

Getting smart with eWaste

Case study from Fujitsu Oceania

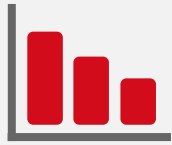
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Blaise Porter
Sustainability Manager, Oceania



Who we are



At a glance

- One of the largest ICT companies in Australia and New Zealand
- 4,000 staff
- 1,000+ customers
- \$1.1bn+ annual revenue
- 30,000 m2 of data centre footprint



Global reach, Local focus

- Agile and responsive
- Local market insight and innovation
- Local accountability, informed decision-making



Customer Focused

- Full service provider of sustainable, end-to-end ICT solutions
- Business improvement approach
- Working with our customers to solve business problems



Sustainable at the core

- First factory built in park like grounds
- First NABERS Energy for Data Centre rating
- 100% renewable energy in NZ
- ABA100 winner for Sustainability & Eco Innovation in 2017
- 14 waste streams from 19 premises

- eWaste generated three times faster than all other forms of waste
- 23.6kg eWaste generated per person annually in 2017.....
.....up from 20kg in 2014
- 95% of Australians agree that recycling eWaste is important, but 45% do not currently do so

ICT Sustainability Benchmark



Enablement

- How ready are you?
- Key drivers
- Use of technology across the organization
- Agile workplace/remote working
- Business process management
- Governance and compliance



Metrics

- What gets measured gets managed!
- Consumption and cost of ICT energy



Lifecycle

- Procurement of new ICT assets (standards & ratings)
- Use of equipment over the life cycle
- Disposal of eWaste



End User

- Personal compute devices
- Standard policies, controls
- Printing
- Technology consumables (paper, print toner)



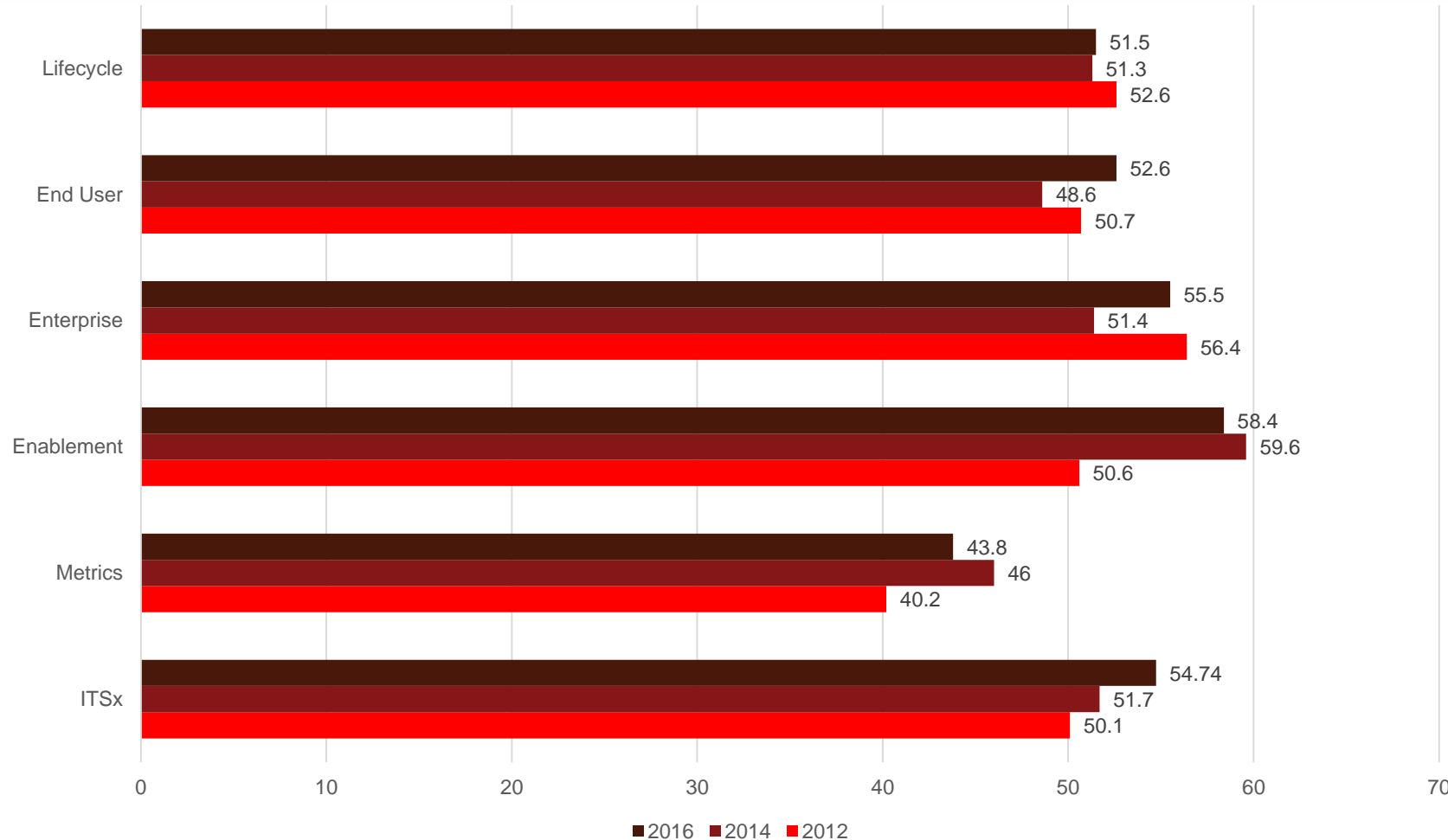
Enterprise

- Data Centre
- Broader infrastructure – networks, software architecture etc

Australia ITSx Benchmark



Australia ITSx by Index Component



- NCTRS introduced in 2011
- Recycling environment stable, developing
- Business maturity not growing

- Not the removal of best practice....
....so what is it?

eWaste Problems



Confused

- What is eWaste?
- eWaste is for big devices
- Where can I take what?
- This might be useful again one day



Inconvenient

- I don't want to have to drive out to the council depot
- I don't have the budget to pay for recycling
- It's a logistical effort to arrange
- It's fine in the cupboard



Security

- Personal and business data on the device
- How do you protect that?
- Who do you trust?



Lack of knowledge

- It's not that big a deal
- One eWaste processor is much like another
- eWaste in landfill isn't harmful
- I've heard eWaste is really valuable, I could get some cash for this

More eWaste, More Problems



Fujitsu & eWaste – where were we

- Zero electronic waste policy to landfill since 2009
- Liable party under the 2011 Product Stewardship (TV & Computers) Act
- Complex eWaste environment for our people to understand
 - Different rules for different things
 - Different sites had different options
 - Customers had their own rule
 - Risk & environmental concerns not well understood
 - Not a priority issue





Education

- Legal requirements
- Environmental impacts
- Human health and social justice impacts
- Business risk
- Benefits of recycling



Convenient

- Disposal options that work for the site
- Reduce the numbers of recycling vendors
- Utilise presence on customer sites to assist
- Bring the facility to the user
- Allow people to bring in their own stuff



Security

- Physical security of collection
- Due diligence for processing partners
- Leverage Fujitsu's relationship as a trusted partner



Simplify

- Broadening the net
- Where could we use our technology expertise to help?

eWaste bins: the concept & first prototype

- Priority: ease of use, safe, secure, attractive
- Used standalone IoT sensor to monitor fill levels and alert when full
- Worked with customers, employees, bin manufacturer, recycling partner and IoT tech vendor to generate concept and iron out problems



Co-creation involves blending business expertise and digital technology to create new value together. This is achieved by using local and global Fujitsu resources as well as leveraging partnerships with start-ups and relevant

FUJITSU
Smart electronic waste bin

eWaste only



Mobile phones
& tablets



This is a smart eWaste bin. It is fitted with a sensor that will automatically alert when the bin needs collection.

For any queries contact: sustainability@au.fujitsu.com

What to put in this bin:



- PCs, laptops and components (e.g. hard drives, circuit boards)
- PC power supplies and chargers
- Keyboards, mice, other accessories
- Power and data cables
- Mobile phones, tablets, MP3 players, their chargers, etc.
- LCD monitors, DVD and video players, projection
- Digital cameras and video cameras
- Network devices
- Gaming consoles and handheld devices
- Stereo equipment and hi-fi speakers
- Data centre kit: servers, racks, storage arrays



What NOT to put in this bin:

- Kitchen appliances or whitegoods (kettles, blenders etc)
- Smoke alarms
- Batteries, including large UPS batteries and car batteries
- CRT monitors and TVs
- Large multi-function devices (over 3kg)
- Media (CDs, DVDs, VHS tapes)
- Anything that won't fit comfortably through the slots
- General rubbish

ALL EWASTE COLLECTED FROM THIS BIN IS PROCESSED DOMESTICALLY IN CERTIFIED FACILITIES TO PROTECT HUMAN HEALTH AND THE ENVIRONMENT.

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Uses IoT sensor to...

- Monitors fill level
- Trigger an alert when full

Uses Run My Process to...

- Retrieve job number from eWaste processing partner
- Book its own courier collection
- Advise the customer of the date and time of collection

eWaste Dashboard



380,937.9

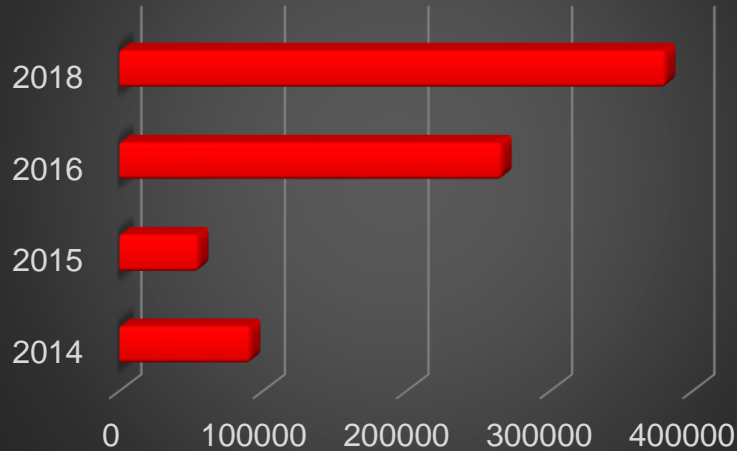
Kg eWaste processed in 2017



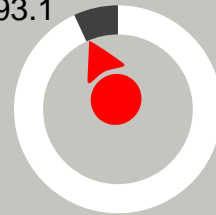
10,000

People reached through SmartBin education material

eWaste recycled (kg)



93.1

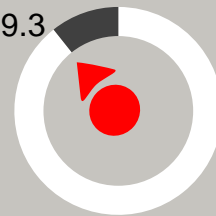


Fujitsu 2018 lifecycle ICT benchmark score



56.7
2500+ performance

89.3



2014 category leader performance

CUSTOMER CASE STUDY

“We placed our faith in Fujitsu and its local Head of Sustainability and he delivered the results we needed to make us more sustainable as a company.”

Flyn van Ewijk
Environment and Sustainability Manager
Qantas

The Fujitsu eWaste service provides upgrades, repairs, redeployment, recycling and hazardous materials management for devices reaching end of life at Qantas.

At a glance
Country: Australia
Industry: Aviation
Founded: 1920
Employees: 30,000+
Website: www.qantas.com

Challenge
Around 2,000 devices reach end of life at Qantas every year, disposing of them in a responsible and sustainable manner was proving a challenge. It needed a more proactive and strategic approach to recycling.

Solution
The company partnered with long-term IT provider, Fujitsu, to implement an eWaste programme that would cover every aspect of the device end of life process, including upgrades, repairs, redeployment and recycling as well as hazardous materials management.

Benefit
Fujitsu collects old devices and works with certified recyclers to either repair, upgrade or recycle them, with over 50 per cent of material reused.
Since the programme began, over 12,000 assets have been recycled, diverting 120,000kg of material from landfill.
The programme has been extended to employees who are encouraged to bring in personal devices; one event netted 1.5 tonnes on a single day.

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120,000
Devices diverted from landfill with Qantas

DESIGN FOR END OF LIFE

Fujitsu products are designed to be both easily repairable and recyclable. We have reduced adhesives and fused components to make recycling simpler.

INNOVATION IN RECYCLING

2002 - Fujitsu uses plastic recycled from own PCs in new notebook housings
2012 - Fujitsu develops methodology for recycling CDs and DVDs into notebook housing

RECYCLING

Includes print consumable recycling, component re-use, supplier packaging concerns

Top Tips

For your people

- Meet people where they are and bring the facility to them
- Allow everyone to participate
- Treat it like a benefit



For organisations

- Allocate a budget
- Have an eWaste policy
- Do policy education
- Buy for recyclability
- Measure, communicate, and celebrate



For navigating technology


- Identify the biggest impact
- Start small – but start
- Use competitors and customers to your advantage
- Look out for the added unintended consequence and benefits



For your recycling partner

- Go to visit
- Do an audit
- Examine downstream processes
- Chain of custody
- Check Certifications
- Additional capabilities you may want





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