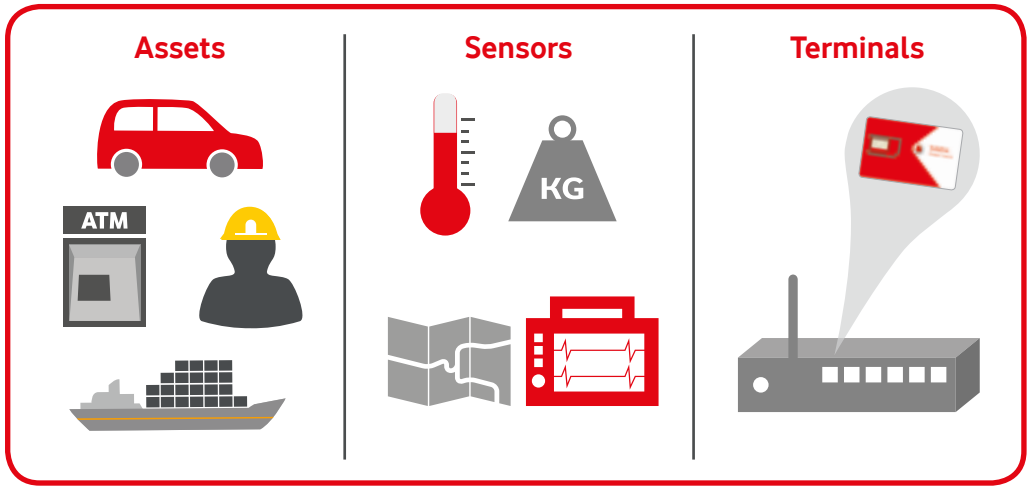
Making it happen

While every IoT solution is different, each is made up of a few key elements.

1 IoT devices sense their environment



Assets

It all starts with your assets: the people, vehicles and fixed equipment that you need to connect. No matter whether they're fixed or mobile, large or small, and in hazardous environments or not, there's an IoT solution to suit.

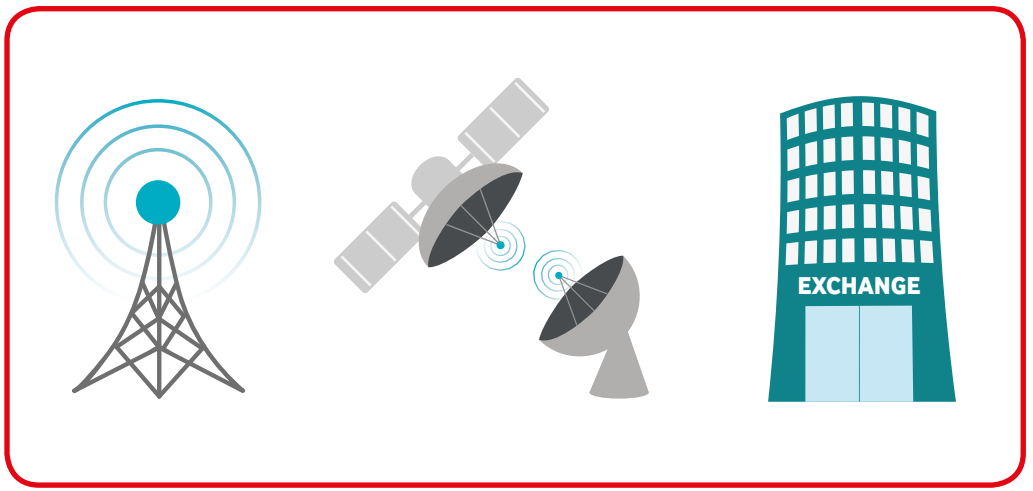
Sensors

Almost all IoT applications depend on sensors: whether that's for temperature, vibration, light, weight, movement, power consumption, or some more esoteric factor.

Terminals

The data from these sensors is gathered in an IoT terminal integrated in, or mounted on, the asset. The terminal may take many different forms depending on whether it's built into a car, fixed to an air conditioner, part of heavy industrial machinery, or even part of a user-carried device.

2 Network connectivity carries M2M data



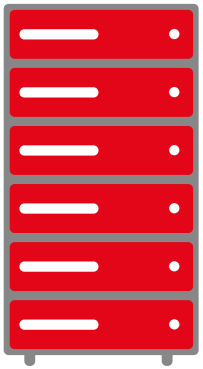
Connecting assets

Each IoT terminal — of which there may be millions in a single deployment — is connected, so that it can communicate the data it's gathered and receive instructions back in turn.

Often this connectivity takes the form of an M2M SIM card, meaning the IoT device is cellular, in some ways just like your smartphone. But terminals may also communicate via fixed line; via Wi-Fi or Bluetooth; via other radio connectivity; or even via satellite.

In some cases, where connectivity absolutely has to be assured, you may want to connect your assets by two different means simultaneously.

3 An IoT platform aggregates data and controls your devices



The IoT data passes over global wireless and wired networks to your IoT provider, where a central platform gathers and processes the data and allows customers like you to manage and monitor all your IoT devices.

You may even be able to do this via the web through your browser window or on a mobile device.

4 Applications use IoT data in business processes

The value of IoT comes from using the data and automating how assets are controlled. So the IoT platform connects, often via APIs, to your business applications — whether those are ERP and CRM systems, fleet management tools, insurance risk engines, building management tools, worker job scheduling systems, or countless others. This is where you use the IoT data and react to it, either automatically or manually.

5 Professional services keep everything running smoothly

IoT solutions can become highly complex, aggregating data from a multitude of sources. You'll need to plan each stage carefully and identify where investments are prioritised. That's where the choice of provider comes in — and the professional services they offer, from design and testing to ongoing support. You'll want an experienced partner that knows how to take the complexity out of IoT deployments.