What is IoT?

The Internet of Things (IoT) is the network of physical objects or "things" embedded with electronics, software, sensors, and network connectivity, which enables these objects to collect and exchange data.

A "Thing" in the context of the Internet of things (IoT), is an entity or physical object that has a Unique identifier, an embedded system and the ability to transfer data over a network.

- Heart monitoring implants
- Biochip transponders on farm animals
- Automobiles with built-in sensors
- DNA analysis devices & Other Wearbles etc.

These devices collect useful data with the help of various existing technologies and then autonomously flow the data between other devices.

KEVIN ASHTON – "FATHER OF THE IOT"

"So you get stuff like the smart wine bottle, the smart bikini, and the smart water bottle. This stuff is not the Internet of Things – this stuff is all rubbish."

He believed IoT could "turn the world into data" that could be used to make macro decisions on resource utilization.

"Information is a great way to reduce waste and increase efficiency, and that's really what the Internet of Things provides"

ANTHOSH KUMAR is presenting 17 November 2015]

COLLECTION

Devices and Sensors are collecting data everywhere.

- At your home
 - a In your car
- At the office
- In the manufacturing plant

ACTION

Taking action based on the information and data

- Communicate with another machine (m2m)
 - Send a notification (sms, email, text)
 - Talk to another system



RFID Sensor Smart Tech Nano Tech

To identify and track the data of things To collect and process the data to detect the changes in the physical status of things To enhance the power of the network by developing processing capabilities to different part of the network. To make the smaller and smaller things have the ability to connect and interact.

IOT Application Scenario - Shopping



(2) When shopping in the market, the goods will introduce themselves.

As the shapper orders the store, scansons sheetily her clusthing by the tags embedded in her pasts, order and shees. The store tenons where she to longfill everything she is wearing.

(1) When entering the doors, scanners will identify the tags on her clothing.

A mirror hip embedded in her credit eard take to the checkout mores. Pagement authorization

(4) When paying for the goods, the microchip of the credit card will communicate with checkout reader.

As she removes a battle of determined, the reader in the shelf recognizes the read its reader it and meris the shelf.

A reader at the directional constant and treatments any turners

No shoplifting here because the reader catches everything size is carrying.

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(3) When moving the goods, the reader will tell the staff to put a new one.