Firstsource eliminated hot and cold spots around the office, improving the workplace environment for its employees and resulting in a drastic reduction in complaints about temperature imbalances. The facilities team which spent considerable time responding to complaints and manually adjusting the temperatures across the office are now able to dedicate their time and energy to other jobs.

Temperatures across the facility are now efficiently controlled to +/- 2°F from the desired set point ensuring no overcooling or hot spots. To ensure this 75F system has been equipped with:

- **System & Zone Temperature Limits with Alarm Notification** for immediate alerts about equipment trouble
- **Automated Operations** that include pre-set conditions instead of manual On/Off so as to maintain consistency across the facility.

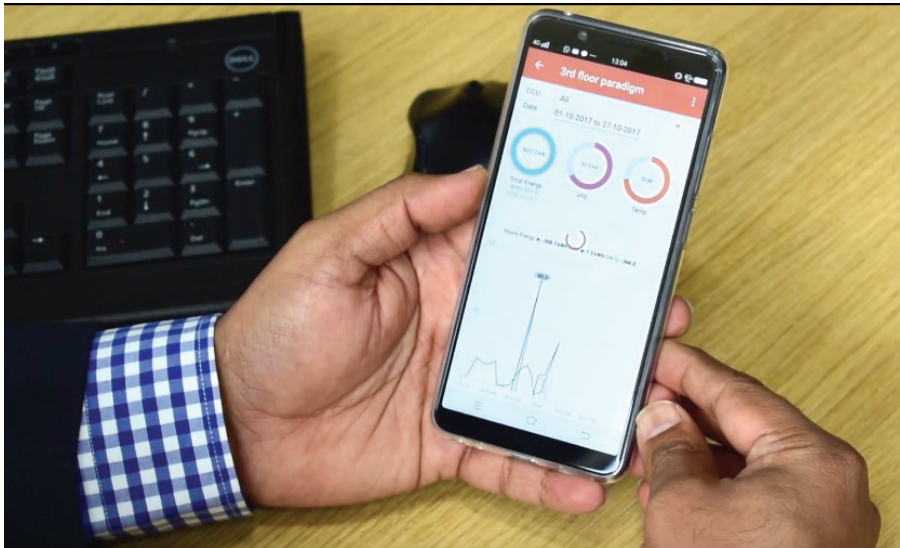


Comfort Profile Snapshots

Smarter Facility Management

The 75F solution was easily installed within 3 days, thereby causing minimal disruption to employees.

The Facilisight platform provided FSL's facility team with actionable alerts, diagnostics, remote controlling, temperature trends, energy consumption trends, Real-time Heat map etc.



Quick Payback

75F's smart technology is enabling FSL to make better use of their resources. Lower installation costs and massive savings from reduced energy use will result in a 'Return on Investment' of **2.05 years**.

In addition to saving on energy and lower installation costs, FSL also stands to gain from increased employee productivity and savings through automation, reduced equipment wear and tear.

“ I found 75F's technology was much superior compared to any other company that I met. They understand technology very well, and they are a very agile team. ”

Manjunath Srivatsa | Sr. Vice President, Administration & Security