5 practical use cases for IoT in industry

The possibilities for implementing Internet of Things (IoT) are only limited by our imagination. To serve as inspiration, we've rounded up some of the most common industrial use cases today, as well as those we are likely to see more of in the near future.

1. Predictive Maintenance

Unplanned downtime is every manufacturer and utility operator's biggest headache but IoT can easily prevent it. Once you have networked all your machines and their data is being gathered in a cloud-based solution, you can remotely see how well they are running and fix any potential faults or issues before they become more serious and lead to unplanned downtime. You can even programme the system to automatically order any replacement parts and have them delivered to site before the operator arrives to carry out the maintenance. And with AR (augmented reality), you can also provide a schematic layered over the machine with step-by-step instructions on how to fix it. It can massively improve efficiency, saving time and money, which is why predictive maintenance is one of the most common industrial uses of IoT today.

2. Environmental Monitoring

Environmental monitoring is another popular use of IoT and is set to become more common over the next few years as companies strive to cut their carbon footprint. Three years ago VINCI Energies Business Unit Cougar Automation set up a proof of concept study dubbed 'Smart Lab' at its Hampshire site, using IoT to monitor room temperature, energy and water consumption, as well as which meeting rooms or hot desks are in use, and feed the information to an online dashboard. Since then, Cougar Automation has continually refined the system and taken action based on the data to improve energy efficiency and reduce waste – using energy only where and when it is needed – and lessen environmental impact. Following this success, VINCI Energies aims to roll out IoT environmental monitoring to all of its UK and RoI sites as part of its plan to cut carbon emissions 40% by 2030.

3. Car Parking

For employees at airports, hospitals, and other large organisations, finding a car parking space can sometimes take up to half an hour, making them stressed, frustrated and potentially even late for work – not a good way to begin a shift! By installing sensors in parking spaces and connecting these to an IoT smart parking system, however, you can seamlessly allocate spaces and reduce the time it takes to park by 5-10 minutes. One Cougar Automation customer worked out they would recoup the money spent on the project in just nine months! Of course, smart parking doesn't just benefit the employees of an organisation. It helps to create a pleasant and efficient experience for all – including customers, guests, and other visitors.

4. Utility Meters

Although smart meters have started to come in, some utility companies still send people out to read every single water meter. There are whole teams of people who, once they've finished have to go back to the start, performing a constant loop of an area. Cougar Automation is currently looking at installing smart water meters on top of existing ones. Most are buried deep in the ground but there are low-powered sensors that, once installed, will work for years. All the meter readers will have to do is drive around on a route and the IoT system will collate the information without them having to step out of their vehicle, saving them so much time and fuel. Once utilities have their so-called LoRa (Long Range) network set up, they can add other devices to it, such as ones that monitor pipe bursts remotely, helping them to identify and fix them quicker and perhaps even prevent them in the first place.

5. Anti-COVID measures and cleaning

IoT also has the potential to help keep people safe during the fight against COVID-19. For example, it could be used to remotely monitor people's temperature and whether they are wearing the correct PPE, raising an alarm if there is a risk. Or it could be used to monitor the number and location of people in a building to help maintain adequate social distancing and trigger cleaning alerts. Without IoT, meeting rooms, WCs and elevators are typically cleaned after a set amount of time regardless of whether they have been used by 20 people or none at all. With an IoT system, however, cleaners could efficiently prioritise their time, saving resources and improving hygiene. This would also work well for motorway service station toilets, where you can save cleaners the journey if nobody has

used them.

Get in touch with Cougar Automation's IoT experts to discover more about their proof of concepts and discuss ideas for implementing IoT in your business.

〈 Prev

▦ Back to the list

〈 Prev

▦ Back to the list