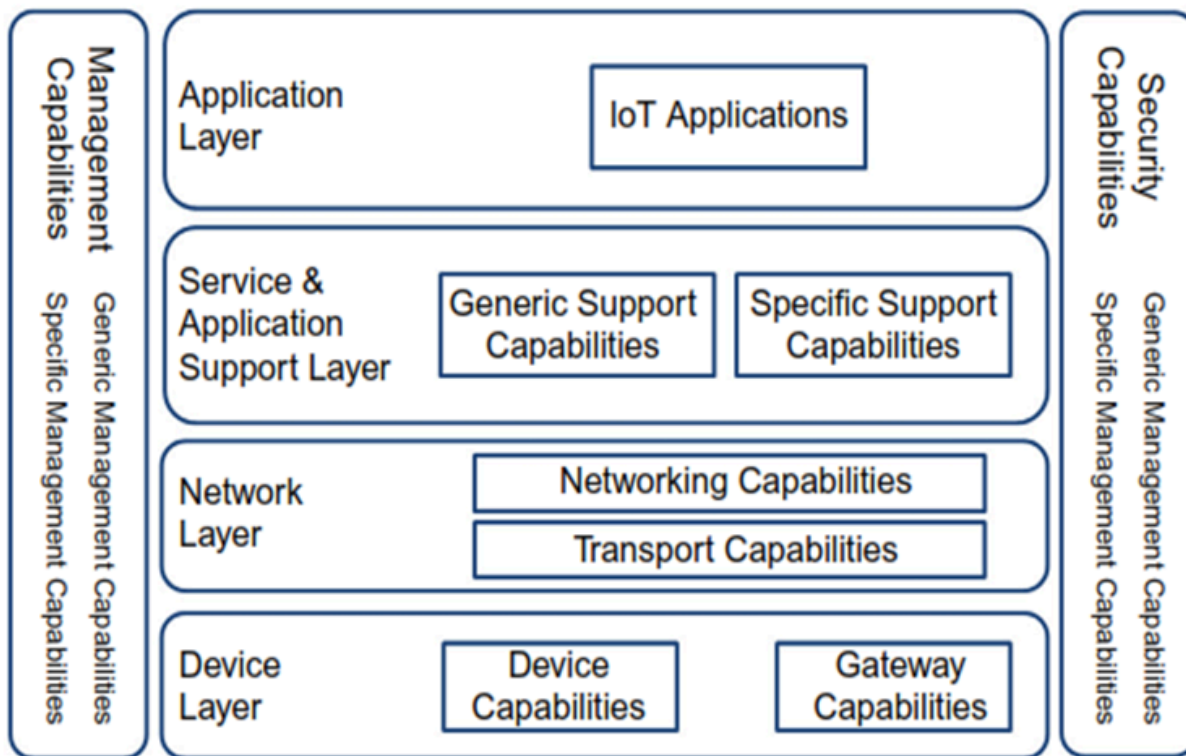# IOT REFERENCE MODEL

This **IoT Reference Model** organizes the system into four layers along with essential management and security capabilities. Here's how it works:

- **Device Layer (Bottom):** This layer consists of IoT devices (sensors, actuators) and gateways that gather and transmit data.

- **Network Layer:** Responsible for communication; it includes networking and transport capabilities to send data between devices and systems.

- **Service & Application Support Layer:** Acts as the brain, with generic support capabilities (common services like data storage) and specific support capabilities (tailored to particular use cases).

- **Application Layer (Top):** Where the IoT applications operate, providing specific services or insights to users (e.g., smart home controls, health monitoring).

Management and Security Capabilities run alongside all layers:

- **Management Capabilities:** Handle device configuration, updates, and overall system monitoring.

- **Security Capabilities:** Ensure data protection, secure communication, and system integrity.