KYUSHU
UNIVERSITY

IIT- DELHI

Security in the Internet of Things Space (SIOTS)

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Co-funded by

IoT

Internet of things (IoT) is the network of physical objects—devices, vehicles, buildings and other items—embedded with electronics, software, sensors, and network connectivity that enables these objects to collect and exchange data.

IoT Security

IoT SECURITY

IoT Applications

Health Care

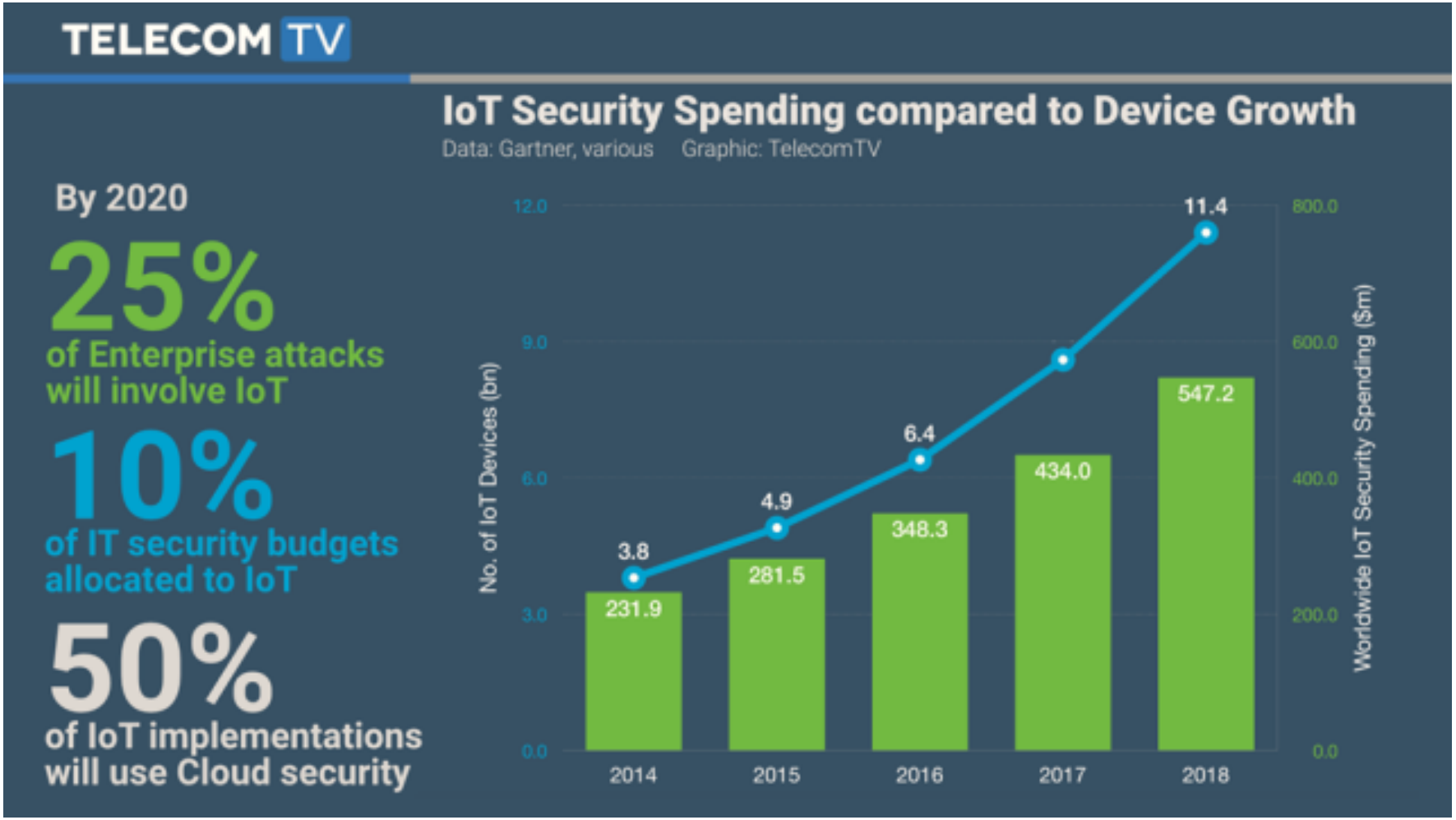
Smart Cities

Data Driven Agriculture

Autonomous Vehicles

IoT

IoT Applications



Recent attacks on IoT

MIRAI BOTNET

Connected Cardiac devices with sweet spot for IoT hacking

Objectives of the project

- To set up a **Joint Research Laboratory (JLR)** at IIT Delhi (JRL-IITD) and at Kyushu University (JRL-KU)

With focus on **Security in the IoT Space**

- The two main **verticals**
  - **Research** in Security in the IoT Space (SIOTS)
  - **Outreach** related to IoT

- **Research agenda (JLR-IITD)** will focus on *Preventing, Detecting, Defending and Recovering* from possible attacks on IoT devices
- **Outreach agenda (JLR-KU)** will cover regular 'Short-term courses' for industry, government organizations and academia, MOOCs, training through Cyber range

- At the end of **ten years, the JLRs would expand to form Joint Research Hubs (JRH)**

Specific Tasks

- Research on Security of IoT, particularly in the context of IoT enabled Smart Buildings

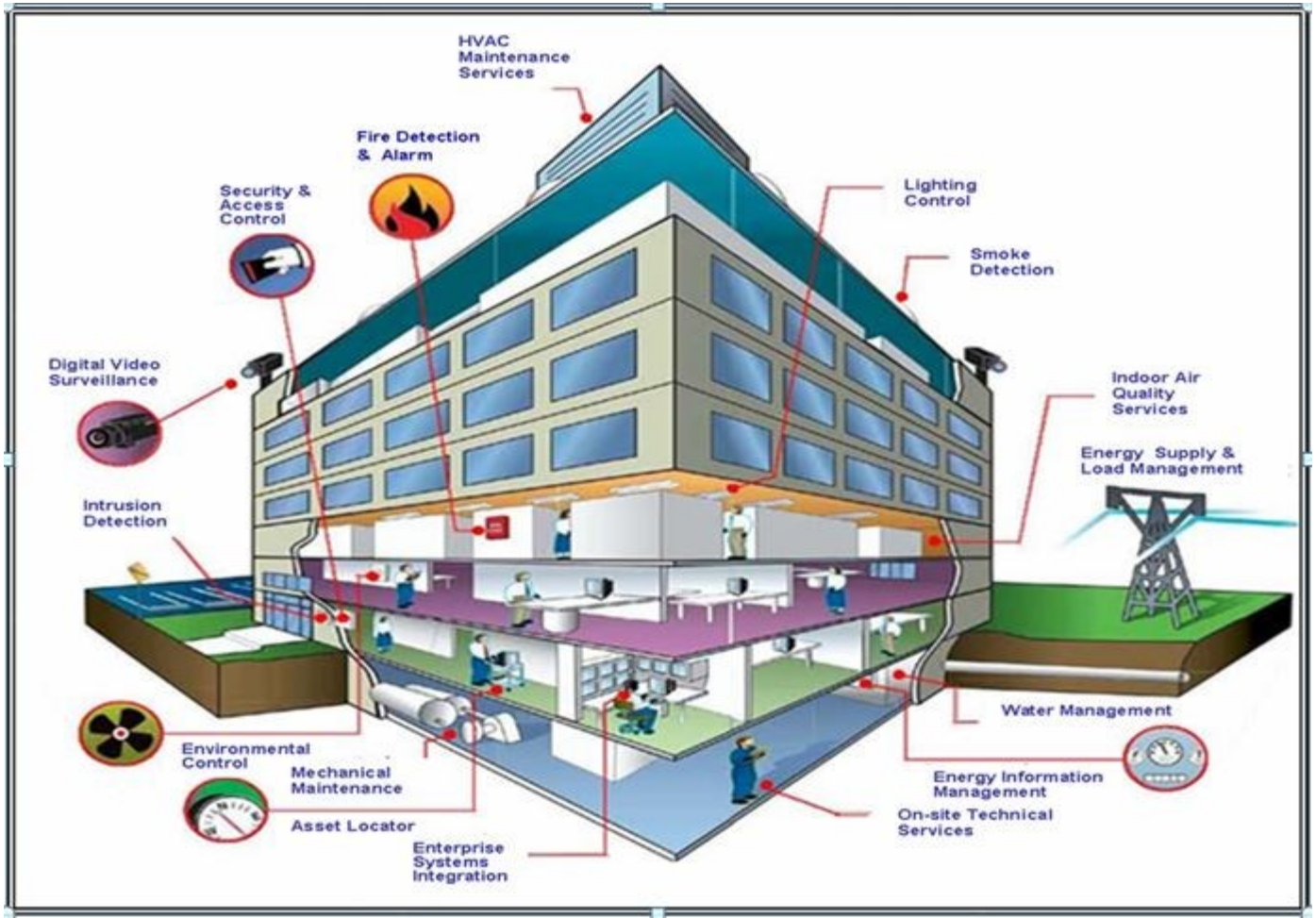
- To **create a generic test-bed** for IoT security

- **Workshops** and **Training Programs** for Government Agencies, Industries and teaching professionals.

- Short Term courses for Schools for Cyber Hygiene Certification and hands-on Training based on **Cyber Range** with IoT devices.

Use Case: Security of Smart Buildings

IoT Enabled Smart Buildings have a large Attack Surface



Work Packages