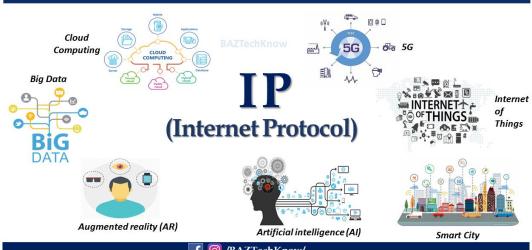
### Every Emerging Technology needs IP Network

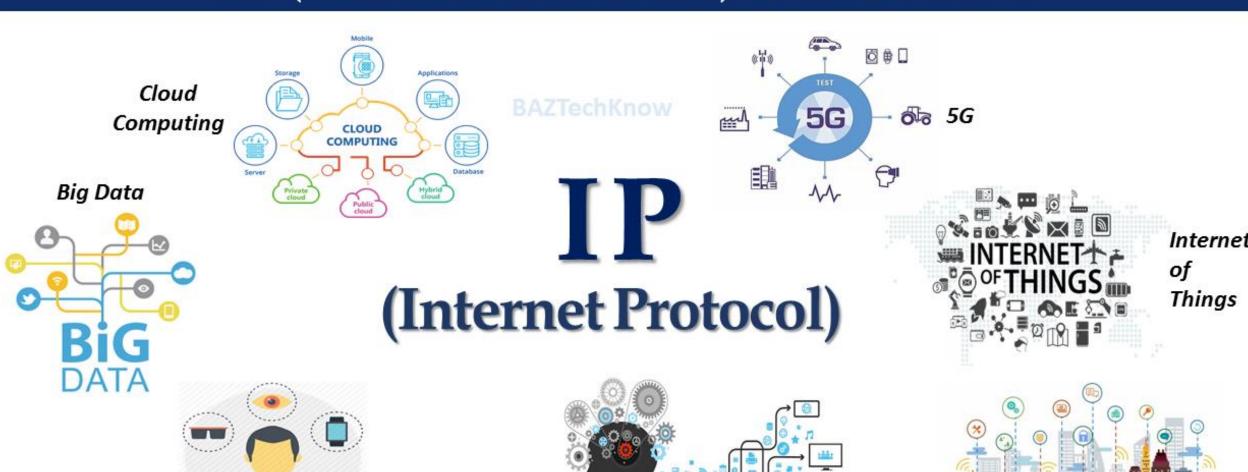
### Engr. Bashir Ahmed Zeeshan

https://www.linkedin.com/in/bashirahmedzeeshan/

Every Emerging Technology needs IP (Internet Protocol) to Evolve!!



# Every Emerging Technology needs IP (Internet Protocol) to Evolve!!



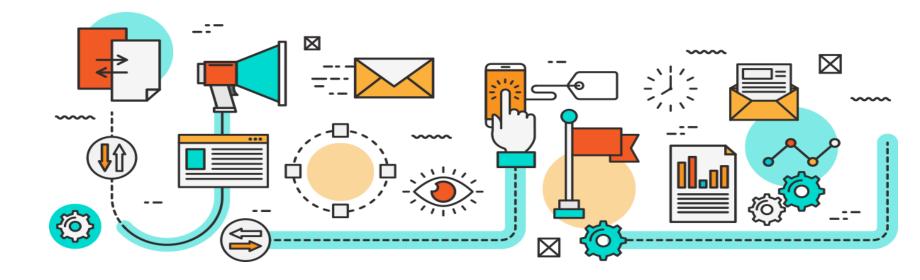
Augmented reality (AR)

Artificial intelligence (AI)

Smart City

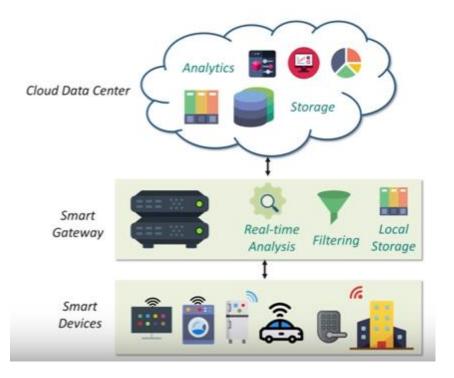
### Agenda

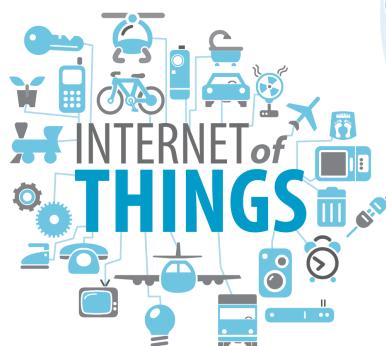
- Emerging Technologies
- IoT
- 5G
- Cloud
- Big Data
- AI
- Q/A



# IoT - Internet of Things

IoT is the network of physical objects—devices embedded with electronics, software, sensors, and network connectivity—that enables these objects to collect and exchange data.`





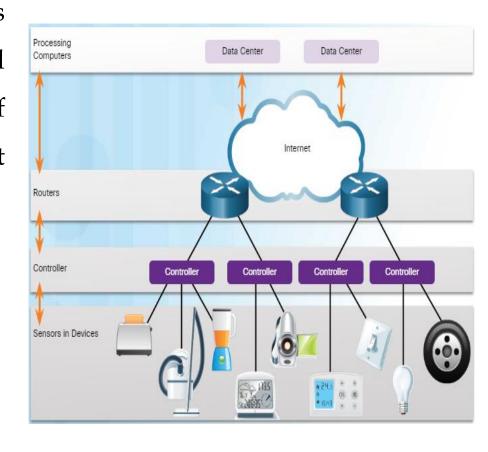


### IoT

- Network layer is an essential part of IoT eco Cycle.
- Common types of communication are wireless communication are Wi-Fi, Cellular, Bluetooth, NFC and some devices (smartphones & tablets) use a combination of wireless communication methods to connect to different devices.

#### **How IP Network helping IoT**

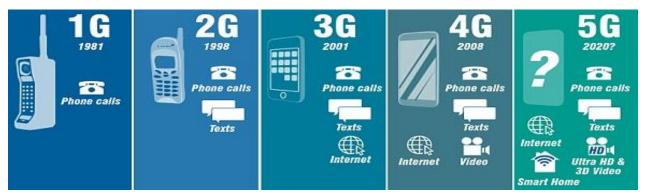
- Reachability to Sensors
- IP networks handles all communication for Controller
- Transportation of data

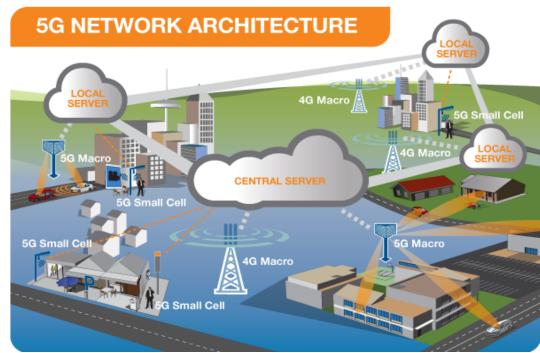


### **5G Network**

5G is the next generation of mobile internet connectivity, offering faster speeds and more reliable connections

- 1-10Gbps connections to end points in the field
- 1 millisecond end-to-end round trip delay (latency)
- 1000x bandwidth per unit area
- 10-100x number of connected devices
- (Perception of) 99.999 per cent availability
- (Perception of) 100 per cent coverage
- 90 per cent reduction in network energy usage
- Up to 10 year battery life for low power, machine-type devices



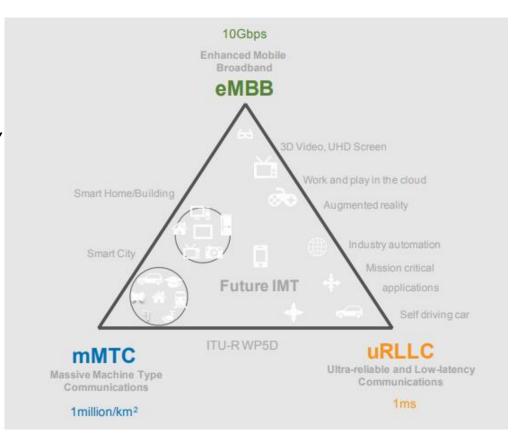




### 5G - 5G NR

#### How IP Network helping 5G

- Complex networks incorporating multiple services, standards, & site types
- 2. Coordination of multi-connectivity technologies
- 3. On-demand deployment of service anchors
- 4. Flexible orchestration of network functions
- 5. Shorter period of service deployment





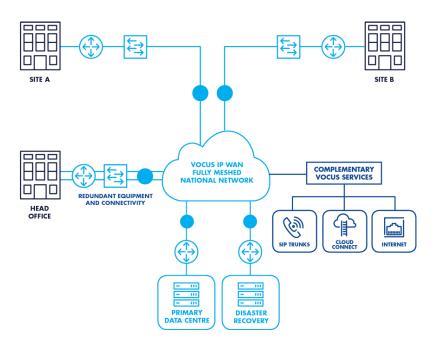
# **Cloud Computing**

- Cloud computing is on demand availability of computer system resources, especially data storage and computing power, without direct active management by the user.
- The term is used to describe data centers available to many users over the Internet.

#### **How IP Network helping Cloud Computing**

- Reachability of Private, Public & Hybrid Clouds
- Bandwidth & Global Connectivity
- Communication Between Micro services
- IP networks to handle the cloud's massive data load
- A Scalable Topology





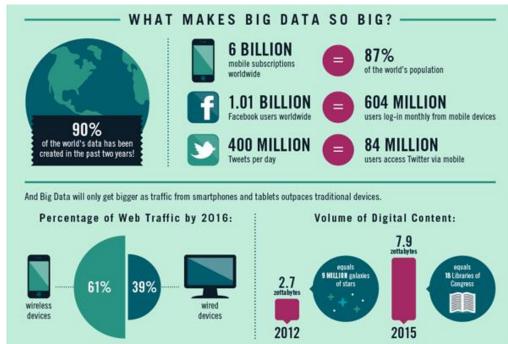
# Big Data

A field that treats ways to analyze, systematically extract information from, or otherwise deal with data sets that are too large or complex to be dealt with by traditional data-processing application software.

#### How IP Network helping Big Data

- truckloads of data for analysis
- 3V (Volume, Velocity & Variety)
- predictive analytics, user behavior analytics, or certain other advanced data analytics



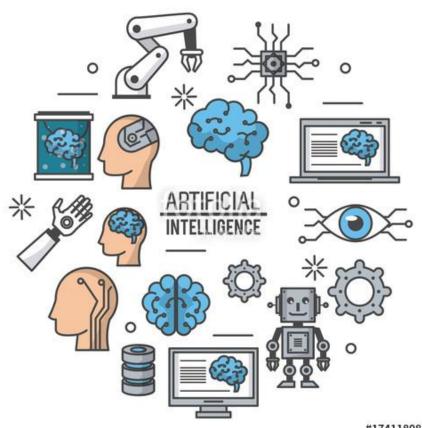


# Artificial Intelligence

AI technology, brings the ability to automatically identify patterns and detect anomalies in the data that smart sensors and devices generate—information such as temperature, pressure, humidity, air quality, vibration, and sound

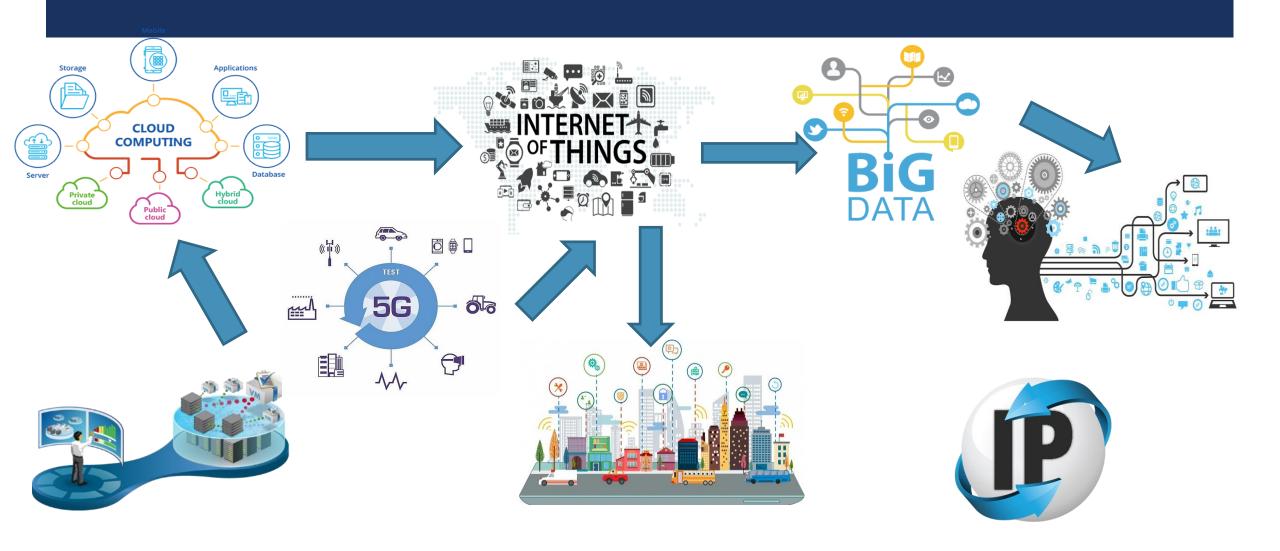
#### How IP Network helping Artificial intelligence

- Reachability of AI systems
- Bandwidth Connectivity
- AI-focused IoT start-ups are on the rise.



#174118081

### Co-relation



# Q/A Session & Discussion



If you want to get in touch with me,
Scan here



