

### **Introduction to Blockchain**

ITAC 2018 Adelaide Co-designing our digital future

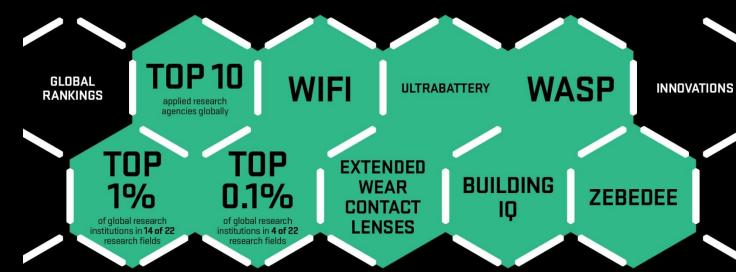




#### **CSIRO - POSITIVE IMPACT**



- **5300** staff
- Over 2000 hold doctorates
- \$1.2 billion annual operating budget
- 2000+ industry partners totaling \$220 million+ per year



# DATA **61**

AUSTRALIA'S
DIGITAL INNOVATION
POWERHOUSE



employees
[including students]

415<sup>+</sup> students

31 Government partners Corporate partners

29 University

partners

data-driven projects

172 patents

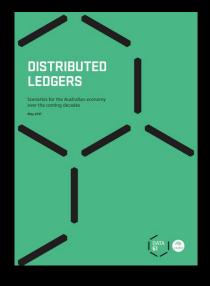




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# Want more?

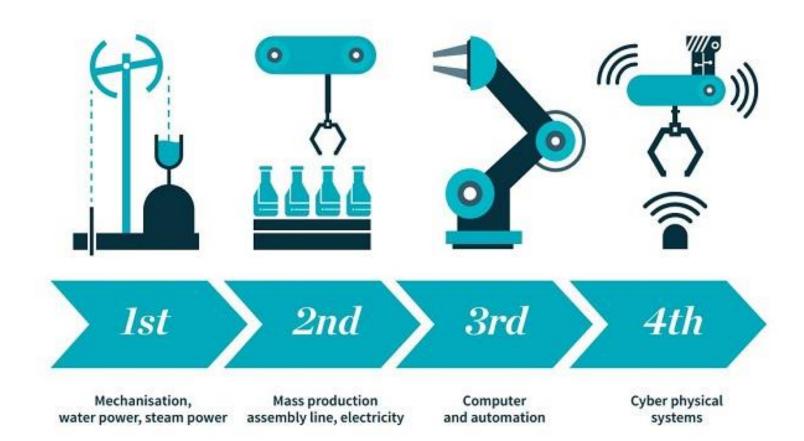


www.data61.csiro.au/blockchain



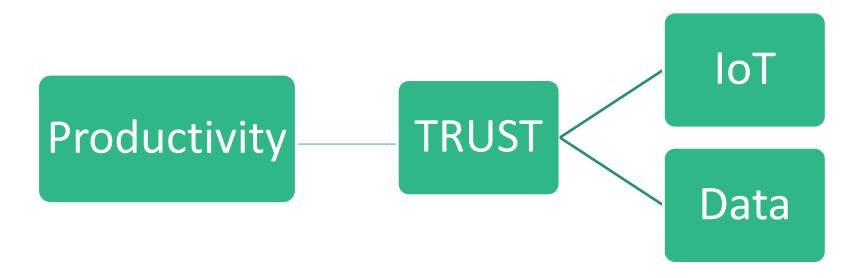


### **Fourth Industrial Revolution**

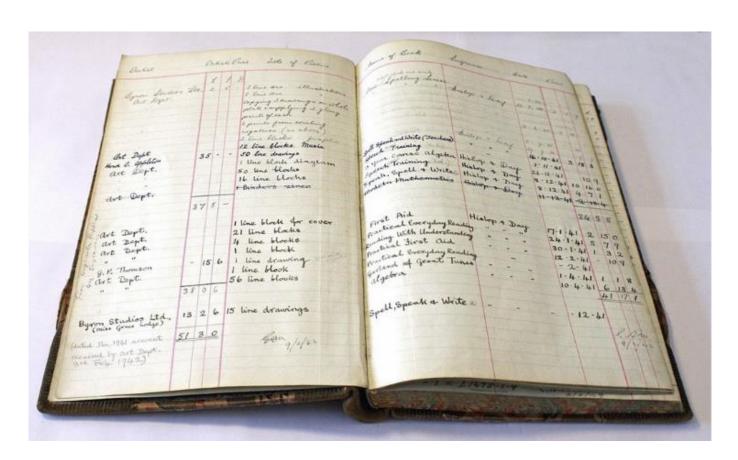


### What's the story?





## **Ledgers & Distributed Ledgers**



# **Spreadsheet Metaphor**





### The first use case





#### **Use cases**



- Integrity
- Provenance
- Transparency
- NOT Disintermediation

### **Internet of Trust**



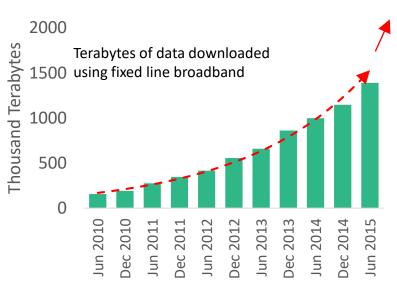






#### **Data Volumes**





And we'd need another 75m to show you the 2025 forecast.

According to IBM The world creates 2.5 quintillion bytes of data daily; 90% of the data was made in the last 2 years.

### **Medical Devices**



#### Black Hat hacker details lethal wireless attack on insulin pumps

By Sebastian Anthony on August 5, 2011 at 7:00 am 31 Comments







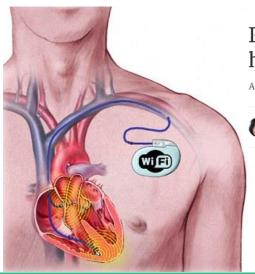




Thousands of pacemakers and defibrillators 'at risk of hacking'







#### Pacemakers are far more vulnerable to hacking than we thought

A team of researchers find 8,000 bugs in pacemaker codes.

	Mariella Moon, @mariella_moon
3	05.29.17 in Security

14

1193

#### **Trust is contextual**





#### Caveats!



- Scalability
- Standards
- Security

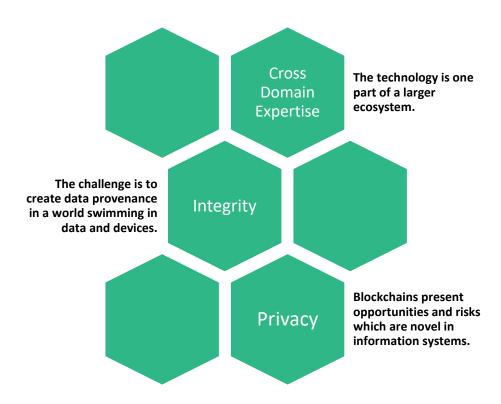
### **Toxic Data**





# **Key points:**

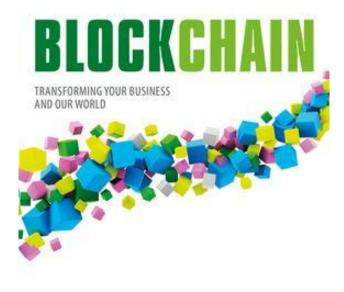




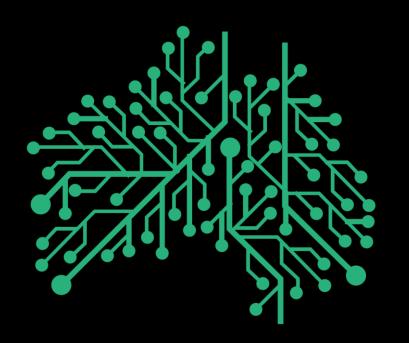
### **Blockchain:**

# **Transforming Your Business and Our World**

By Mark Van Rijmenam, Philippa Ryan







# AUSTRALIAN NATIONAL BLOCKCHAIN

A new digital backbone for business





http://ethviewer.live

