

## Technology Byte 2015 – “Internet of Thing”

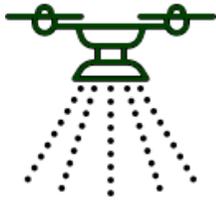
So as the year 2015 has past, we take a quick look to what it has given us in terms of new technologies.

Though there are lots of areas in which we can see significant developments in 2015 but there is one area on which everyone is focusing upon right now and which has a tendency to shape our future.

This area is “Internet of Things”, though the research and development is going on in this area back from 1999, but some companies have achieved significant breakthrough in 2015 in this field.

Internet of thing is not limited to a single environment, but it can be put in use to each and every environment known to man. Below is the list of environments which can reap the benefits of IOT.

|  |   |
|--|---|
|  <p><b>Manufacturing</b><br/>Use of smart sensors in manufacturing process.</p>  |  <p><b>Oil and gas</b><br/>Smart internet connection based sensors will provide under earth conditions at extraction site.</p>                |
|  <p><b>Transportation</b><br/>Car to car communication will be the next big thing to solve the issues of traffic and accidents.</p> |  <p><b>Insurance</b><br/>Insurance companies can design the insurance policies based on real data rather than on historical information.</p> |



**Defense**

Use more and more number of military robots and drones can save precious human life in battle front.



**Homes**

Smart homes that can adapt to individual needs.



**Agriculture**

Sensors that detect and track soil temperature, acidity and fertility conditions in order to help achieving higher crop yields.



**Food Services**

Smart interactive labels that show quality of packaged food product.



**Utilities**

Energy companies around the globe are trying to use smart meters and installing smart grids to meet the growing energy demands.



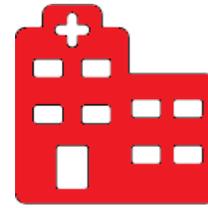
**Retail**

Beacons used by products help customers to locate products in a retail stores. Retail stores can now push advertisements on the customer's phone as soon as he enters.



### **Hospitality**

Advanced door locks, automatic lighting and temperature control based on sensor data from IoT devices, etc provide more comfort in hotel rooms.



### **Health Care**

Various interconnected devices can collect data related to patient's condition.



### **Logistics**

Parcels and shipments containing smart tracking sensors can prevent loss of good during shipment.



### **Banks**

Real time monitoring of ATM to prevent theft and damages. ATM's can now be controlled remotely and can be shutdown in event of security alarm.

## **Driving Factors**

By 2020 the IoT Ecosystem will increase enormously due to various factors:

- Low cost sensor chips
- Higher internet connectivity
- Enormous investment by large companies.

## **Potential Barriers**

Like every other technology IOT too has controversies associated with it such as:

- Security
- Privacy
- Design
- Impact on Environment