Smart Cities & Smart Citizens
Blockchain Connect

The 'Smart Cities & Smart Citizens' stream live from Blockchain Connect explored:

✔ **How Personal Identity and Digital Passports will help the smart citizens of the future**

✔ **Impacts on Telecommunications, Transport, Utilities and Provisioning of Services**

✔ **Harnessing the power of both IoT & Blockchain**

✔ **The positive impact on fuel and electricity intake**

✔ **Smart citizens enabling better communities**

✔ **Real time data and connectivity**

✔ **IoT, Interoperability of Data & Data Security use cases and demos**

Gareth Mee
CEO
INVENICA

Gareth Mee CEO, Invenica (moderator) explained how businesses are using Blockchain as a key enabler for Digital Passports, and how securing personal identity is key for Smart Citizens of the future. There must be a global form of identity, with different groups harnessing Blockchain technology to connect with one another.

Gareth also discussed how we regulate these emerging technologies, using Autonomous Vehicles as an example. Autonomous Vehicles are packed with sensors, with instant decision making, using IoT and AI to share information and manoeuvre through traffic. On top of this we have an operating system across the different vehicles, increasing the volume of shared data there is to regulate.

Currently we are at a lower maturity phase, but the more projects that run using Blockchain and emerging technology, the more we can understand the problem areas and the level of regulation needed.

David Palmer
Blockchain Lead for IoT

vodafone

"We are seeing a new dynamic world emerging, a massive amount now more than ever of IoT devices being connected with expectancy of 100 billion new devices being connected by 2030"

David Palmer, Vodafone

Will Ferguson
COO

vt | **sigfox** operator

David Palmer, Vodafone, showcased Business App-Invent, Vodafone's Application-as-a-Service solution. The service allows developers to easily integrate customised, managed IoT applications into their own solutions. David used the example of a SIM card enabled to integrate service providers and consumers through a single network. Allowing you to monitor existing transactions, both coin wallets, business rules from different nodes and whilst also being possible to issue a new transaction for a specific node.

If we imagine an automotive car entering London, you can apply the congestion charge fee in the Blockchain. By defining the value, and other transaction attributes, and issue it in a peer-to-peer transaction, certain developers can have the last word in the Blockchain network. Its configurations in a world of connected things on SIM cards is enough to identify devices and interact with services, leaving businesses to focus on productivity.

Will Ferguson, vt-iot ,is Irelands exclusive operator of the Sigfox network. Their nationwide IoT network provides the lowest, power, cost and connectivity for the most common use of connected objects, just by using sensors and devices. The Global Sigfox network allows for vt customers to connect all under one contract over one network. Sig-fox enables industries to track non powered assets. A recent use case from DHL showed that 300,000 roll cages are currently being tracked using the Sigfox network. Sigfox runs on global scale showing how the use of this technology can track cages, trolleys and give real time tracking up to when the end consumer receives their delivered parcel. What's more is that Sigfox have produced over 250,000 IoT tracking devices. This year alone, they're going to have over a million IoT devices produced in Ireland. We can really see a huge opportunity here when it comes to asset traceability.

Connall Laverty
CEO

"We are really starting to see momentum in the deployment of IoT devices within the networks as the technology has matured. Its also a clear way for potential customers to gain return on investment"

Connall Laverty

Aman Kohli
CTO

DXC.technology

Connal Laverty, WIA using IoT devices on buildings, they can scale space, utilisation, occupancy and the monitoring of air quality. There is a huge number of opportunities from just using simple data points. What we find when looking at traditional buildings they have excessive energy usage, high operational costs and don't fit the bill when it comes to future proofed sustainability or green regulation standards. The key areas of a smart building include motion and occupancy sensors, low energy usage and overall a benefit to employees for better air quality. WIA provides one of the leading IoT cloud platforms and professional services to enable companies to utilize sensor technologies to discover building efficiencies and optimisation. WIA installs the network, connects the sensors and gathers the data. This enables customers to discover processes & tools to make their building smart.

DXC believes government runs better with the right technology and a client-focused partner. Whether it's modernizing and protecting government infrastructure or delivering better services to citizens, we help public sector organizations fulfill their missions and make the most of their resources.

One key topic around the adoption rolling out of Smarter Cities, is minimising cost. A key problem that's been going on since they first started bringing out smart cities is you have sticker shock. If you want to make a city truly smart, you're talking trillions of dollars of investment, and no one will invest that. We need to look at what is doable and how do you iterate it and what's missing? What's really missing is, what's the enablement plan for a smart city or for a smart citizen? Once we figure this out it will this will bring out huge opportunity for Smart Cities to excel.