**SO WHAT IS THE INTERNET OF THINGS?**

Connecting any device with an on and off switch to the Internet (and/or to each other). This includes everything from cell phones, coffee makers, washing machines, headphones, lamps, wearable devices and almost anything else you can think of.  The analyst firm Gartner says that by 2020 there will be over 26 billion connected devices…that’s a lot of connections (some even estimate this number to be much higher, over 100 billion).  The IoT is a giant network of connected “things” (which also includes people).  The relationship will be between people-people, people-things, and things-things.

**INTERNET OF THINGS-DAILY LIFE:**

* You are on your way to a meeting, your car could have access to your calendar and already know the best route to take, if the traffic is heavy your car might send a text to the other party notifying them that you will be late.
* What if your alarm clock wakes up you at 6 am and then notifies your coffee maker to start brewing coffee for you?
* What if your office equipment knew when it was running low on supplies and automatically re-ordered more?
* What if the wearable device you used in the workplace could tell you when and where you were most active and productive and shared that information with other devices that you used while working?
* What if your house could save you effort by recognizing that you’re at a drugstore and automatically sending a list of things you need? Stuck out of town on a [business](http://www.digitaltrends.com/business/) trip? Tell your house to stay in vacation mode, turning lights on and off to make the place look lived-in, but not running up heating and cooling bills.
* Sensors in a bed (or an alarm clock) could notify other devices when you wake; in turn, they could open drapes, start the coffeemaker, and discretely turn on the TV in the breakfast nook for news, weather, and traffic.
* When the clothes dryer finishes, maybe an alert appears on your TV so you can grab items before they wrinkle.
* If it’s dark outside, a sensor in your front door lock could turn on the inside lights before you step inside — after all, [cars](http://www.digitaltrends.com/cars/) have been doing things like that for decades.
* While en-route to the ferry, your car will tell you the ferry is running late, so there's no need to rush. This type of information would be served up all day: your [coffee machine](http://www.amazon.com/TASSIMO-TAS5541-Coffee-machine-titanium/dp/B008V9TZ3A) at work could brew a cup before you arrive, for instance, or your laundry at home could start to wash and then dry around lunchtime.

**KEVIN ASHTON ON IoT:**

Kevin Ashton supposedly coined the phrase "Internet of Things" while working for Procter & Gamble in 1999. He later co-founded the Auto-ID Center at the Massachusetts Institute of Technology. Ashton talked in depth about IoT to the[RFIDJournal.com](http://www.rfidjournal.com/articles/view?4986) in 2009.

"Today computers - and, therefore, the internet - are almost wholly dependent on human beings for information. Nearly all of the roughly 50 petabytes of data available on the internet were first captured and created by human beings - by typing, pressing a record button, taking a digital picture or scanning a bar code," Ashton explained

"Conventional diagrams of the internet include servers and routers and so on, but they leave out the most numerous and important routers of all: people. The problem is, people have limited time, attention and accuracy - all of which means they are not very good at capturing data about things in the real world."

Ashton added that IoT had grown a lot since 2009, but he claimed it has still has much further to go. He's looking beyond your car notifying you of a bogged-down toll road. In fact, he said IoT had the potential to change the world, just like the internet did (or "even more so").

**BIG PLAYERS IN IoT:**

At this year’s **CONSUMER ELECTRONICS SHOW** (CES) in Las Vegas, devices representing the Internet of Things were in full force. From smart air conditioners to wearables, seemingly every company worth its silicon was tripping over its competitors trying to sell us on products that would fundamentally change the way we live, work and play.

“**IBM** has announced it is investing $3bn over the next four years in the development of a new Internet of Things (IoT) unit.

Earlier this year, **GOOGLE** announced that it had acquired Nest, the home device company started by former iPod creator Tony Fadell, for a whopping $3.2 billion. Responsible for the best-selling Nest Learning Thermostat, the acquisition shows how seriously Google is taking the idea of interconnect devices

**APPLE** is involved in the IOT, too, following the announcement of Homekit at WWDC 2014. Homekit is Apple's Internet of Things platform, and it will co-ordinate various third-party home automation accessories – stuff like door locks, dimmer switches, cat flaps and even your dish washer – via an iPhone or iPad. Furthermore, Apple iPhone syncs with your iPod Touch, your iMac syncs with your iPad, and all of it asks you to sink more and more money into iTunes and the App Store -- over the coming years a growing amount of our technology will interact not just with ourselves, but also with each other. This will result in a newly intuitive user experience, offering plenty of feedback to “nudge” you in the right direction regarding everything from healthy eating to the best way to swing your golf club.

**5G IT IS THEN…**

4G has a relatively narrow spectrum, which means it can handle about 2-3 4G devices for every person in the UK. But once every “thing” becomes a device there is no way 4G will be able to handle the load. But 5G can. 5G will not only be able to handle the increased device load, but it will be more stable, faster, and cheaper than 4G.

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