## MAGNET 360 CASE STUDY

MAKING THE OFFICE LOOK AS INVITING AS IT FEELS



I think it's a fantastic solution. If you're looking for the cost savings, it's there. If you're looking just to be green, it's there. At the end of the day, if you're looking for comfort, that's the number one reason to roll it out.

**Dan M.** | Founding Partner



## THE CHALLENGE

When Magnet 360 first moved into their 30,000 square foot building in 2010, they found that building temperatures fluctuated drastically depending on the season. With over 50 rooms in the office, many with large glass windows, employees struggled to control the temperature. The existing Allerton VVT control system was simply not solving the problem.

Magnet 360 takes pride in providing the best working environment for their employees. The business was even deemed one of the states 100 best companies to work for by Minnesota Business magazine. They offer snacks, coworking spaces, walking desks, ping-pong tables—you name it. Yet personal comfort was an issue that needed an effective solution.

## AT A GLANCE

Location	St. Louis, Minnesota
Project	Dynamic Airflow Balancing
Square Footage	30,000
Rooftop Units	5
Average RTU Size	20 tons
Previous System	Allerton VVT System
Zones	50



## THE 75F SOLUTION

Dedicated to offering a comfortable environment for their employees, Magnet 360 tested and deployed the 75F Dynamic Airflow Balancing™ solution throughout their office building. 75F installed 50 internet connected sensors and 70 smart dampers across their office spaces, conference rooms and employee break rooms.

The sensors take a thermal snapshot every minute to build a vast empirical model that informs the smart algorithm in the cloud. These smart algorithms wirelessly transmit data back to the smart dampers, proactively adjusting throughout the day to regulate temperatures. All these wireless devices are controlled by Central Control Units, which are known as the brains of the operation. Installation and setup took two technicians five days to complete. Individual offices each received a WRM (wireless room module), allowing the occupant to change their office temperature depending on personal preferences.

THE RESULT

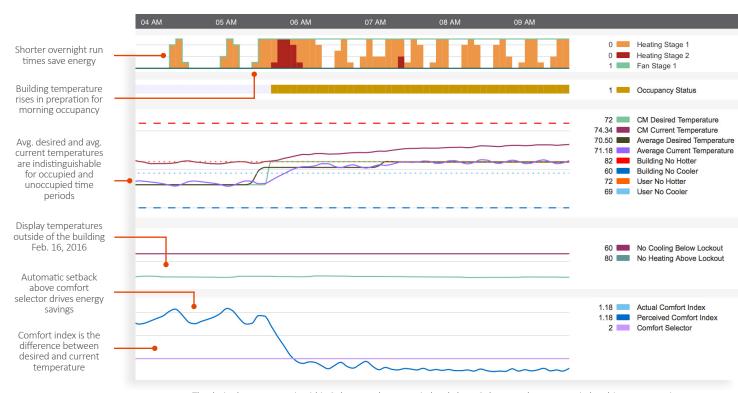
Using Internet of Things (IoT) design, 75F harnessed the computing power of the cloud and packed it into smart HVAC devices that kept Magnet 360 employees more comfortable and informed than ever before. The solution created a lot more granular temperature control and visibility to what was happening within the building. "The smart technology optimizes electricity use allowing for us to save power and reduce our impact on the planet," explained Facility Manager, DeeDee W.

One innovative feature is the ability to create a live heat map of your entire building. Simply import the floor plan, assign all areas a name and tie them to the sensors in each zone. From there, you can see the actual temperature vs. the desired, set temperature. You can also see what zones are actively cooling or heating. The best part? All this is readily possible from anywhere in the world and can be viewed and updated using our app, Facilisight, from your computer, tablet or smart phone.

The concept of a self-learning and intelligent system leads to more comfort and less perpetual maintenance.

Chris G. | IT Manager





The desired temperature is within 2 degrees when occupied and above 2 degrees when unoccupied to drive energy savings.