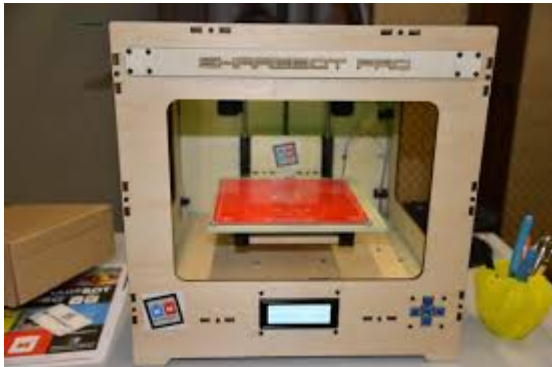


What is the Internet of Things?



Ever wondered what people mean when they talk about the 'Internet of things'? The future of the digital world will explode with interconnectivity putting you at the heart of everything that's done online. Scary for the privicists, not so bad for anyone else! Will Roebuck explains...

The 'Internet of Things' is real, already here and is revolutionising the way we live.

The Internet of Things is the capability to connect everything with anything, everywhere using the Internet. So, your fridge can reorder food to be delivered through your online shopping account. Livestock feeding systems can replenish themselves and give animals just the right amount of food they require to keep them tip top healthy. Smart cars can drive themselves using satellite navigation. And the long-term sick can be monitored at home rather than having to stay in hospital, thus giving them more independence.

All by superfast connections to the Internet. It's a brave new world!

The Internet already has 10 billion 'things' connected to it, including computers, portables and smart phones. Before the end of the next Parliament in 2020 this figure will rise to over 50 billion, all linked and controlled by embedded and

attached sensors and actuators. Current estimates suggest that 95% of all data ever created in the history of the world happened in the last two years. It won't be too long before that statistic changes to two minutes.

The 'Internet of Things'

The Internet of Things is the next evolutionary step in a world relying more upon digital technologies to find solutions that deal with the social and economic challenges which lie ahead. The Internet of Things is the third wave of the mass Internet revolution following the invention of the world wide web in the 1990s and then Internet connectivity extended to mobiles enabled by European GSM in the early 2000s.

Make no mistake. The scale of interconnectivity will transform and disrupt current political, social, legal, economic and commercial business models over the next decades. Traditional eco-political cycles will end, many will fail to keep up with the exponential changes. But fresh opportunities and innovation will continue to drive economic growth, leading to more and better jobs, and a more sustainable economy.

The Internet of Things is capable of providing bottom up consumer/citizen engagement and imposing top down surveillance and control. But, the latter will be very different from what we have been used to. Governments and traditional media can no longer get away with only giving the public carefully-chosen information, as demonstrated with the [Edward Snowden](#) and [Julian Assange](#) sagas. Mass consumerism means that we can now all build our own trusted networks online through social media – which hides nothing. And the massive scale of current data collection and usage will make the issues around data protection and ownership of digital identities even more sensitive and complex. No-one trusts governments with databases rich with content about individual citizens. That's one of the reasons why the UK government is setting up an [ID](#)

[Assurance Scheme](#) without them. Security, reliability and resilience issues will become more acute with greater dependence on interconnected critical national infrastructure focused on communications and energy.

It's a lot to take in. The UK has global leadership in some Internet of Things areas, for example chip design and creative applications. Technology needs to be neutral. Decisions upon how we are able to control our lives better, or enable others to control them for us may be better made from market forces and not politicians or regulators.

Leadership

Whatever happens, British leadership is essential to driving the economic and social strategies affecting the Internet of Things. We still need to grow our economy, create new jobs for new industries, and keep unnecessary public expenditure down whilst delivering better public services. It's not just government leadership we require. Business people and top managers in public sector roles must all play their part, put their heads above the parapet, make tough decisions and drive through innovation and change. Entrepreneurs also need support to take their creative ideas to market and achieve their long-term ambitions and goals.

[link all'articolo](#)