

# **Top Technologies Driving Connected Buildings**

Technology has provided us with new tools to improve efficiency, safety, productivity, and connectivity in the workplace. The foundation of the connected building is the internal ecosystem of devices and sensors that work together to enable human to human, human to device, and device to device interaction. Here are the most important technologies deployed today.

#### 1. Utilization Sensors

Occupancy sensors at desks and in conference rooms and common areas can provide a deeper understanding of how and where teams are working. They can also be used to prevent people from entering occupied spaces, and help monitor safe social distancing.

## 2. Smart Lighting

This is one of the biggest trends in today's smart building. Designed for energy efficiency, smart lighting adjusts to occupancy and/or the availability of daylight. The trend is also moving towards the use of highly efficient LED lights to cut energy costs.

## 3. Security/Access Control/Keyless Entry

Connected buildings often include cameras, badge readers, wireless locks, and other security systems that can provide audit trails and track if users have left the building. They can also grant access to guests and prevent unwanted visitors.

# 4. Smart Signage

Smart digital signage typically features remote content management software that enables users to change content from anywhere via a web interface. Smart signage can change content automatically depending on a variety of inputs from business applications and other data sources.

## 5. Intelligent Parking

Cameras and sensors can provide access to parking lots/garages as well as identify where there are open parking spaces. Intelligent parking may also enable visitors to reserve parking spaces in advance.

#### 6. Smart Devices

Connected Buildings have many IoT devices that provide critical information and data to end users. Devices like smart tags and smart shelving help keep inventory levels stable in grocery stores, while PoS systems can enable contactless payments and digital kiosks and sensors can provide directions to people on campuses.

## 7. Predictive Maintenance Sensors

This is where sensors placed on machinery or with building automation systems can send alerts if something fails or when regular maintenance, such as a filter change, is needed. Predictive maintenance has proved extremely effective in reducing costs and extending the life of mechanical systems.

### 8. Wireless Connectivity

Deploying effective wireless for a smart building can be challenging and may consist of multiple technologies, such as DAS, Wi-Fi, CBRS, and small cells. As so many smart building sensors depend on wireless, it's crucial to have reliable, ubiquitous wireless to create a fully functional digital workplace.

#### 9. Contactless Services

Contactless payment technology allows physical objects in close proximity to talk to each other either through chips in credit cards or mobile payment services like Apple Pay or Google Pay. But Apps, sensors, and other IoT devices are creating fully contactless experiences like calling for the elevator from your smartphone, allowing hotel guests to order room service and control the room temperature from an App, or smart mirrors that enable shoppers to try on clothes digitally.

Ready to lay the foundation for a connected experience? Transform your building with Black Box, the trusted leader in connected building technology. We can help you design, deploy, and manage your solution to empower your space and the people in it.

For more information, call us at 855-324-9909, or email us at contact@blackbox.com.

