

# Powys SMART Towns

## Internet of Things for Retail



### What is the Internet of Things (IoT)?

Electronic IoT devices can tell you what's going on in your business. From footfall to indoor air quality and refrigeration monitoring, these devices provide insightful information in real-time so that you can make decisions to improve your business and increase revenue.

### How Does It Work?

IoT devices measure various aspects relating to your business and transmit to a local gateway using the *LoraWAN* system. The gateway sends the measurement to a dashboard on the Internet where insights are discovered. This information is then presented to you via the dashboard on your phone or computer.

### Examples

Footfall Counting	A footfall counter will accurately count the number of customers entering your retail establishment. Combined with till records, you can determine customer behaviour and identify improvements to increase revenue per customer.
Regulatory Compliance	If your business deals with food, your fridges and freezers must be monitored and records kept. Using small temperature sensors inside each unit, hourly records are automatically saved to a dashboard on the Internet. This saves staff time and removes the need to keep paper records.
Air Quality	Poor air quality such as high levels of CO <sub>2</sub> , can negatively affect peoples moods and purchasing decisions. Monitoring alerts you when air quality drops, which allows you to take action, which could be to simply open a window or door.
Basic Security	Low cost door, window and motion sensors can provide a cost effective, basic security system, especially for small retail units. The owner can be alerted when a window has been left open or if motion is detected out of hours.
Happiness Monitoring	Simple buttons at retail exits allow customers to vote on good service or otherwise. This helps you improve the customer experience and provides opportunities to up-sell, based on customer behaviour.



### How To Benefit From IoT

There are many different types of IoT sensors that can help your business.

The best approach is to engage with other businesses and your town council to discuss what others have done. You can then engage with an IoT practitioner to help with the technical challenges and solutions.

### How To Get It

The selection of sensors and the creation of the dashboard will require some specialist help. Funding may be available via the local council or support organisations.

In the first instance please contact Focus Newtown Enterprise Hub via their website **[focusenterprisehubs.wales](http://focusenterprisehubs.wales)** or phone **01686 806349**