

IoT – Internet of Things. A Brief Introduction and Insight.

To start with, let me share with you a very interesting fact – A study states that in the year 2008, the no. of devices connected to the Internet was greater than the no. of people living on Earth!

Internet of Things – Although the concept is not new and has been a hot topic of discussions between top tech pundits for decades, going back to late 1980s, it has started to grow in the mind of Tech giants and is spreading like a wildfire. Remember the time when in the name of web connectivity, all we had was a computer with a CRT Monitor connected to a dial up connection where 256kbps of bandwidth speed was considered to be lighting fast. We have come miles ahead of that time with way better internet connectivity and many devices with Wi-Fi and Bluetooth connectivity. Smartphones and hand held devices contributing a major portion, into both data creation and easy internet access to the web where easy means literally speaking to an assistant residing inside your smartphone.

But what exactly is **IoT (Internet of Things)** in the most generic sense? The literal core meaning is very simple and you just read that, Internet of things, that is it. It is nothing fancy but a bunch of devices connected to the internet that can interact with each other, us and various applications. IoT is the future of internet with vast global network infrastructure where physical and virtual things have identities and are connected to each other through the internet. With vast improvement in **wireless technology (RFID, load sensors, NFC, WSN, Barcode)** and technology as a whole, IoT is gaining a lot of attention and momentum as well.

The idea of seamlessly integrating sensors in a whole lot of day to day objects and turning them into smart devices that can collect, transmit and upload data, becoming a reality seems to be just around the corner. For example: Smart lighting systems is already a reality with companies like Philips already coming up with a product – Philips Hue, Where you can remotely adjust the lighting of your home with these bulbs, through your smartphone, The brightness, color, hue, duration, on off, etc. Another notable mention would be smart watches, they may only be interacting with the smartphone for now, but standalone smart watches that can collect vital data are already in production. Smart watches such as the Apple Watch, Samsung Gear, Huawei Watch all can not only show phone notifications, but also have a heart rate sensor that can collect human vitals data.

To conclude,

There are many other innovative applications like smart wearable, shoes, refrigerators, etc. which will contribute to the whole ecosystem that is IoT, where some of these devices are already a reality and some are upcoming. I will talk about them in my next articles. How IoT environment will look like in the coming years, would be very interesting scenario to look forward to.