

Internet of Library Things

Tom Edwards, Wyndham City Libraries

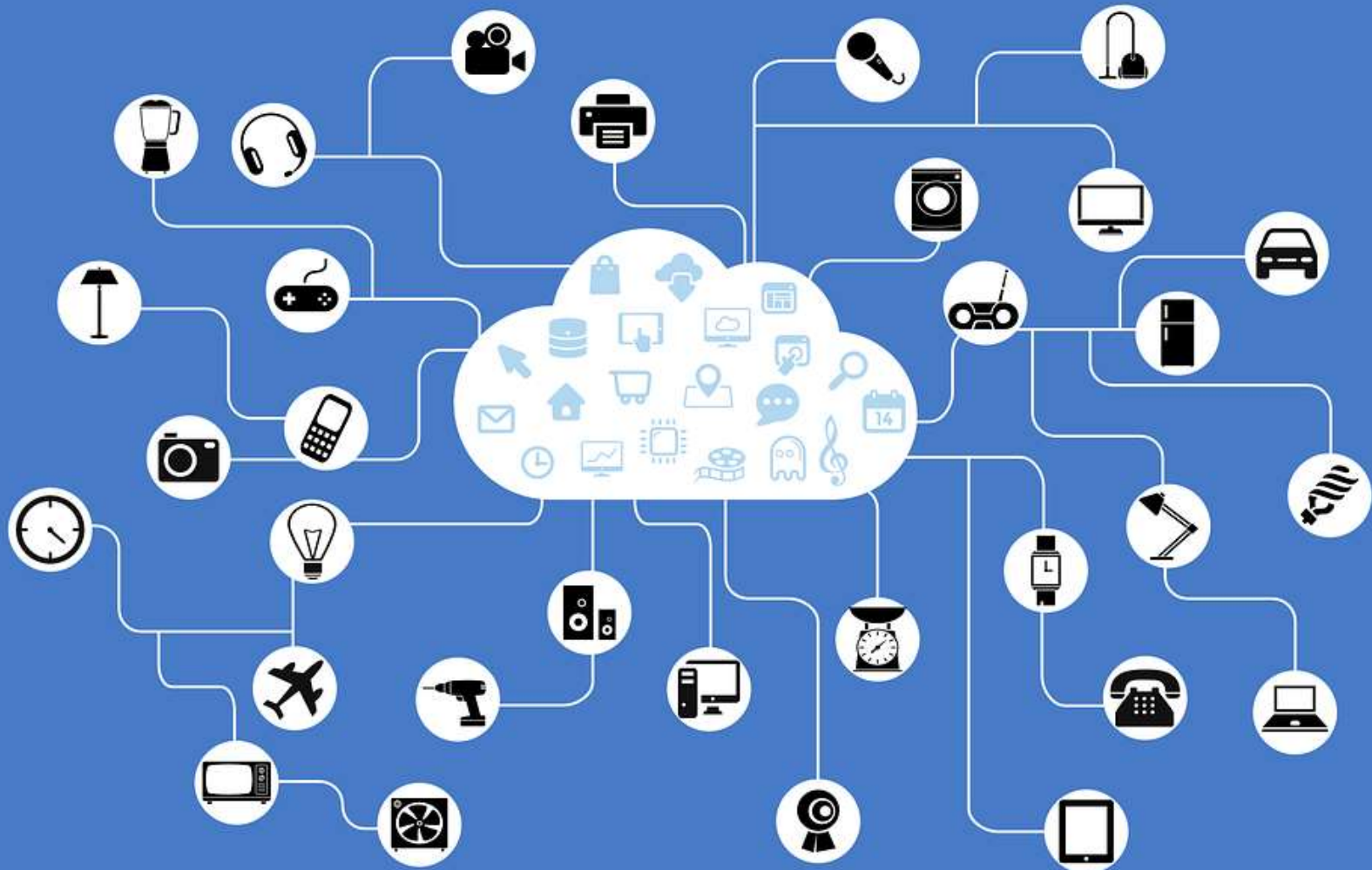


The Internet of Things (IoT) is:

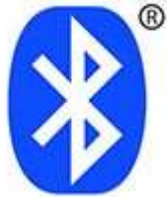
“a global infrastructure for the information society, enabling advanced services by interconnecting (physical and virtual) things based on existing and evolving interoperable information and communication technologies.”

Internet of Things Global Standards Initiative <http://www.itu.int/en/ITU-T/gsi/iot/Pages/default.aspx>





Common IoT protocols



Bluetooth



Zigbee



Z-wave

6LoWPAN

6LowPAN



Thread



WiFi



Sigfox



NFC



Neul



LoRaWAN



Cellular

Examples in the wild...





VALA
2016



Nest Weave



VOLA
2016

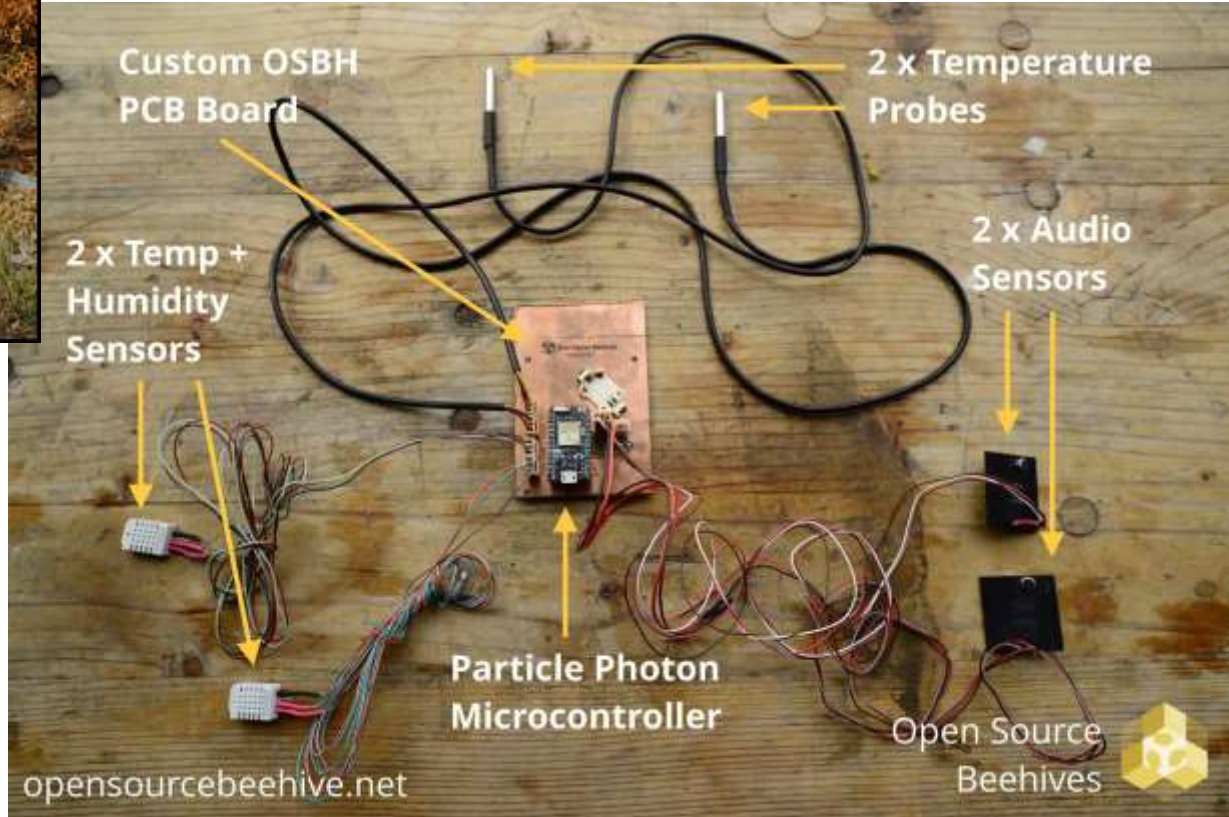




VALA
2016



<https://github.com/opensourcebeehives>



discussion/controversy
/zeitgeist

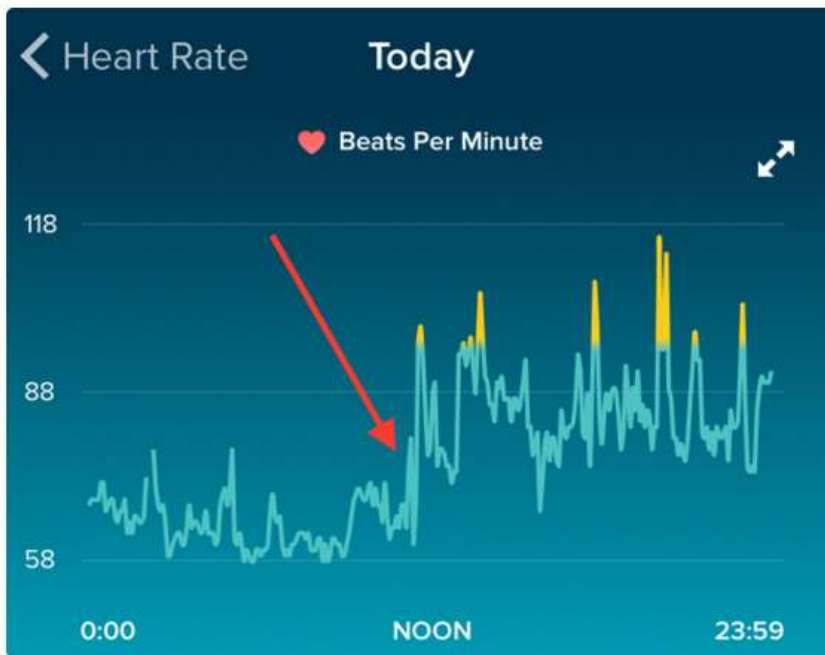




Koby
@iamkoby

Follow

Breakup, as captured by my fitbit. #breakup
#Fitbit



RETWEETS
2,331

LIKES
3,069



10:55 a.m. - 19 Jan 2016



VOLA
2016





VOLA
2016





VOLA
2016



Commentary/critiques

<http://www.wired.com/2015/12/2015-the-year-the-internet-of-things-got-hacked/>

<https://www.eff.org/deeplinks/2015/01/who-will-own-internet-things-hint-not-users>

<https://twitter.com/internetofshit>



IoT Units Installed by Category (Millions of Units)

Category	2014	2015	2016	2020
Consumer	2,277	3,023	4,024	13,509
Business: Cross-Industry	632	815	1,092	4,408
Business: Vertical-Specific	898	1,065	1,276	2,880
Grand Total	3,807	4,902	6,392	20,797

Source: Gartner (November 2015)



IoLT



Existing IoT in your library?

Physical things

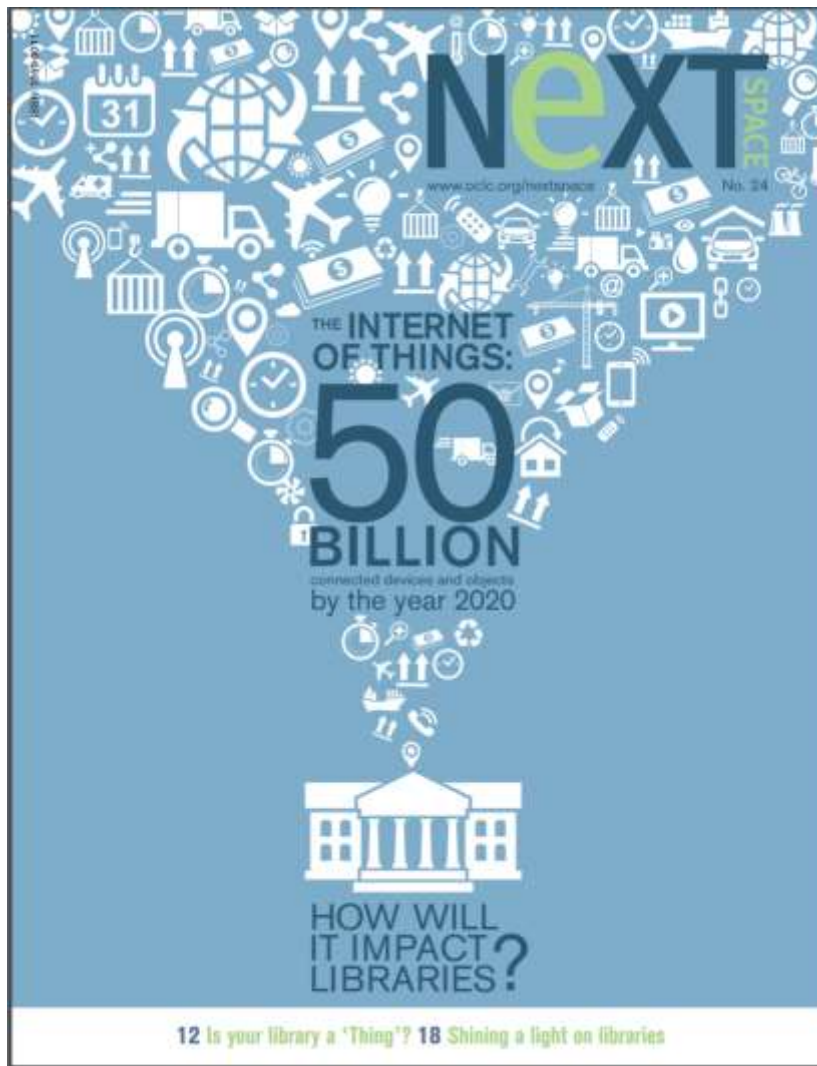
Gates
Check out kiosks
Inventory devices
Automated materials
handling
Tags

Interconnecting based on
existing and evolving
interoperable ICT

SIP2
ISO 28560
Allocation of the 13.56
Mhz spectrum

Virtual things

SIP Server
Local configuration
database



- Inventory control
- Mobile payments, ticketing and event registration
- Access and authentication
- Climate and room configuration, accessibility and way-finding
- Mobile reference
- Resource availability for both content and physical plant (rooms, AV equipment)
- Smart books (features activated/enhanced by other IoT-enabled systems)
- Gaming and augmented reality
- Object-based learning
- Assistive technology



Paper at VALA2016!

“Building an Internet of Things environment in the Library”

May Chang

Associate Dean, Libraries IT

Western Michigan University

<http://www.vala.org.au/vala2016-proceedings/960-vala2016-session-1-chang>



Location aware services



Location aware services



and finally...

Tom attempts a segue...

