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Information Services

Smart Cities - Strap line

- Connect the unconnected
- Create non-proprietary data lakes
- Open data up through API'sPeople will develop their own APP's (esp UoP)
- Commercialise assets
- IoT be become a disrupter i.e. Employees - monitoring their workspace environment through devices

Cities Taking The Lead

- Glasgow
- Bristol
- Peterborough
- Manchester
- Greenwich - App in development (single sign-on), includes smart wallet for payment and include hooks into local vendorsencouraging Stay local, buy local

How to get there

- Leadership
- Look for project with needs
- Work with partners in the city Residents, SME's, University, Schools, Charities
- Unpinned with high speed connectivity

Tech/Standards

- Open Standards is key
- Currently lots of competing standards:
 - LORAWAN - Open standard (likely to become the standard)
 - NWave
 - Sigfox - Proprietary
 - Zigbee
 - LPWAN
- PAS181

IOT Device & Connectivity Attributes

- Must be cheap
- Battery life 10yrs (Use solar energy)
- Supported on a network with good coverage (4G/5G)
- Must be reliable & support QOS
- Device MUST be secure
- Positioning and triangulation is important in data collection

Infrastructure Components

- IoT Device
- Gateway to Network
- Cloud based applications

Potential Applications:

- Metering
e.g. sewage monitoring
- Medical dispensers
- Defibrillators
- Security
- White goods on/off
- Car Parking - Management
- Smart Metering
- Asset Tagging
- Street Light Control
- Livestock!
- Air quality
- Coastal defence monitoring
- Wearables for residents - Re Health care - THIS IS GOING TO BE BIG IMPACT!
- Journey planners based on sensor information

IoT in Portsmouth

- Coastal Defences
- Air quality
- Bin collection
- Traffic Control
- Smart Car Parking (Revenue generator)
- Big data
- Events
- Energy (store/share)

Look to use IoT to fix stuff in the city Involve residents

What drives innovation?

- Connecting stuff together that was not previously connected
- Seamless sharing
- Interoperability (API's)
- Ubiquitous coverage
- Regional data management - Health/Council
- Data analytics make sense
- A workforce that can work from anywhere - Govroam!
- Bust down the silos both within the organisation (for PCC CCTV/Traffic Management) and across the city
- Aggregate demands across the city
- Get stuff online
- Take customer/citizen feedback on-board and reengineer where necessary
- Change management adopt and adapt for the location

Data sharing

- Data has a value and can be used to create income

LISTEN TO WHAT THE CUSTOMER WANTS - DON'T FORCE THINGS ON THEM