

Internet of Things (IoT)

### **Plan of Presentation**

- What is Internet of Things?
- ➤ How IoT Works?
- Current Status & Future Prospect of IoT
- Knowledge Management From Data to Wisdom
- ➤ The Future of IoT
- ➤ The Potential of IoT
- Few Applications of IoT
- Technological Challenges of IoT
- Criticisms & Controversies of IoT
- References

# **History of IoT**

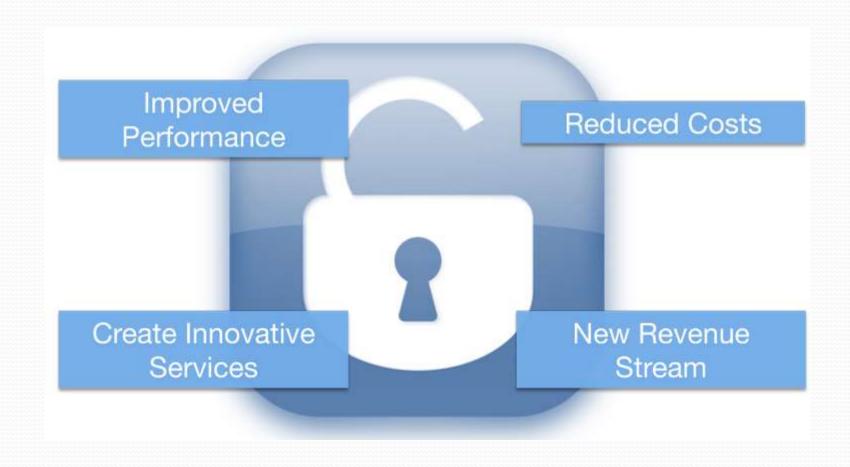
The concept of the Internet of Things first became popular in 1999, through the Auto-ID Center at MIT and related market-analysis publications. R

Radio-frequency identification (RFID) was seen as a prerequisite for the IoT at that point. If all objects and people in daily life were equipped with identifiers, computers could manage and inventory them. Besides using RFID, the tagging of things may be achieved through such technologies as near field communication, barcodes, QR codes, bluetooth, and digital watermarking.

### The Potential of IoT

GE's estimates on potential of just ONE percent savings applied using IoT across global industry sectors.

## Unlock the Massive potential of IoT



Of course, we know nothing remains static, especially when it comes to the Internet. Initiatives and advances, such as Cisco's Planetary Skin, GE's Industrial Internet, HP's central nervous system for the earth (CeNSE), and smart dust, have the potential to add millions—even billions—of sensors to the Internet.

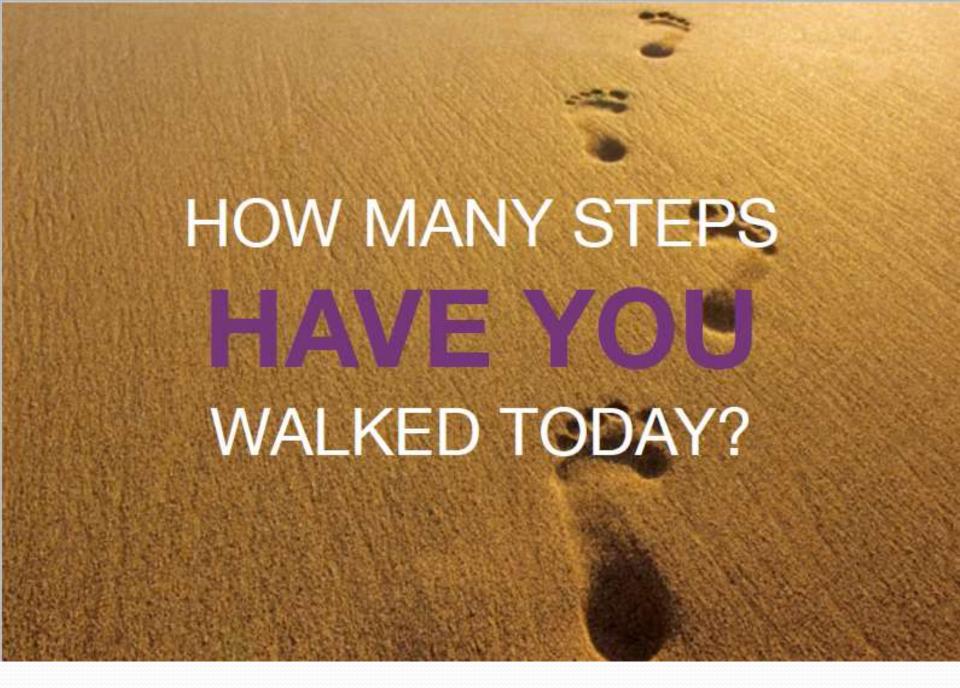
As cows, water pipes, people, and even shoes, trees, and animals become connected to IoT, the world has the potential to become a better place.

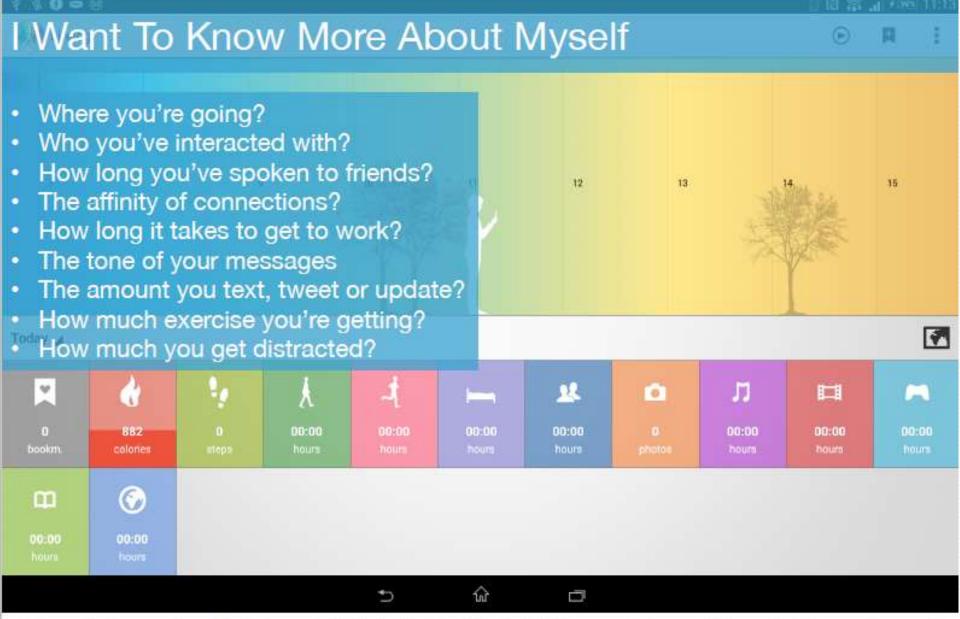
"With a trillion sensors embedded in the environment—all connected by computing systems, software, and services—it will be possible to hear the heartbeat of the Earth, impacting human interaction with the globe as profoundly as the Internet has revolutionized communication." - Peter Hartwell, Senior Researcher, HP Labs.

"How much more IoT can do is only left to your imagination"

On the other hand, IoT systems could also be responsible for performing actions, not just sensing things. Intelligent shopping systems, for example, could monitor specific users' purchasing habits in a store by tracking their specific mobile phones. These users could then be provided with special offers on their favourite products, or even location of items that they need, which their fridge has automatically conveyed to the phone.

Additional examples of sensing and actuating are reflected in applications that deal with heat, electricity and energy management, as well as cruise-assisting transportation systems. Other applications that the Internet of Things can provide is enabling extended home security features and home automation.





Can Internet of Things (IOT) Help Us To Know More About Ourselves?

#### IoT helps you in LIFE LOGGING

#### References

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- 3. Cisco whitepaper, "The Internet of Things" How the Next Evolution of the Internet Is Changing Everything, by Dave Evans, April 2011.
- 4. GE cloud expo 2014, "Industrial Internet as a Service", by Shyam Varan Nath, Principal Architect.
- 5. Dr. Mazlan Abbas, MIMOS Berhad, Wisma IEM, Petaling Jaya

## **THANK YOU**

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