

#### SNS COLLEGE OF ENGINEERING



(Autonomous)
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

19EC621 - IoT and Wireless Sensor Networks

Unit -1 Overview of Internet of Things

# loT Architectural View and Technology Behind loT





#### Data Flow Control Flow

#### 4- STAGE LOT ARCHITECTURE



#### APPLICATION LAYER

Smart Application and Management

Smart Application

#### DATA PROCESSING LAYER

Processing unit Data Analytics / Dicision Process Information

#### **NETWORK LAYER**

Internet Gateways / Network Gateways
Network Technologies
(Data Acquisition System)

Data Transmission

#### SENSING LAYER

Physical objects Sensors and actuators Data Gathering

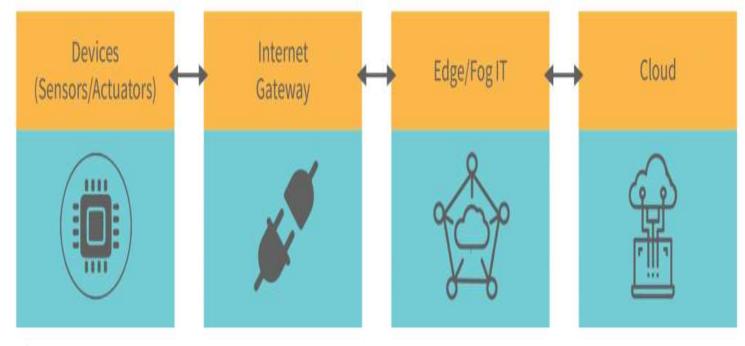








### **Stages of IoT Solutions Architecture**











#### **Example of an IoT system** Analyze data, Collate and Collect data take action transfer data ..... loT device (e.g., antenna) IoT gateway . . . . . . . ......





#### IoT Technology & Protocols



- Several Communication Protocols and Technology used in the internet of Things. Some of the major IoT technology and protocol (IoT Communication Protocols) are Bluetooth, Wifi, Radio Protocols, LTE-A, and WiFi-Direct.
- These IoT communication protocols cater to and meet the specific functional requirement of an IoT system.
- There are 6 IoT Communication Protocols/ Technology, let us look each one of them.

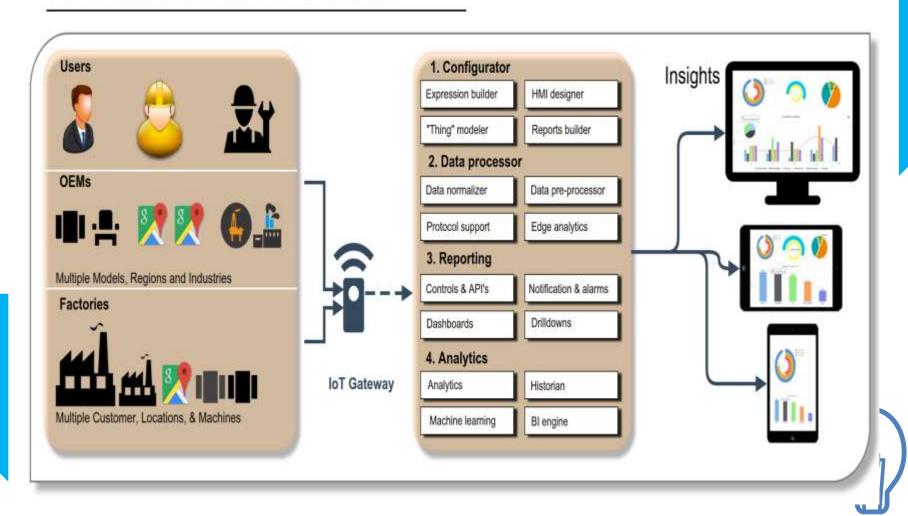








#### Tools and Skills for IoT Solutions







## Thank you

