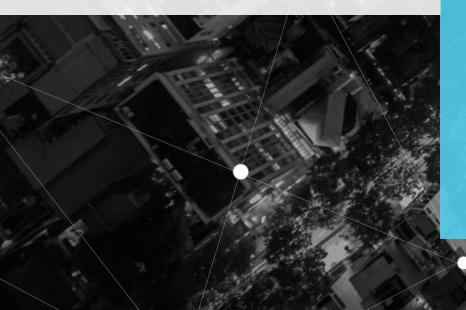




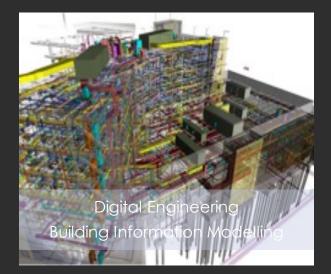
#### From Here to Where, and How?



#### Catherine Caruana-McManus

Director-Sales and Strategy Executive Council – IoT Alliance Australia Catherine@meshed.coma.au

#### Technology is disrupting cities & industries













#### The internet of everything is here



Collecting data from wireless sensors (things)

...and then doing something meaningful with it.







### Why all the fuss about IoT?

**6.4 billion** internetconnected devices in 2016

()

**46 billion** connected devices, sensors & actuators by 2021.

(Juniper Research 2016)



Potential global economic impact of IoT applications

\$11.1 trillion (USD) per year in 2025.

(McKinsey & Company 2015)



\$116 billion of potential upside to the

Australian economy by 2025 (IDTAA 2016)

> A\$308 bn In 18 years. Average productivity improvements of around 2% p.a. (PWC/ACS 2018)



# IoT will create new jobs but will require new skills

Data Scientists,

Software & Systems Engineers,

Full Stack Developers,

Cyber Security Professionals

**Communications & Network Designers** 

Cognitive Design

**Behavioural Scientists** 

+

We need to be future fit!

**Change Agents** 



#### South Australia is at the forefront of IoT

#### Why are cities investing in IoT?



Building critical digital infrastructure to support their communities to thrive.



#### Smart Cities & Suburbs Program

- \$50 million program for collaborative & innovative smart city projects.
- \$28.5m awarded in Round 1 across 52
  Projects

- Air quality monitoring
- Autonomous Vehicle Trials
  - Active transport
  - Smart Buildings
    - Smart Parking
  - People Counting
  - Energy Data Sharing
    - Waste Reduction
- Integrated Water and Energy Systems
  - Environment Modelling
    - 3D City Modelling



Enabling Principles to derive value (community, business, industry, environment)

- Open source & standards based
- Interoperability
- Data sharing
- Co-creation

#### LIVERPOOL CITY COUNCIL



NATIONAL NSW LOCAL COUNCIL

#### Tracked smartphones to tell the council how to fix our streets

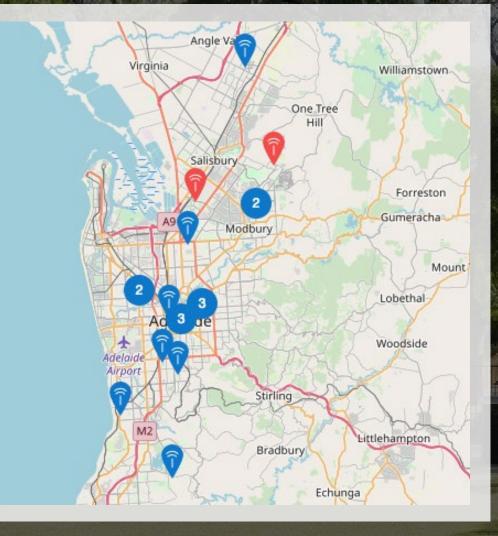
The movement of pedestrians and vehicles in inner-city Liverpool will be captured by upgraded CCTV cameras and smartphones.

The project, part-funded by the federal government's \$50 million "Smart Cities" program, aims to help the local council map potential tweaks to streets and planning rules, in an area undergoing rapid development.









### **Connected** Cities

- Collaborative project between City of Prospect, City of Burnside, City of Port Adelaide Enfield, City of Playford, Campbelltown City Council, and the University of Adelaide
  - Community and environment driven use cases parks and places
  - Key Partners: G3 International, Local IoT Suppliers (Smart City Solutions)
  - Leverage the existing TTN network which has been deployed by Leo Gaggle (TTN) & other Cities – eg. City of Tea Tree Gully.
- Deploy city wide public access IoT network using The Things Network

#### Data is the underlying currency of IoT.....

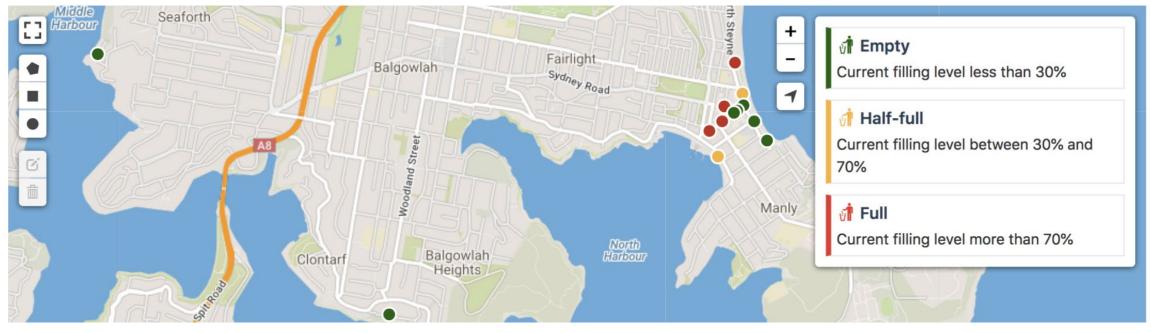


#### Northern Beaches Council Smart Bins dashboard

Current (real time) filling level of Smart Bins in the Northern Beaches area

Click here to access to historical data dashboard -->>

Current filling levels map



## **OpenDataSoft**



northern beaches council





# Thank-you

"We always overestimate the change that will occur in the next two years and underestimate the change that will occur in the next ten.

Don't let yourself be lulled into inaction." Bill Gates