



The Future of Networking

How will the Internet of Things help businesses to evolve in the future?

Major Corporate Roundtable Discussion
7 September 2017



There's nothing like a rousing roundtable discussion to really bring a subject alive, and BT's recent Internet of Things (IoT) debate in central London did exactly that.

Today, most organisations have a good handle on the potential of the Internet of Things for making the world run more smoothly - as smart sensors start to send back information from everyday objects, infrastructure and vehicles in real time.

In fact the panel agreed that IoT will be the major source of transformation for businesses, and indeed for humanity, within the next couple of years - taking over from mobile technology.



To take the discussion on to the next level, BT brought together CIOs from some well-known UK organisations to talk about their own IoT implementations, and the value they have unlocked from them. It quickly became clear that these transformations are not limited to their own business operations; rather they are also delivering important benefits to local communities - from improving public transport to tackling flooding and coastal erosion.

At the National Trust, IoT's role is two-fold. Firstly, it enables the not-for-profit to operate more efficiently - by understanding how its land, properties and car parks are used, and their current state of repair. CIO Jon Townsend said he also sees "massive potential" to get ahead of coastal erosion and keep communities safe, through continuous analysis of changes to headland and public pathways.





Northumbrian Water has also tapped into multiple benefits. The company already has 300,000 sensors monitoring its infrastructure, and is gradually swapping in more intelligent, connected sensors as more basic ones need to

be replaced. With more detailed information feeds, the company can plan more targeted repairs to its pump stations and better manage leaks and overflows. This is saving the organisation a lot of money, and protecting local communities from the misery caused by flooding. “It means we can send our people to the right place to carry out more timely interventions,” CIO Nigel Watson noted.

Smart sensors can relay all sorts of readings, from vibrations and power use to temperature changes. Northumbrian Water has been trialling acoustic sensors to detect restricted water flow, caused by the build-up of debris. This could lead to flooding in heavy rain, when overflow water needs to be flushed into the rivers. So keeping on top of the problem with targeted clean-ups is both efficient and effective in keeping communities safe.

Northumbrian Water also recently brought in a data scientist from Newcastle University to analyse data feeds from its pumping stations. By studying discrete changes in water flow and power use, he accurately predicted an imminent pump failure – even though this seemed unlikely to experienced experts.

Craig Ellis, CIO of Go Ahead, a major bus and rail service provider in the UK, believes information from sensors could unlock a further 40 per cent of train and bus capacity by enabling dynamic timetabling – based on real-time demand and transport conditions. For him, the really exciting possibilities from IoT will come once more organisations start to collaborate and share data, without having to worry about where the data is or the platform or network it is on.

“We run the risk of building many different networks when what we need is one common platform,” he said. “If we can work together to create a connected environment, we have a massive opportunity to optimise journeys from the house to the office – across different modes of transport. But this relies on co-operation using data from multiple sources.”

The falling cost of smart sensors and fast, reliable connectivity will help promote those connections. So will managed IoT platforms that enable organisations to share intelligence securely, without concerns about data getting into the wrong hands?

Geoff Snelson, Milton Keynes Council’s Director of Strategy and Futures, noted that managed IoT ecosystems like the one BT and the Open University have built for Milton Keynes are likely to be the way forward here. “This has given us a city-scale platform to support a whole range of collaboration, both commercial and experimental, in a controlled but evolving way,” he said.

Summing up the mood of the debate, Martin Tufft, BT’s IoT Director, said, “McKinsey has said it can measure the economic value of IoT in trillions, but in this debate we’ve also heard about its significant potential for environmental and social impact. This is an opportunity to use communications and solutions to build a better world, and it’s an exciting place to be.”



The BT-hosted roundtable debate event, ‘How will the Internet of Things help businesses to evolve in the future?’, took place on September 7 at the Ampersand Hotel in Kensington, London.

Panelists included Jon Townsend, CIO, National Trust; Geoff Snelson, Director of Strategy and Futures, Milton Keynes Council; Nigel Watson, CIO, Northumbrian Water; Craig Ellis, CIO, Go Ahead; Enrico Motta, Professor of Knowledge Technologies, The Open University Knowledge Media Institute; Martin Tufft, IoT Director, BT; Guillaume Sampic, IoT Strategy Director, BT; Tom Baker, Major Corporate CIO, BT; Neha Agarwal, Global Proposition Director IoT, BT.

Technology, telecoms and consumer affairs journalist and broadcaster David McClelland chaired the proceedings.