

# THE INTERNET OF THINGS

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HCOM-102-23 Brad Williams, 2019

# 01

## **What is The IoT?**

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Our next breakthrough

# Background

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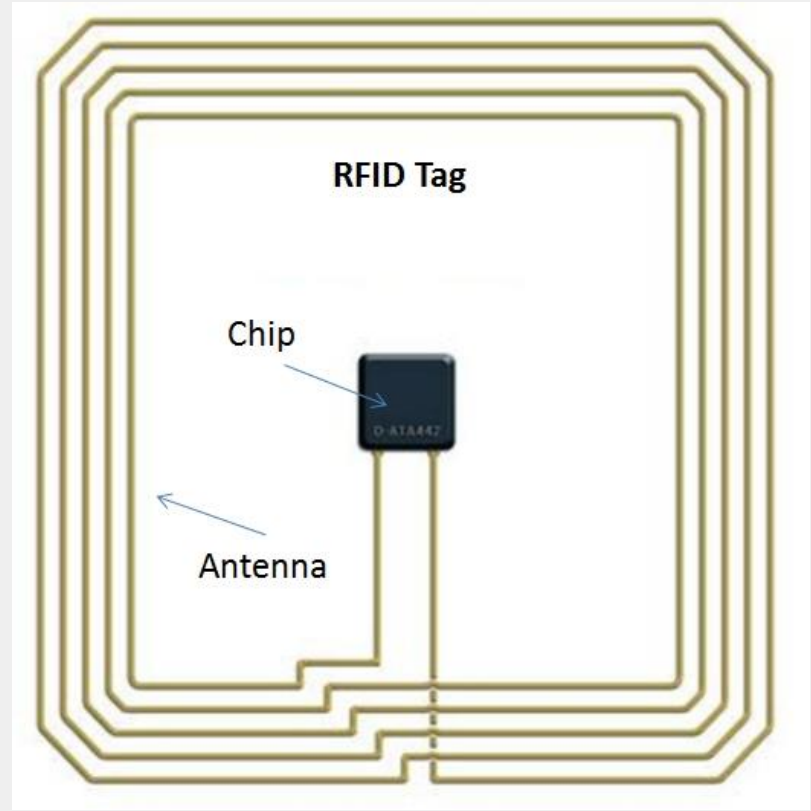
*“The Internet of Things is a system of interrelated computing devices provided with identifiers and the ability to transfer data over a network without human to human or human to computer interaction.”*

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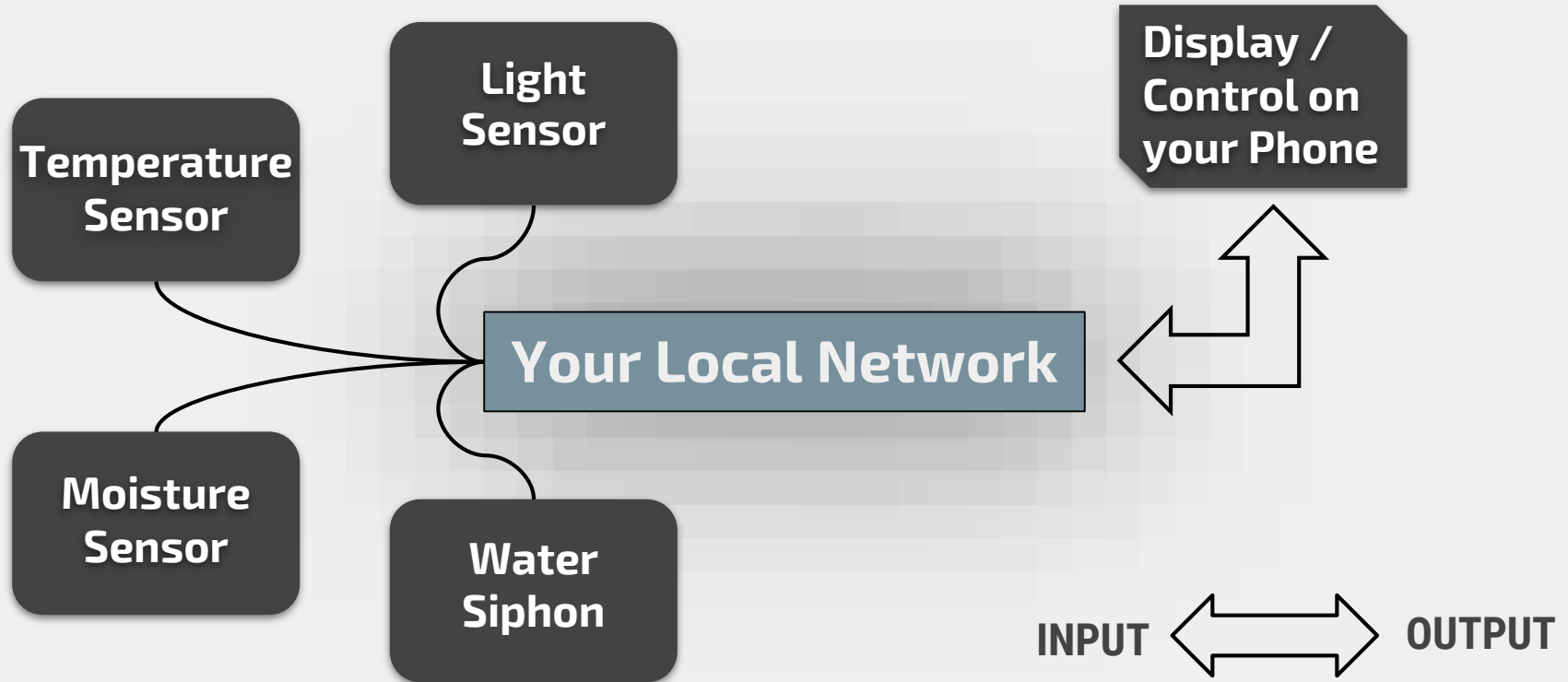
Wikipedia, 2019

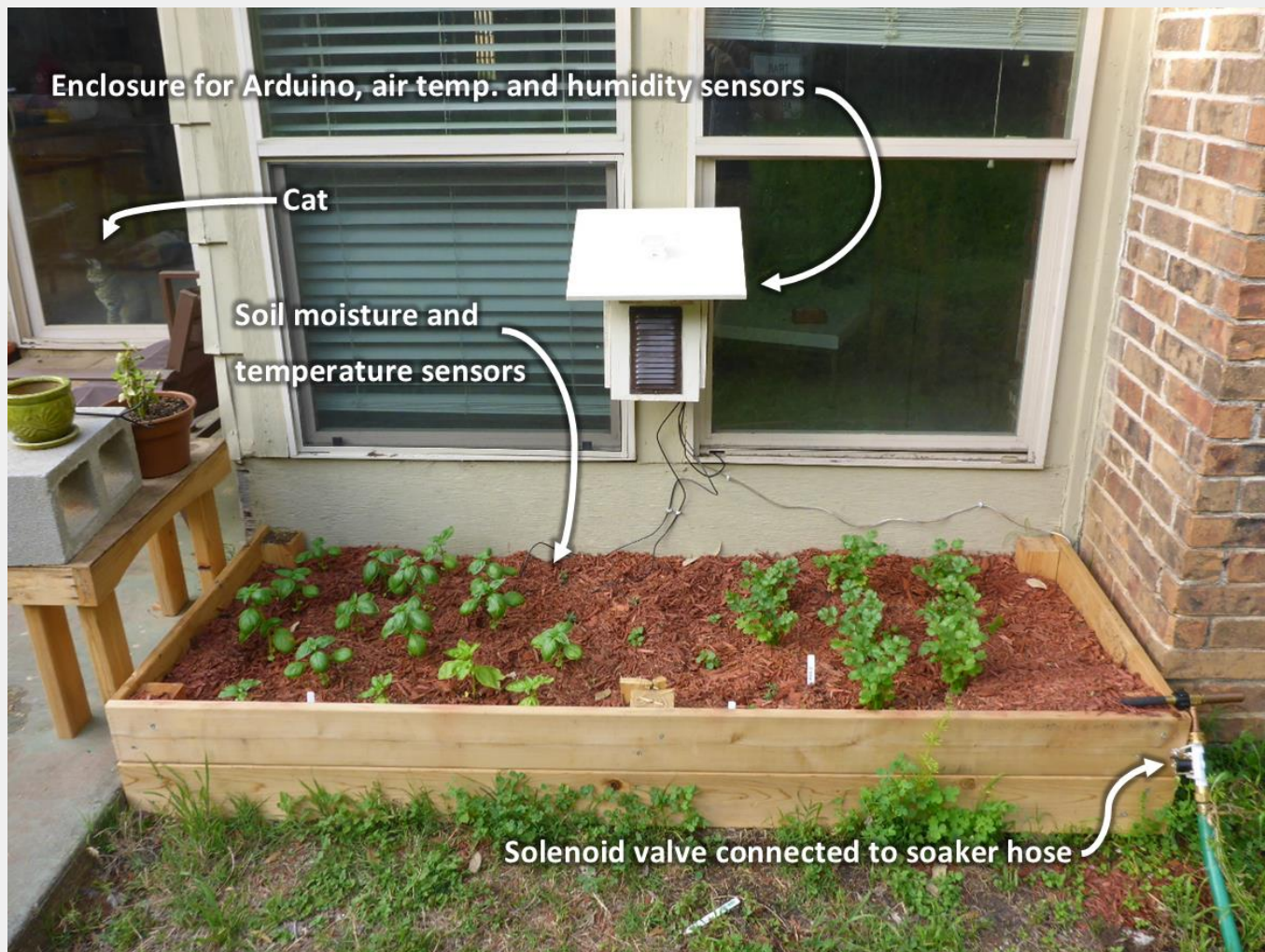
- Kevin Ashton (**1999**) proposed to P&G a new technology called RFID.
- Because of the nature of RFID, Ashton referred to it's operation as The Internet of Things.
- Despite its coinage in **1999**, it did not gain attention until early **2010**.

# Why is RFID an Internet of Things technology?



# SMART GARDEN EXAMPLE





Enclosure for Arduino, air temp. and humidity sensors

Cat

Soil moisture and  
temperature sensors

Solenoid valve connected to soaker hose

Automatic  
Garden Watering  
and Data  
Logging with  
Arduino  
(MakeZine.com)

An aerial night view of a city, likely Dubai, showing a dense network of buildings and roads. The image is characterized by long, vibrant light trails in orange, red, and blue, suggesting traffic movement over time. The city lights are concentrated in the lower half, while the upper half is dominated by the large white text.

# 02

## Why you should care

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Recent events and current use

# Huge companies right now are working with IoT

*“Google was one of the first companies to realize data is most valuable commodity on earth...The next battle in connected devices will be cars and homes, this acquisition is not about following the latest tech fad, but gaining yet more access to customers’ data.”*

- Intel, Microsoft, Google, Cisco, Apple, Oracle, etc...
- Google recently acquired the smart thermostat company Nest for 3.2 Billion dollars.

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What is Nest and why has Google bought it?  
(The Telegraph.uk)



A black and white photograph of a computer circuit board. A large, dark, square integrated circuit (chip) is the central focus, surrounded by various electronic components, solder points, and connectors. The background is blurred, showing more of the board's structure.

# 03

## Future uses

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How this system will affect our future



- Schneider Electric's *EcoStruxure* maximizes productivity and efficiency in the industry and homes.
- By connecting devices energy use is vastly monitored.

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EcoStruxure & Internet of Things  
(Schneider Electric)

*“Industrial companies are improving the speed and accuracy of decision making and corrective actions”*



- By connecting devices, no switch is left on and energy use is vastly monitored.
- Sensor beacons equipped by workers and vehicles in a large warehouse monitor the location, an alert is then sent to an app if a vehicle deviates from a specified route or if a worker enters a dangerous area.

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IIoT And Field Apps: The Future Of The Industrial Connected Worker. (Forbes)

# Conclusion

The next time you use technology,  
make sure you question its  
potential.