

IOT ENABLED INTELLIGENT CONNECTED BUILDINGS

The Internet of Things (IoT) is making the smart building initiative even smarter, resulting in a new breed of buildings that are managed more efficiently and cost effectively ensuring that they are better aligned with the priorities of property owners, managers and tenants.

IT'S ALL ABOUT ACTIONABLE DATA

IoT sensors and devices, installed throughout a facility, deliver real-time data that, when analysed, provide insights that lead to more proactive decision-making. Facilities managers can gain valuable intelligence on everything from HVAC and lighting to environmental quality and tenant occupancy. This information can be used to improve operations, reduce energy waste, utility spending resulting in a better experience.



CREATING THE FUTURE FOR TODAY

With the cataclysmic shift to distributed workforces and work from home, IoT enables sensor efficiencies are even more strategic—as it is the foundation for the new normal, the reimagined and completely renovated workplace. With a stronger focus on ensuring social distancing measures are complied with, the emphasis on socially distanced occupancy, desk and room management is more paramount than ever. When can we see IoT in action, let's look at a few examples:

IoT in Action:

- A CO2 meter that can estimate the number of people in a room and signal a building's HVAC system to increase the ventilation rate accordingly
- An occupancy sensor can order lights to turn on when people enter a room
- The social distancing management system monitors desk occupancy status and displays availability and cleaning status accordingly
- The social distancing management system monitors the people count and occupancy status of communal areas such as bathrooms, kitchens and meeting areas and displays access status accordingly.
- A dashboard can analyse various building sensor data and inform facilities managers where and how much energy is being used—and where it's being wasted.



CREATING THE FUTURE FOR TODAY

Research suggests that 85% of total maintenance¹ spending is on 'reactive' maintenance, fixing a problem after it occurs. However, with actionable data from utility meters, desk or room occupancy, facility managers can be proactive in addressing such issues far more effectively. An approach which can lead to a 40% reduction in costs and up to 50% reduction in downtime². The results speak for themselves with efficiency driving future change.

In addition to predictive maintenance, data from IoT sensors and devices provide a facilities team with insights that they can use to develop energy baselines for various building locations, as well as policies to improve energy efficiency, driving greater sustainability.

To maintain a consistent temperature in various building zones, for example, the facilities manager can implement an algorithm that runs every few minutes and predicts appropriate set points for the HVAC. The algorithm factors in various variables that impact temperature, such as occupancy and ambient temperature.

Energy consumption data can also provide the basis for energy savings procedures to be implemented by various members of the building staff—including simple measures like turning off lights when leaving a room and closing blinds to block out sunlight. Studies show that making behavioural changes an integral part of a workplace energy-savings program can result in annual energy savings of as much as 75%³.

HELPING YOUR CUSTOMERS IMPLEMENT SMART BUILDING TECHNOLOGY

Start by asking the right questions:

What problems are they trying to solve? Better energy efficiency? Improved air quality? More efficient use of space? Return to work office space?

What do they want to accomplish with their IoT investment?

What's the IoT solution that can address their issues most effectively?

Our IoT experts can help. Ingram Micro takes a problem-solution approach to IoT and smart buildings. [Contact us](#) today to start planning your smart building deployment.

¹ Source DPM Surface Care, Neal Peters, Top Ways To Reduce Maintenance Costs For Your Facility

² Source Omega, Resources, Proactive Maintenance vs Reactive Maintenance

³ Source Software Advice, Taylor Short, 4 Steps To Improve Your Facilities Energy Efficiency