



SNS College of Engineering

An Autonomous Institution

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Redesigning Common Mind & Business Towards Excellence



Build an Entrepreneurial Mindset Through Our Design Thinking FrameWork

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Internet Of Things



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Design Principles for Connected Devices

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- There must be a specified protocol (rule) followed at each level (layer) of **data** transfer between connected devices.
- For IoT/ M2M, there should be some principles for **data** transfer
- IoT or M2M device data refers to the data meant for communication to an application, service or process.
- Data also refers to data received by a device for its monitoring or for actions at actuator in it.



IoT/M2M SYSTEMS, LAYERS



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Layer

- A stage during a set of actions

Physical layer

- Refers to a layer at transmitting node / receiving node for data bits. It's the lowest layer and uses physical systems for transmission like WiFi, LAN etc...

Application layer

- Layer for transmitting/receiving data of an application

Domain

- A set of softwares having specific applications/capabilities.

Gateway

- Software for connecting two application layers - one at sender and other at receiver

IP - Internet Protocol

- IPv6 or IPv4

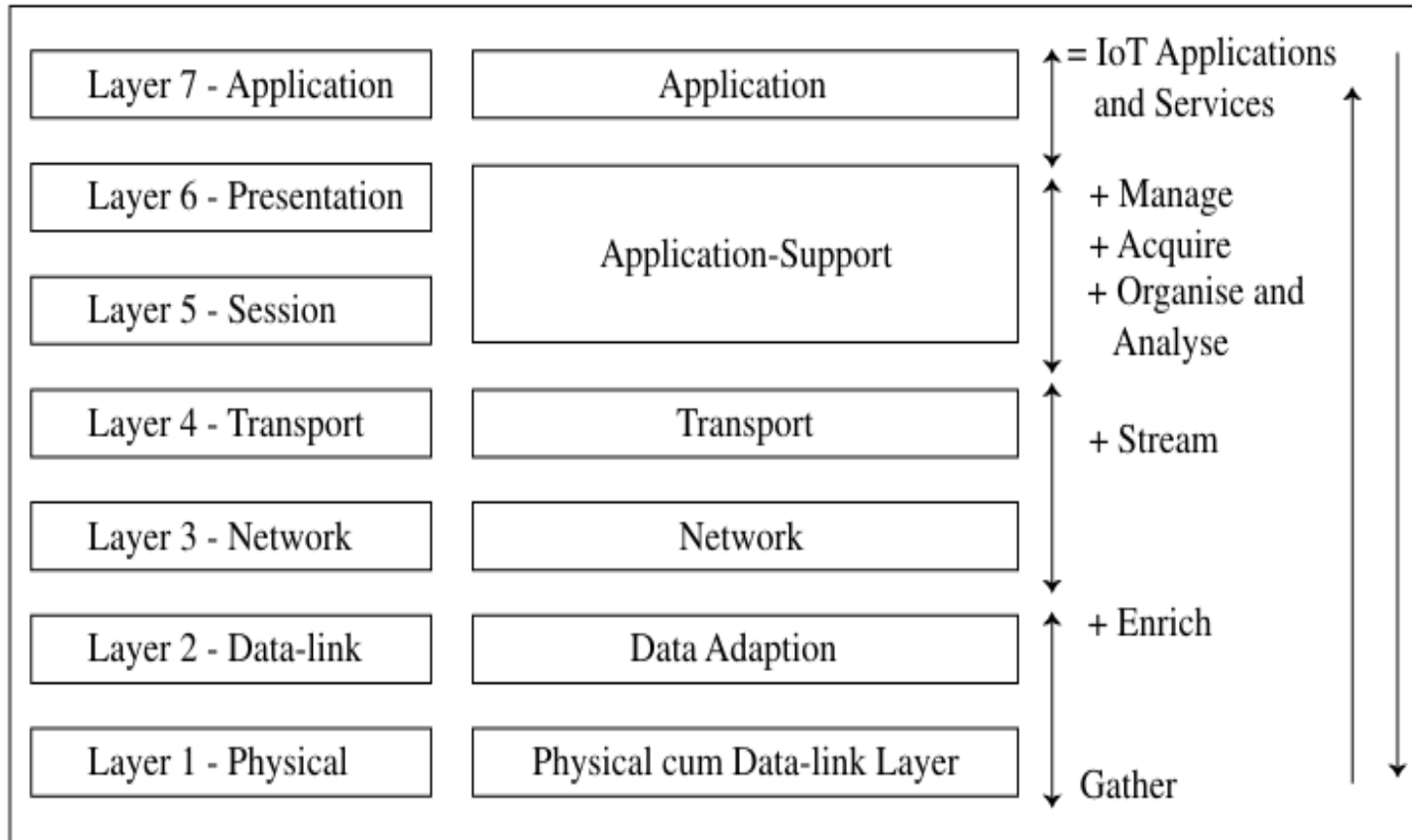


Modified OSI Model for the IoT/M2M Systems



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Gather + Enrich + Stream + (Manage + Acquire + Organise +Analyse) = IoT Applications and Services





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sign Thinking FrameWork

Thank
You