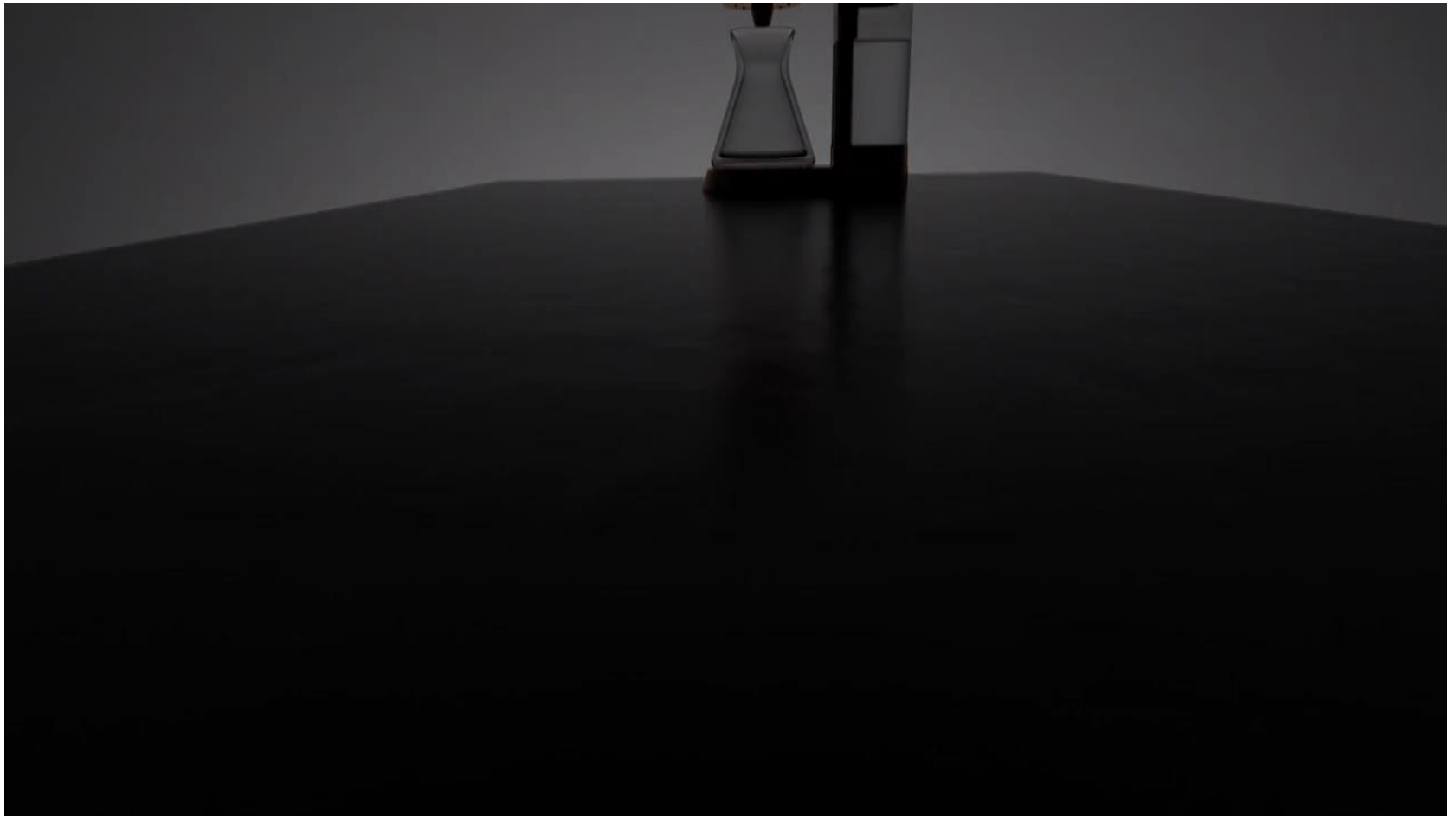


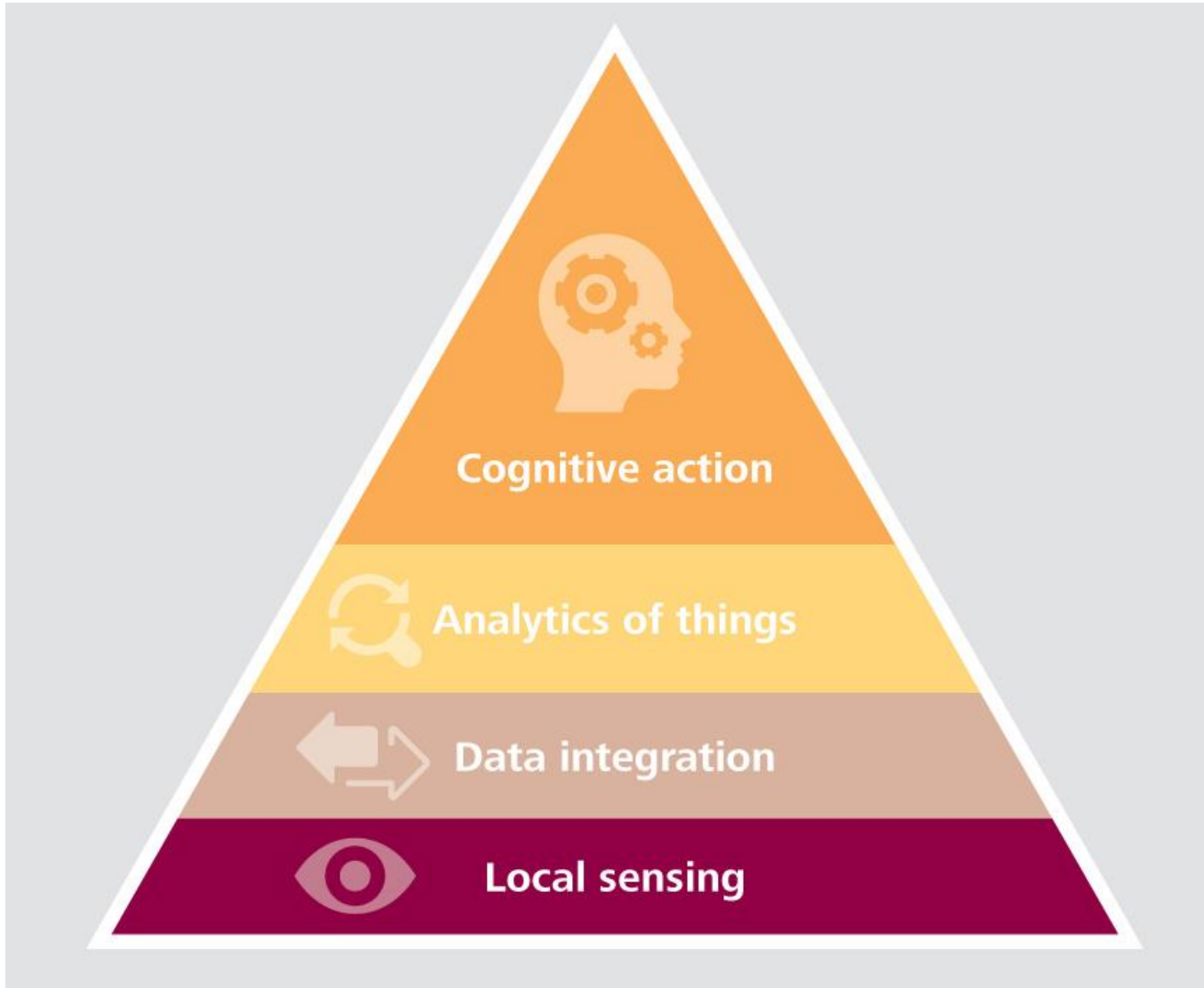
Internet of Things

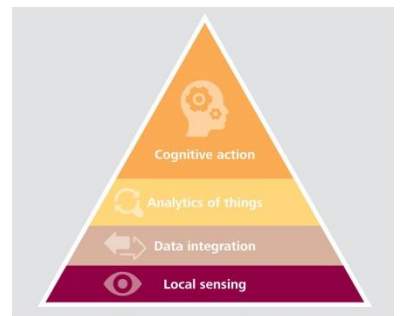
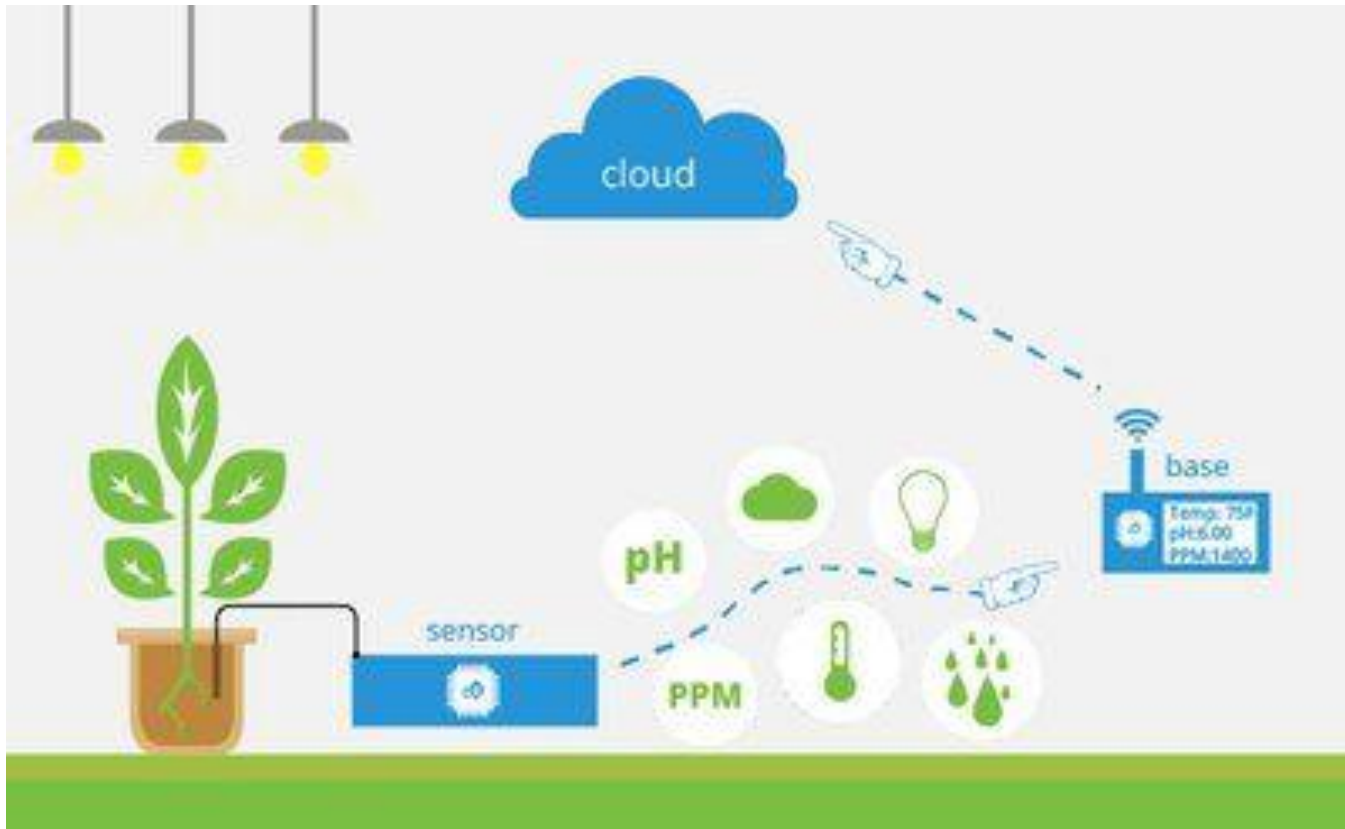
IoT





What's the Internet of Things?

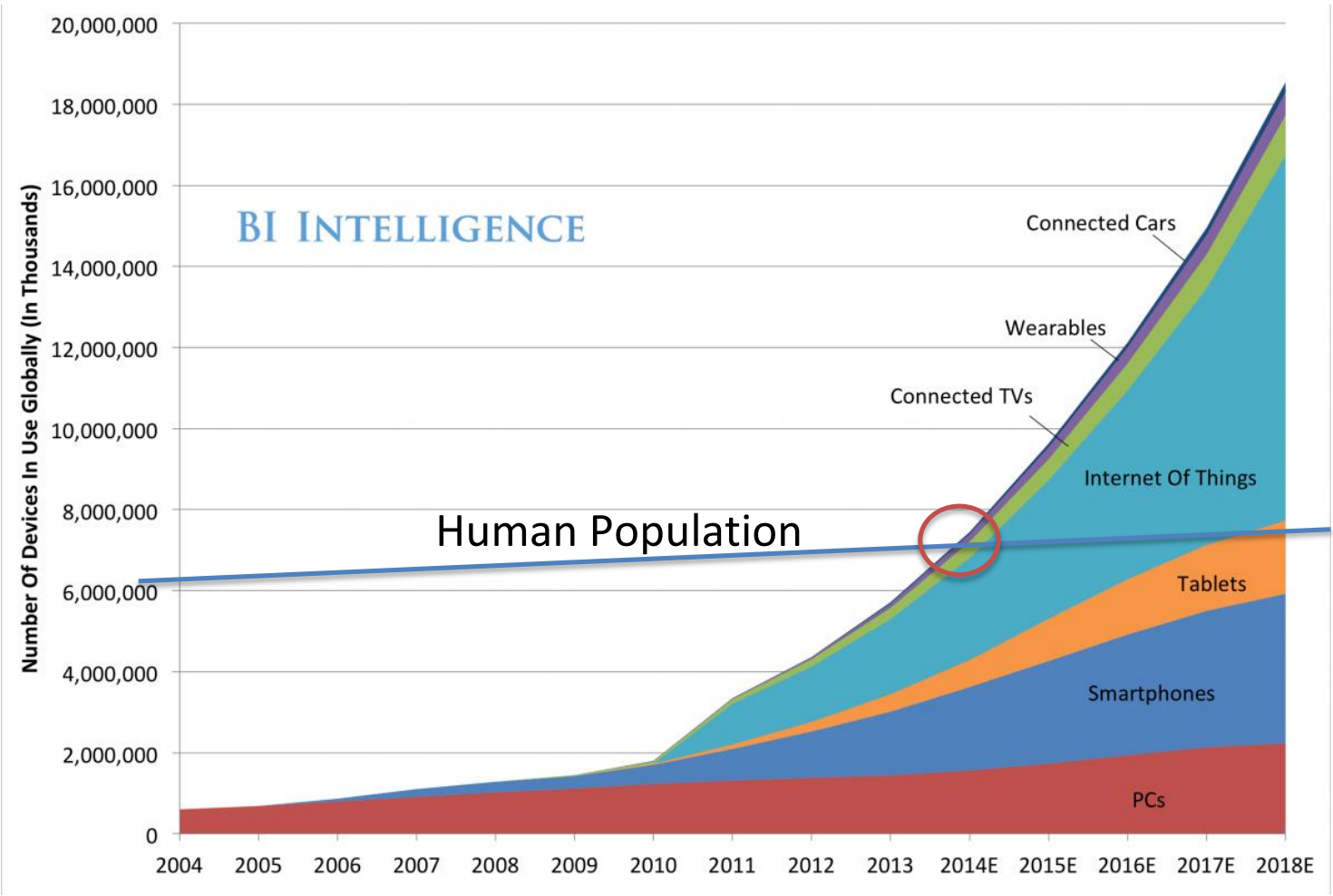




The Internet of Things is

A system of data, analytics and action

Not just connected sensors and devices



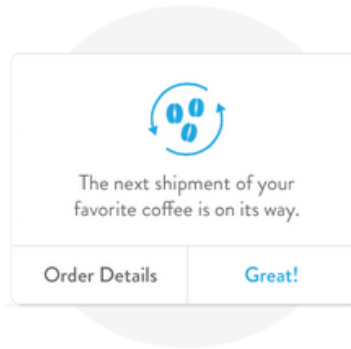
Poppy products think for you.

They work with Dash Replenishment Service by Amazon to reorder the things that keep your household running smoothly.



SMART SENSORS

Sensors know when it's time to refill pet food, baby formula, coffee, filters, and more.



EFFORTLESS ORDERING

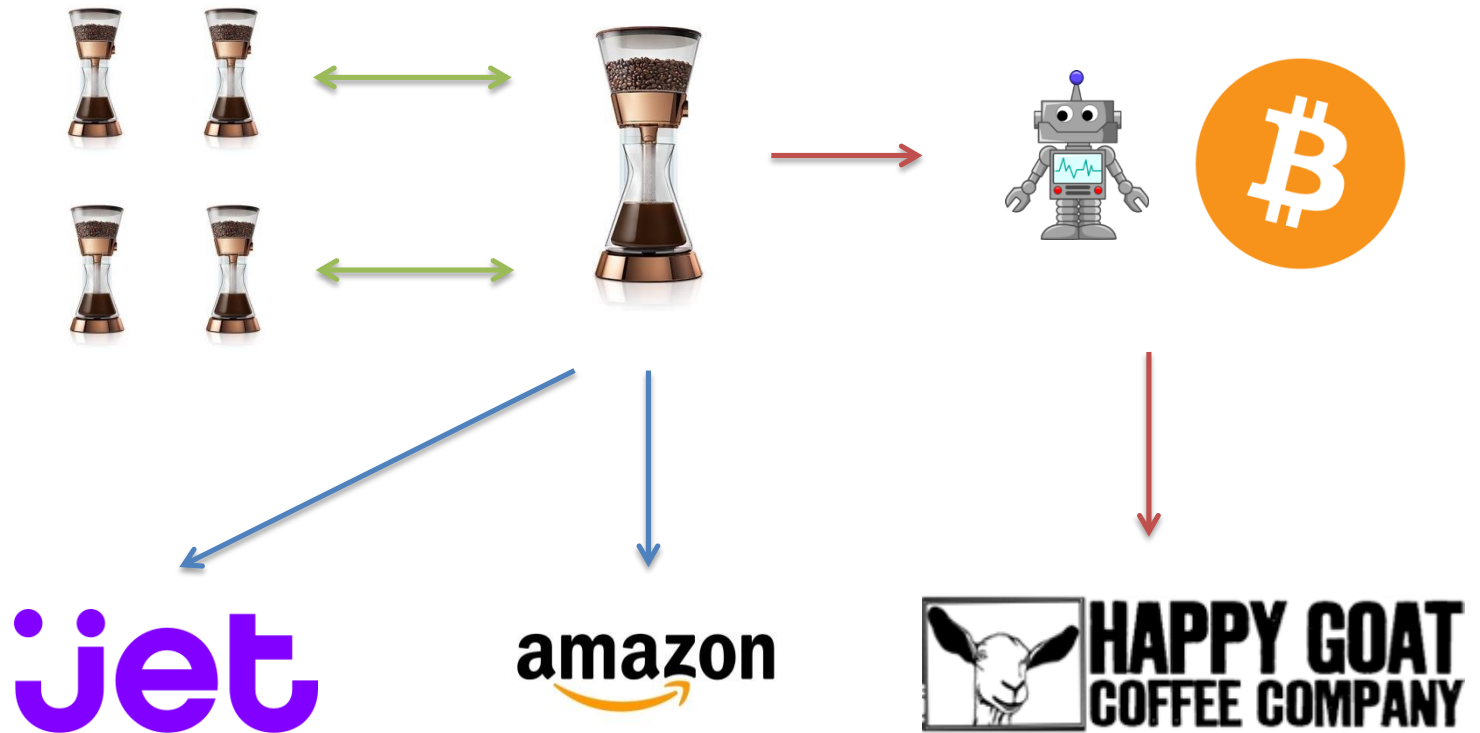
The products connect to your Amazon account to reorder your preferred brands.



AUTOMATIC DELIVERY

Refills of exactly what you need are delivered just when you need them.

Web of Things

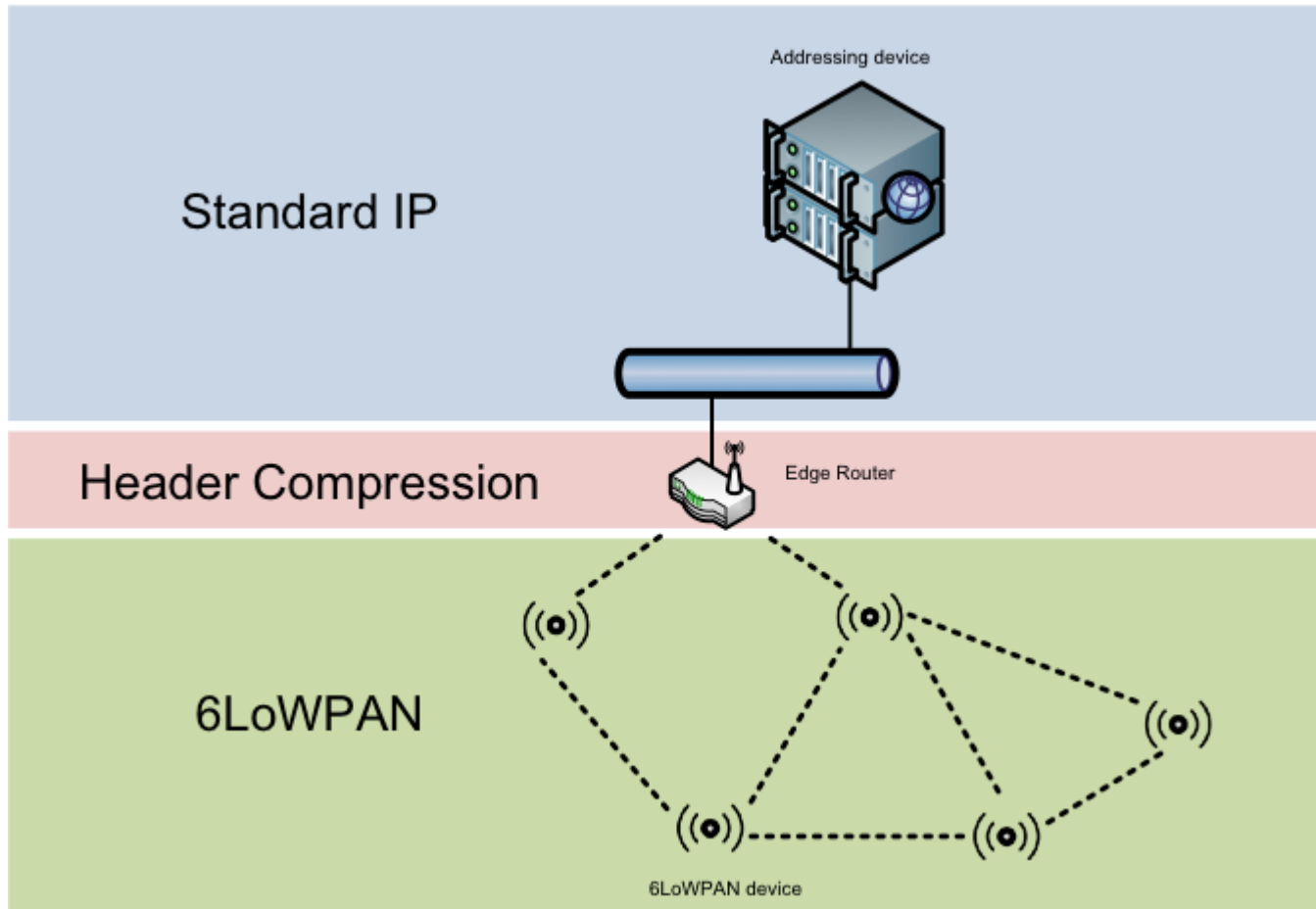


Just like the World Wide Web unlocked
the power of the Internet,

a Web of Things will unleash the
innovation potential of the Internet of Things

Is identity in IoT just addressing?

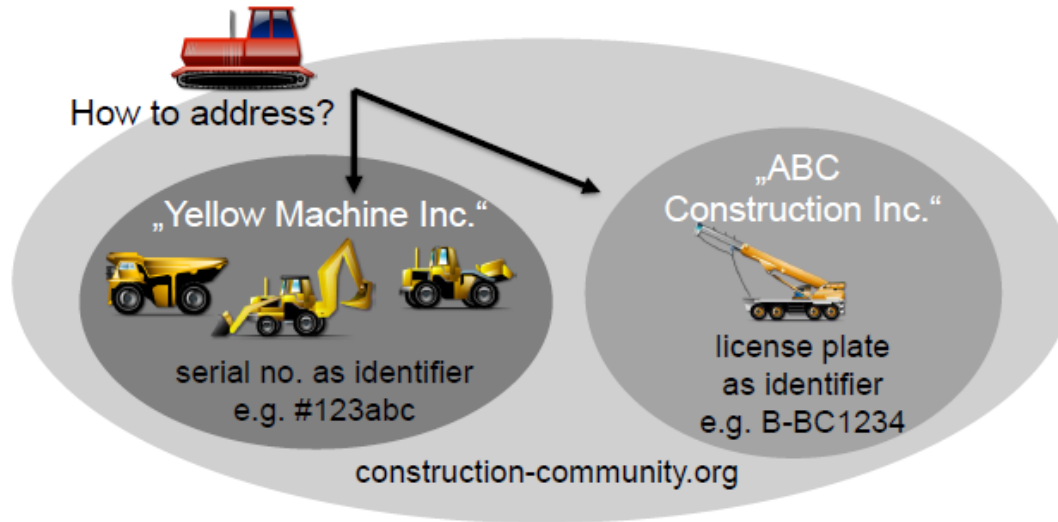
Problem Solved?



Example XRI

xri://construction-community.org/(um:yellowMachine.serialno:#123abc)

xri://construction-community.org/(um:abcConst.license:#B-BC1234)



Something you

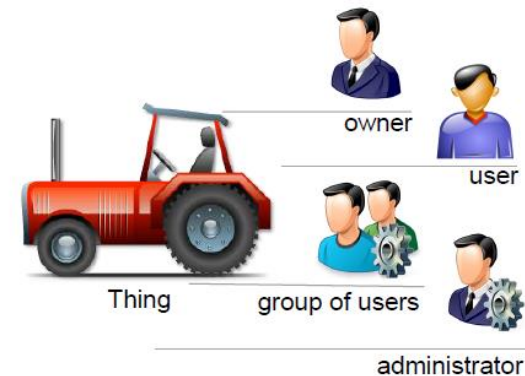


know + have + are



Ownership and Identity Relationships

Things or objects in the IoT often have a relationship to real persons.



Fundamental unanswered questions include:

1. Just what do we want from an IoT identity system?
2. Is a human-centred approach even the right starting point?

IoT Identity Issues

- IoT networks are different, e.g. sensors not running IP (Internet Protocols)
- Security needs to be designed in
- Behaviour, trust and reputation of objects indicate a dynamic, ever-changing system based on actual data
- In open systems, greater role for context and risk based evaluation
- ... and many more

Summary

- The Internet of Things is a system of data, analytics and action
- IoT is happening now: exponential growth
- The Web of Things will unleash the true innovative potential of IoT
- Much, much more work required to properly address identity in IoT



Questions / comments

Vikram Kumar

Email: vikram@swerl.io

Twitter: [@vikram_nz](https://twitter.com/vikram_nz)

© 2015 Swerl IO



References, Image Sources

- Slide 2, 8: Poppy <https://poppyhome.com/>
- Slide 4: Deloitte <http://dupress.com/articles/internet-of-things-wearable-technology/>
- Slide 5: HarvestGeek <http://www.alternativeenergynewswire.com/harvestgeek-automates-your-entire-garden>
- Slide 7: <http://www.businessinsider.com/growth-in-the-internet-of-things-2013-10?IR=T>
- Slide 12: <http://www.embedded.com/electronics-blogs/embedded-cloud-talkers/4236873/How-to-setup-a-6LoWPAN-network>
- Slide 13: Kantara Initiative <https://kantarainitiative.org/groups/idot/>