

Network Big Data Analysis for Intelligent and Reliable Future Internet

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Challenges on Future Internet

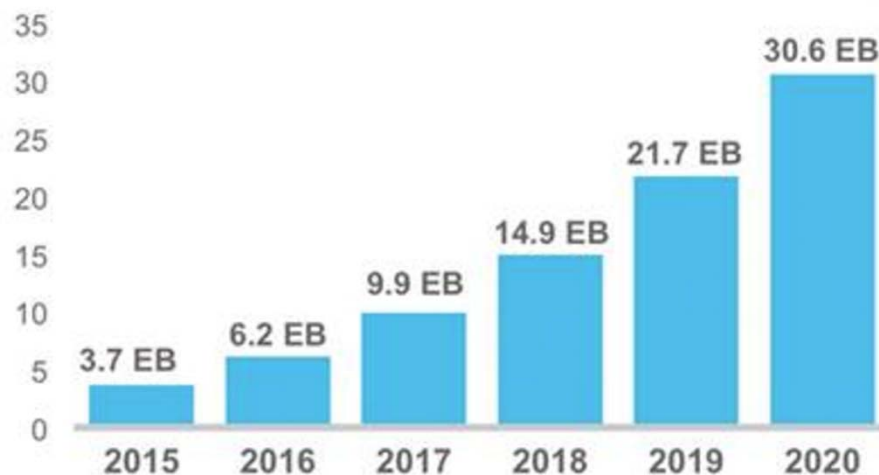
❑ Explosive growth of data traffic

- Cisco VNI 2015-2020 white paper: The total mobile data traffic is expected to rise at a compound annual growth rate (CAGR) of around **53 percent**.
- **Eight-fold increase** of the mobile traffic from 2015 to 2020.

❑ Massive increase in the number of interconnected devices

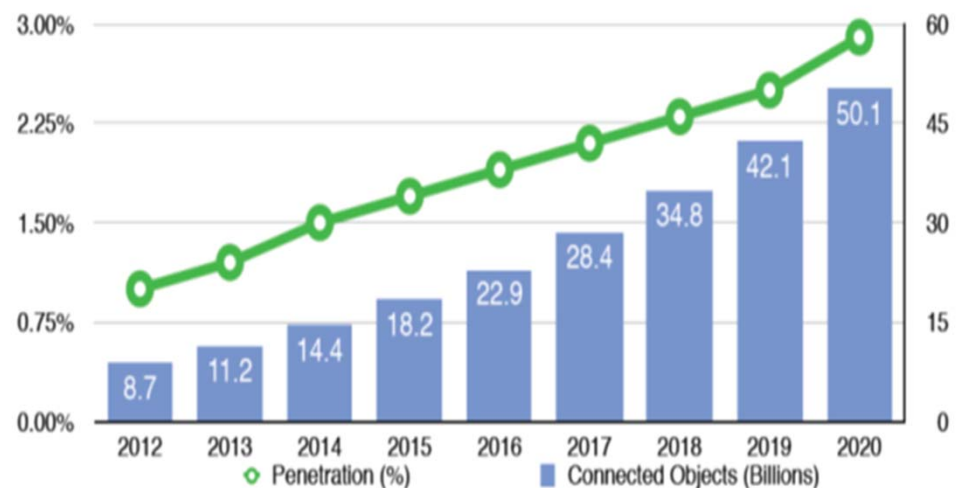
- **Internet-of-Everything**: Everything will be connected through mobile networks.
- Cisco Internet of Things White Paper: The number of connected objects around the world will reach **50 billions** by 2020.

Cisco's Projection For Mobile Data Traffic



Source: Cisco VNI Mobile, 2016

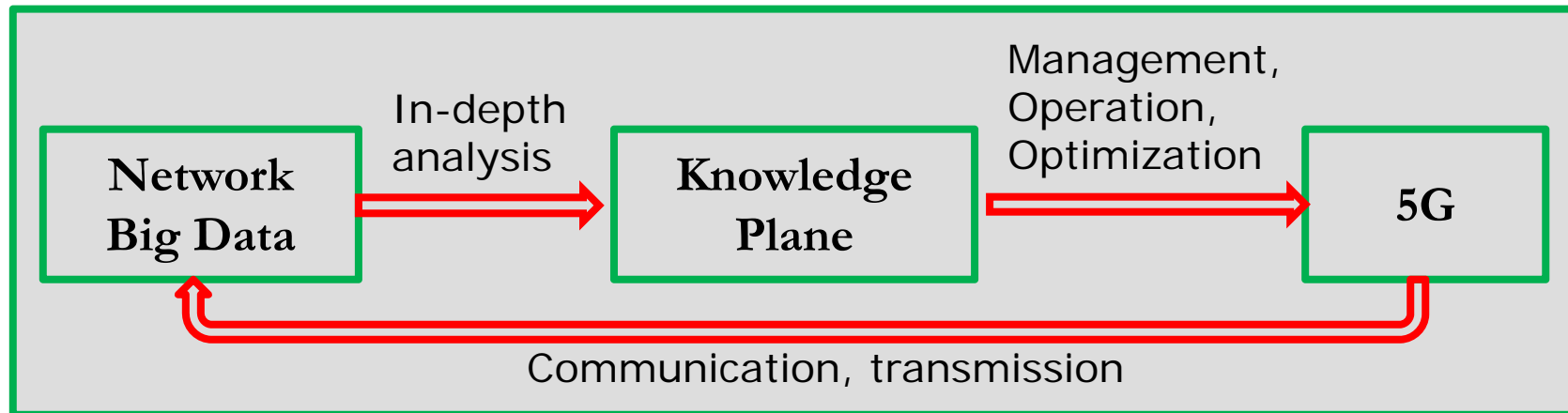
Cisco's Projections For The Internet of Things



Source: Cisco

Network Big Data

- With the overwhelming amount of data pouring into the future Internet, network domains are embracing an unprecedented wave of traffic flows and are stepping into the **era of network big data**.
- **Network Big Data: holistic view of network**



- **Big Data brings Big Value: strengthen the knowledge plane of FI**
 - Network management: resource utilization, load balance.
 - Service assurance: user behaviour, customer experience.
 - System reliability: cyber-security threats, fault management.