Internet of Things

79.4 Zetabytes of data by 2025

90 Percent coverage by 2025

4000 Devices per km² supported

3G

4G

LTE

2G

41 Billion IoT devices by 2027

1 Million devices per km² supported

5G
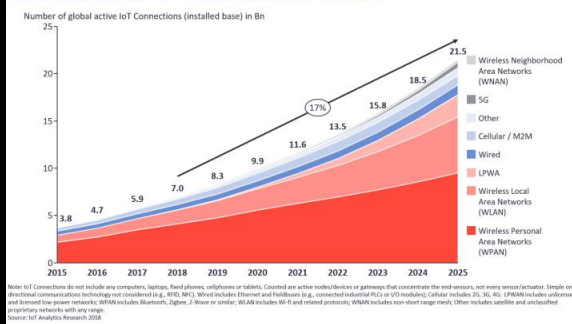
X2X

89 Percent of houses have Internet access

X2X Connecting Everything to Anything

The millimeter wavelength that rivals Fiber

Originally..

..before it had the name of Internet of Things, the first use of a network of smart devices was in early 1982, where a team at Carnegie Mellon University created the first Internet-connected appliance with a modified Coca-Cola vending machine. The vending machine had an implemented sensor that tracked the information useful for a vending machine, such as the current stock of each specific drink, which would be sent to the development team's computer. Although this is standard and looks simplistic to today's standards, this was a massive breakthrough that many didn't think would spiral into what it is today. For the time, it allowed for a slight technological advantage to the companies that implemented it, getting over some of their rivals.

Global Number of Connected IoT Devices

Number of global active IoT Connections (installed base) in Bn

Year	Value
2015	3.8
2016	4.7
2017	5.9
2018	7.0
2019	8.3
2020	9.9
2021	11.6
2022	13.5 (17%)
2023	15.8
2024	18.5
2025	21.5

Legend: Wireless Neighborhood Area Networks (WNAN); 5G; Other; Cellular / M2M; Wired; LPWA; Wireless Local Area Networks (WLAN); Wireless Personal Area Networks (WPAN)

Note: IoT Connections do not include any computers, laptops, fixed phones, cellphones or tablets. Counted are active nodes/devices or gateways that concentrate the end-sensors, not every sensor/actuator. Simple one-directional communications technology not considered (e.g., RFID, NFC). Wired includes Ethernet and Fieldbuses (e.g., connected industrial PLCs or I/O-modules); Cellular includes 2G, 3G, 4G; LPWAN includes unlicensed and licensed low-power networks; WPAN includes Bluetooth, Zigbee, Z-Wave or similar; WLAN includes Wi-Fi and related protocols; WNAN includes non-short range mesh; Other includes satellite and unclassified proprietary networks with any range.
Source: IoT Analytics Research 2018

17%   34%   90%

83 Million smart devices in people's homes in 2015.

193 Million smart devices in people's homes estimated by 2020.