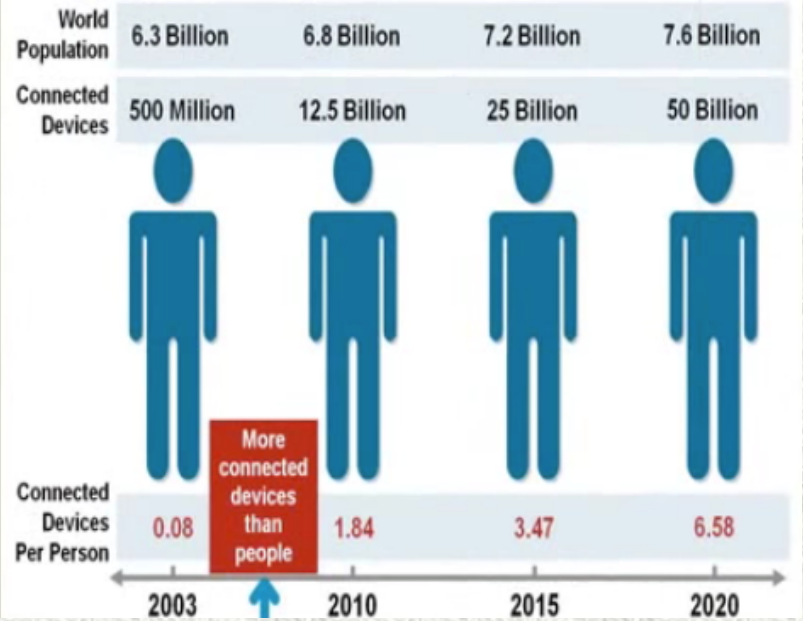
Internet of Things (IOT)

Introduction

- **Internet of Things(IoT) is the network of physical objects or "things" embedded with electronics, software, sensors and connectivity to enable it to achieve greater value and service by exchanging data with the manufacture, operator and other connected devices.**
  - **The Internet of Things(IoT), sometimes referred to as the Internet of Objects, will change everything—including ourselves. Consider the impact the internet already has had on education, communication, business, science and government. Clearly, the Internet is one of the most important and powerful creations in all of human history.**

IoT Today



- IoT is simply the point in time when more "things or objects" were connected to the internet than people
- During 2008, the number of things connected to the internet exceeded the number of people on earth.
- These things are not just smartphones and tablets They are everything.

IoT – The Tipping point

- **Mobile, Cloud, Big data and Social are converging to enable countless application of IoT in the future – and of all the disruptors in play today, IoT could very well be the biggest**
- Smart products
- Smart optimization
- Smart automation
- Smart decision

Big Data and the IoT

- There are roughly three distinct stages for the IoT
  - **First, data is collected using sensors.**
  - **At the next step , this data is analysed whit the help of complex alogrithm that were embedded into the IoT device or cloud based data processing.**
  - **This is followed by the decision-making and transmission of data to the decision making server.**

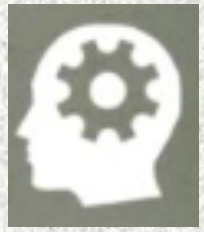
The Internet of Everything(IoE)

- People
  - Connecting people in more relevant, valuable ways
- Data
  - Leveraging data into more useful information for decision making.
- Process
  - Delivering the right information to the right person at the right time.
- Things
  - Physical devices and objects connected to the internet and each other of intelligent decision making.

Challenges in IoT

- **Sensing a complex environment**
  - To sense and deliver information from the physical world to the cloud.
- **Connectivity**
  - Variety of wired and wireless connectivity standards are required to enable different application needs.
- **Power**
  - Many IoT application need to run for years over batteries and reduce the overall energy consumption.
- **Security**
  - Protecting user privacy and manufacture IP detecting and blocking malicious activity.

- **IoT is complex**
  - IoT application development needs to be easy for all developers , not just to experts
- **Cloud is important**
  - IoT application require end – to – end solutions including cloud services.



Conclusion

- Just as the internet has transformed business and lifestyle in the last twenty years, IoT will disrupt one's organization's relationship with its stakeholders.
- While it is complex, and poses some risks and is still evolving many pioneers have started adopting this technology.

Thank you..!

By
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