

OCTO

REACH OUT AND CONNECT

*Connected
lighting*



PRESENTING

Why smart Lighting Presents
opportunities or the wholesaler?



OCTO
Compatible

Connected by

WIZ



OCTO
Option
Available

Powered by
CASAMBI

James Foster – Octo National Sales Manager

AGENDA

Lighting controls of the past & present.

Technologies available to us today.

Triggers and the IoT.

How to realise the desired lighting response.

The integrated future.



Good lighting design **PROMOTES..**

Energy & resource efficiency

Safety

Health & wellbeing

Productivity

The aesthetic

Good lighting design IS..

Placing the right luminaire,

In the right place,

to deliver the right amount of light for
the task in hand at that time.



Lighting control in the past...

More control via grouping rather than 'SCENE control' - lighting around the task & time much like the narrative of a play.

Switching was acceptable, dimming was preferred but expensive and difficult to manage.

Manual interop was essential, automated functions were valued but underused with no thought for hierarchies etc.

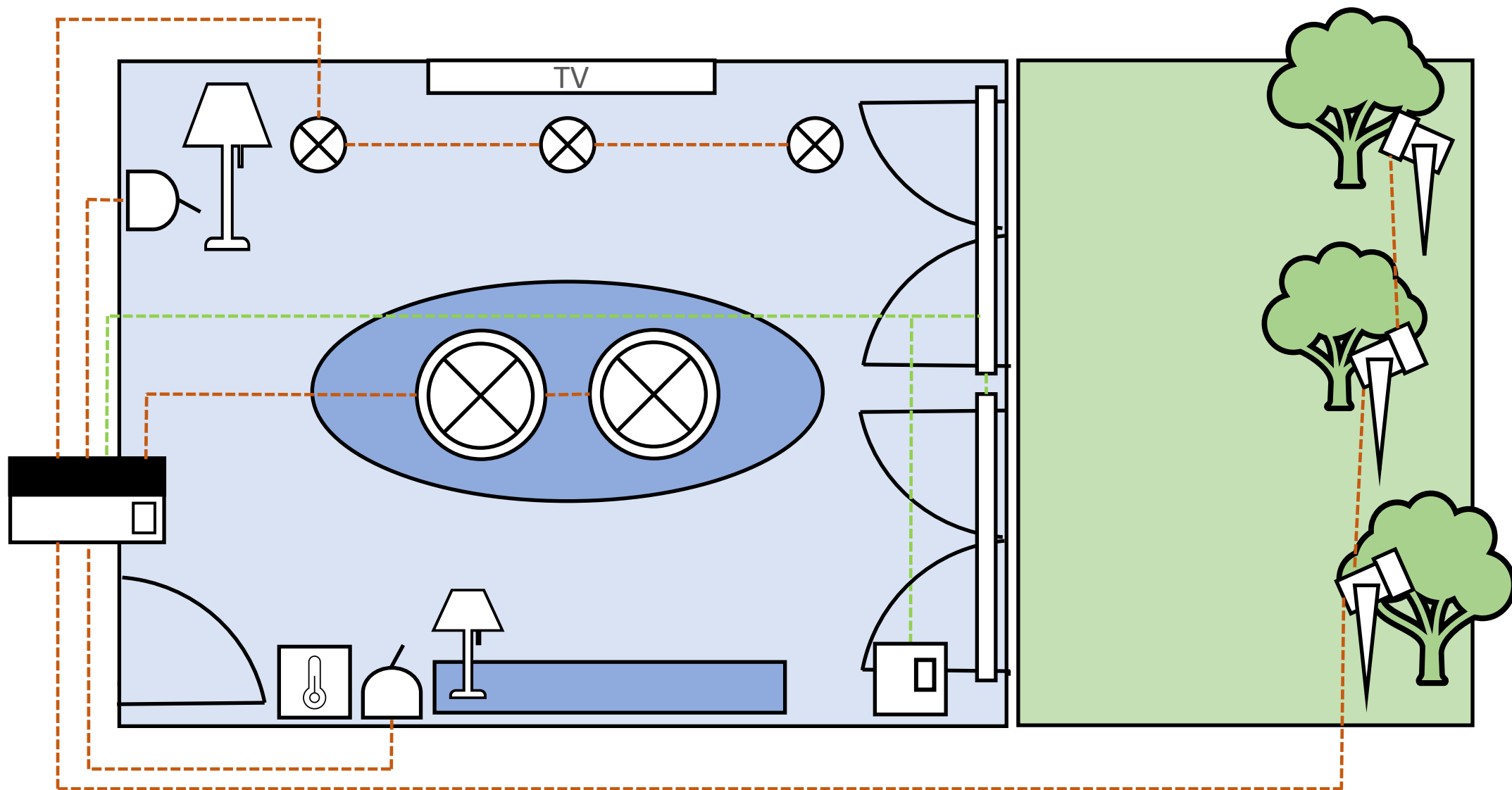
Value Vs. Cost, outside of commercial apps, just didn't make sense.

Reliance on 3rd parties.

Typically not retrofittable.







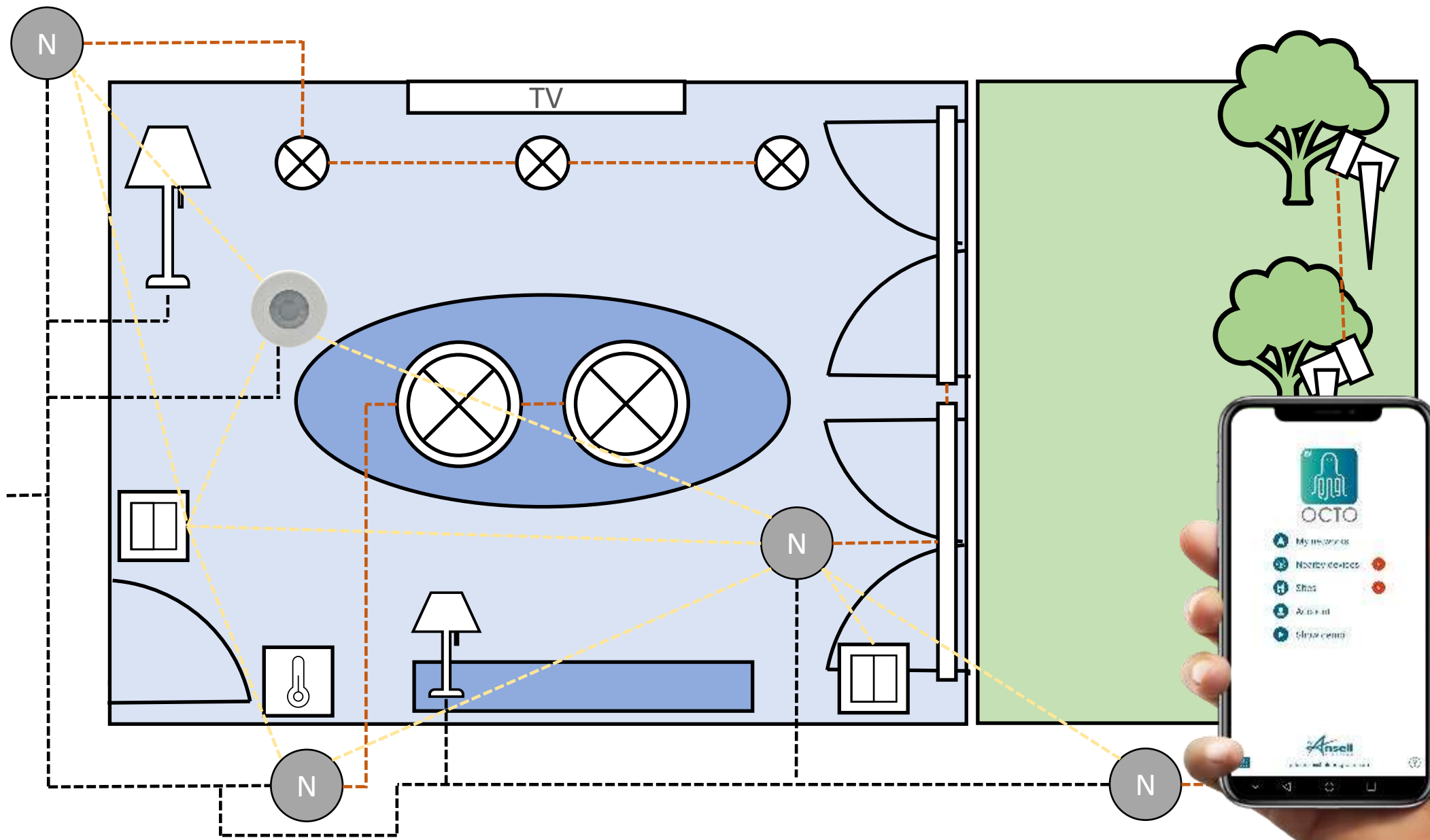
The Aims of SMART Lighting..

Promote energy & resource efficiency by reducing human input and maximising use of natural light.

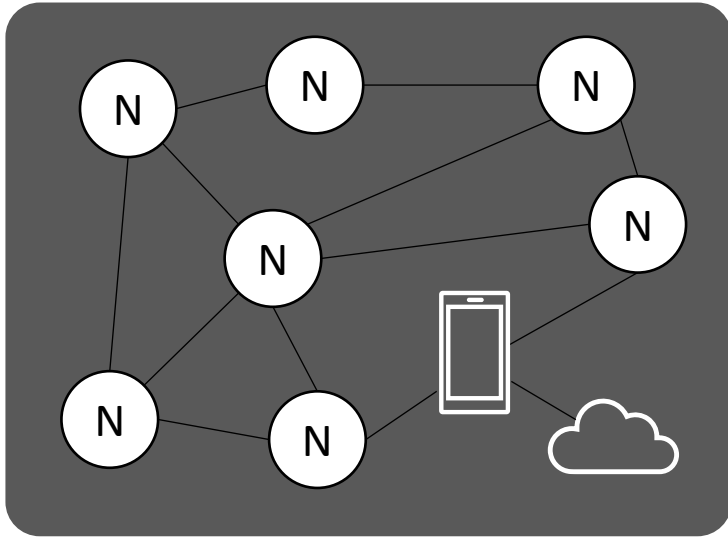
To put safety, health & wellbeing of the user ahead of all else.

To embrace automation to reduce the burden on the user and increase user experience.

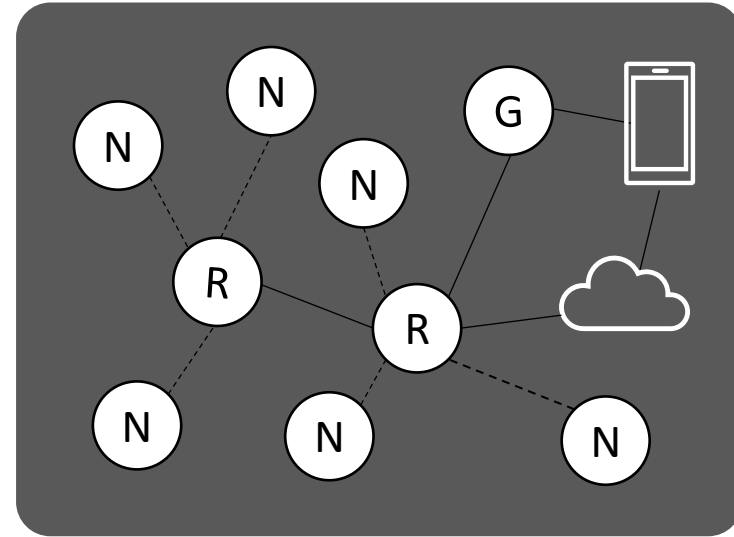
To integrate with other solutions and systems in a way that creates further value for all.



 **Bluetooth™**



 **zigbee**  **ZWAVE**  **WiFi™**



Wireless Protocols in Lighting



Key points on Bluetooth Mesh solutions

Licensed, single standard governed by a single non-profit interest group

Bluetooth is a protocol and a standard in itself

Standalone. No separate infrastructure required

Ubiquitous implementation reduces the need for propriety hardware

All nodes are equal giving a Bluetooth mesh the ability to self heal

Higher cost to implement

Network scale is limited





Key points on WiFi / Zigbee solutions

Multi-platform open protocol based on a standardized specification (IEEE 802.11/15) with wide adoption in many industries

Zigbee is a trademark, not a standard

Good range and data rates

May use or *need* existing Wi-Fi infrastructure. May interfere with other 2.4GHz networks.

Dependant on coordinators. Hubs, gateways and routers may be needed. Not all nodes are repeaters.

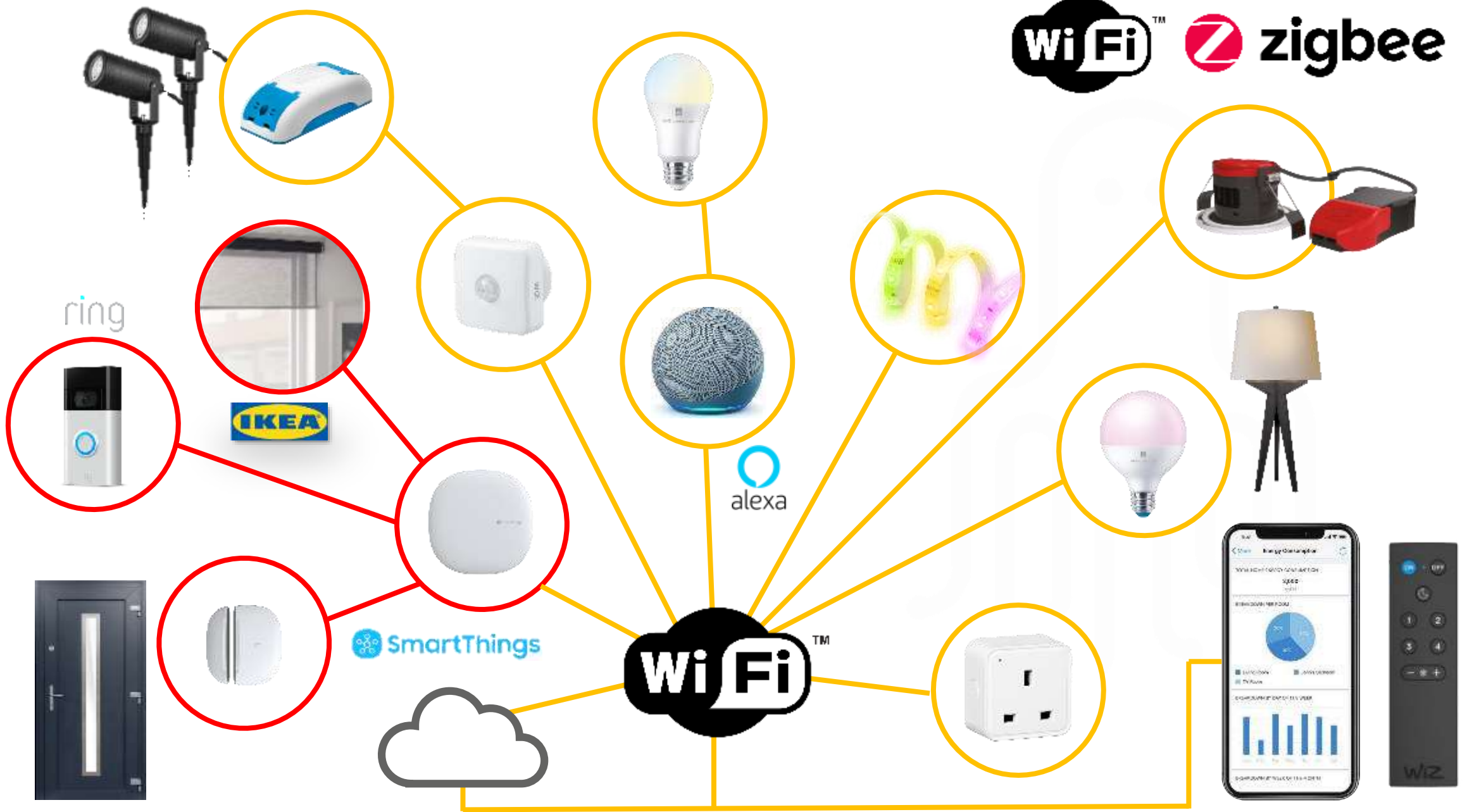
Potential points of failure due to master/slave relationships

Internet obsessed

Non-propriety protocol applied *mostly* to propriety ecosystems

BLE hybrid piggy-back options and more robust meshing coming to market (Zigbee 3.0)







TRIGGERS...

SENSOR

- PIR/MW/Vision SENSOR
- PHOTOCCELL
- Temp/Co2/Air quality
- GEOfence/GPRS

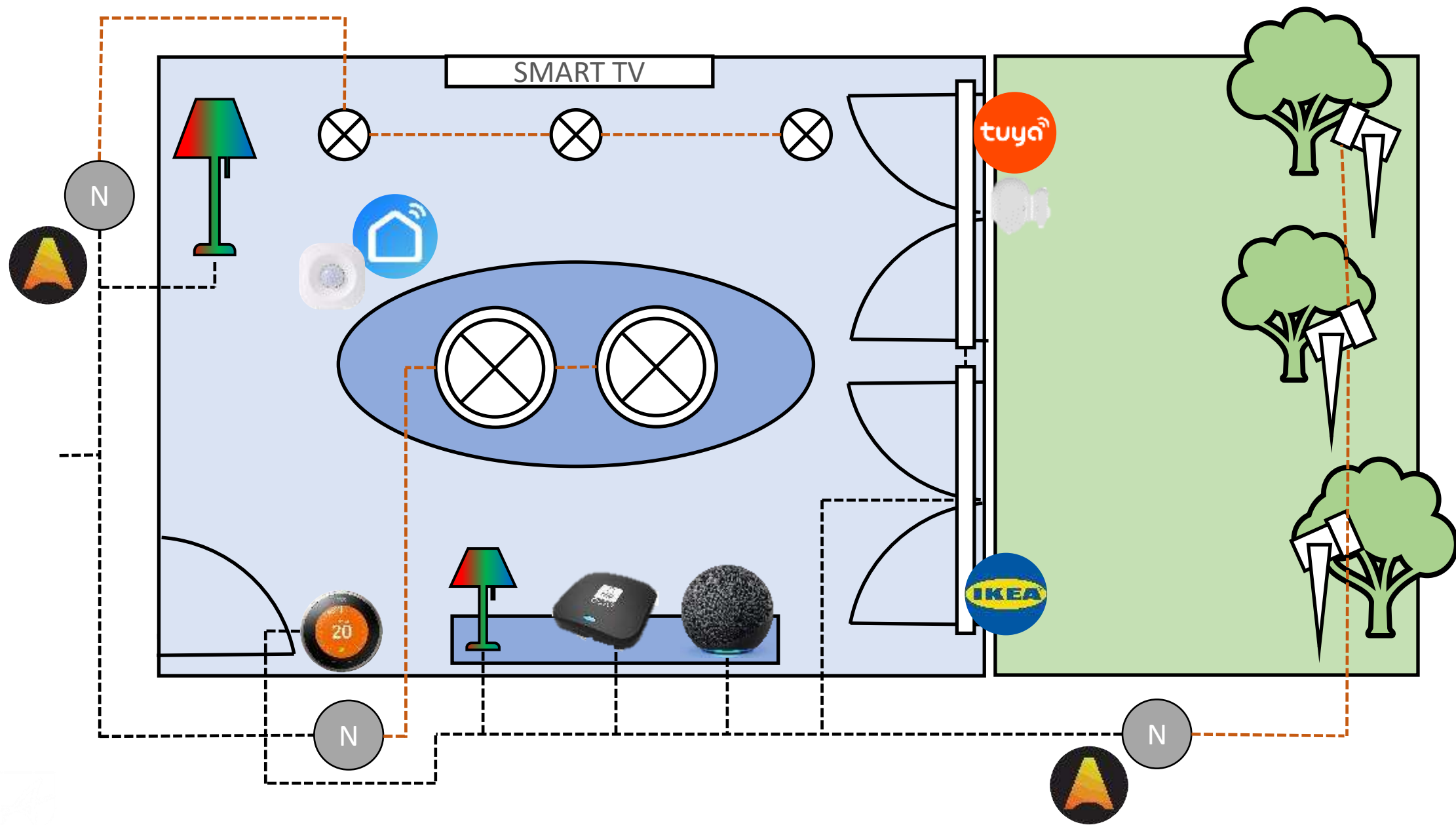
Timer

- Time delay switch
- DIN type programmable
- Plug top
- Astroclock
- Application (programmable)

MANUAL

- Switch (hand)
- 0V contact/relay
- Magcontact
- EMR/security trigger
- Sound





Lighting **RESPONSE**...

Intensity

Energy saving
Comfort/glare
Merchandising
Entertainment
Visual appeal

Spectral

Physiological response
Well being
Productivity
Comfort
General health
Sanitation
Merchandising
Visual appeal
Agri, aqua & horticulture
Entertainment

Movement

Way finding
Display/Retail
Safety/warning
Entertainment



Features & Benefits

Individual luminaire control

- * This gives you the ability to tailor the lighting level to the individual in all applications

Scene creation

- * Create the perfect ambience for different occasions

Daylight harvesting on all our Octo fittings with the use of our PIR's

- * Increased energy saving

Motion Sensors

- * Easy to commission
- * Save energy by only illuminating spaces when they detect movement

Scalability

- * The system is designed to work with in a size building with a single point of access.

Simple Wiring

- * Live, neutral and earth

Circadian rhythm

- * when used with compatible tuneable white fittings

High Level of Security

- * This system only uses BLE (Bluetooth Low Energy) the fittings are not connected to the internet

Conclusions..

Smart lighting and controls are the only way forward...

Generic and proprietary thinking – not 'either/or'...

Interoperation with a little imagination...

Turn small orders in to larger one

Thank You & Any Questions?

