

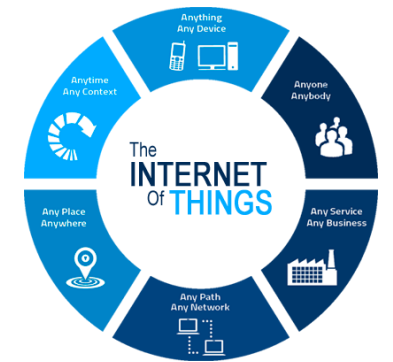
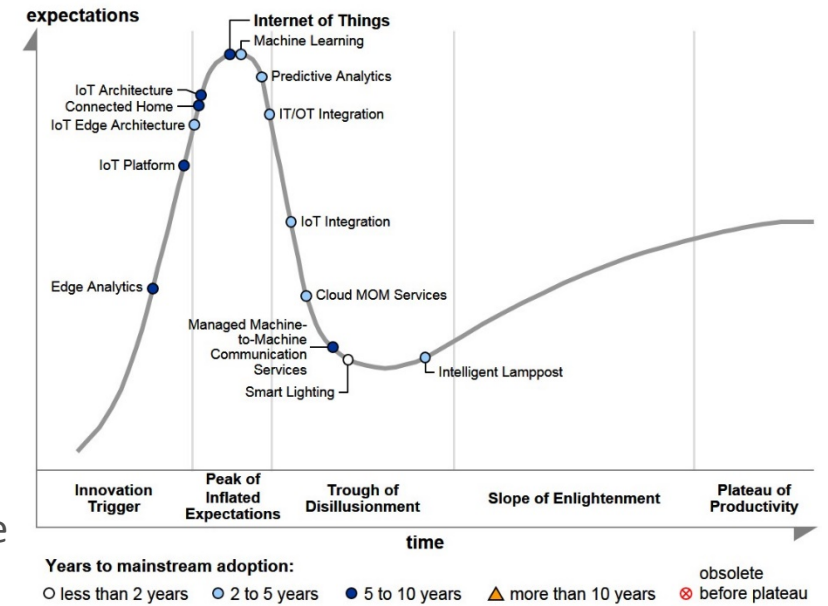
Opening slide

'lighting as a service'

'Circulair Economy | Lighting'

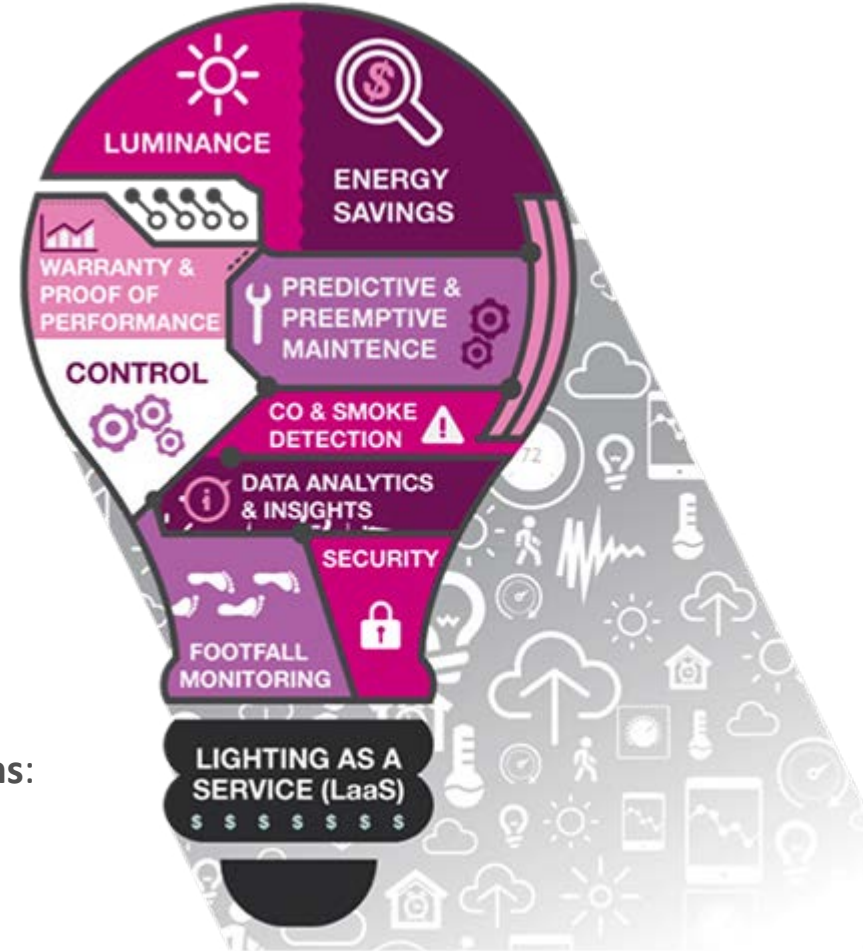
trends

- Lighting will play an important role in the IOT world
- Connected lighting systems create cost savings of another 40 percent on top of the sizable savings generated by Led Technology.
- By 2020, 80 percent of luminaires sold in the professional market (size 56 Billion€) will be LED luminaires and 25 percent will be part of a connected lighting system
- The Growth of profession connected-lighting systems will create new opportunities for high-end professional services such as “Lighting as a service”



Why lighting as a service

- Supplier remains **responsible** for the product:
 - Performance
 - Maintenance
 - Reuse and recycling of parts
- As the system is **connected**:
 - Monitor
 - Remote maintenance
- Add sensors and with that we can enable new **savings/applications**:
 - Intelligent control of light
 - Intelligent control of HVAC
 - More efficient use of the office



Nano-photonics

Photonic materials

Thermal mgmt

OLED materials

Transparent
conductive
materials

A. Breakthroughs in SSL technology

Led packaging

Comp integration

Colour
optimization

Manufacturing and
characterization
equipment

Electronics

Hard/software
reliability

B. SSL system innovation

daylight

Thermal mgmt

Integration tech

Off-grid

Optical designs

C. SSL service innovation: creating added value beyond energy efficiency

Data analytics

Insight generation

User-system
interaction

System of system
integration

Validation under
real-life conditions

Lighting on
cognition

‘lighting as a service’

‘Circulair Economy | Lighting’