IOT Networking and Security

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I O T ?

Talking about "I"

How many bytes of traffic on the internet today?
Guess???

http://www.internetlivestats.com/

4pm eastern 3/26/19

4,184,245,149
Internet Users in the world

1,675,579,432
Total number of Websites

166,567,160,588
Emails sent today

4,224,375,777
Google searches today

4,008,422
Blog posts written today

485,002,825
Tweets sent today

4,492,736,637
Videos viewed today
on YouTube

52,081,498
Photos uploaded today
on Instagram

86,769,831
Tumblr posts today

2,458,663,538
Facebook active users

690,393,995
Google+ active users

345,429,870
Twitter active users

283,408,229
Pinterest active users

213,965,693
Skype calls today

80,124
Websites hacked today

467,445
Computers sold today

2,783,452
Smartphones sold today

296,899
Tablets sold today

4,037,752,605 GB
Internet traffic today

2,569,922 MWh
Electricity used today
for the Internet

2,151,430 tons
CO_2 emissions today
from the Internet

Share This!

It would take almost 12 days for a million seconds to elapse and 31.7 years for a billion seconds.

yotta	Y	1000000000000000000000000
zetta	Z	1000000000000000000000
exa	E	1000000000000000000
peta	P	1000000000000000
tera	T	1000000000000
giga	G	1000000000

Internet of Things (IoT) connected devices installed base worldwide from 2015 to 2025 (in billions)
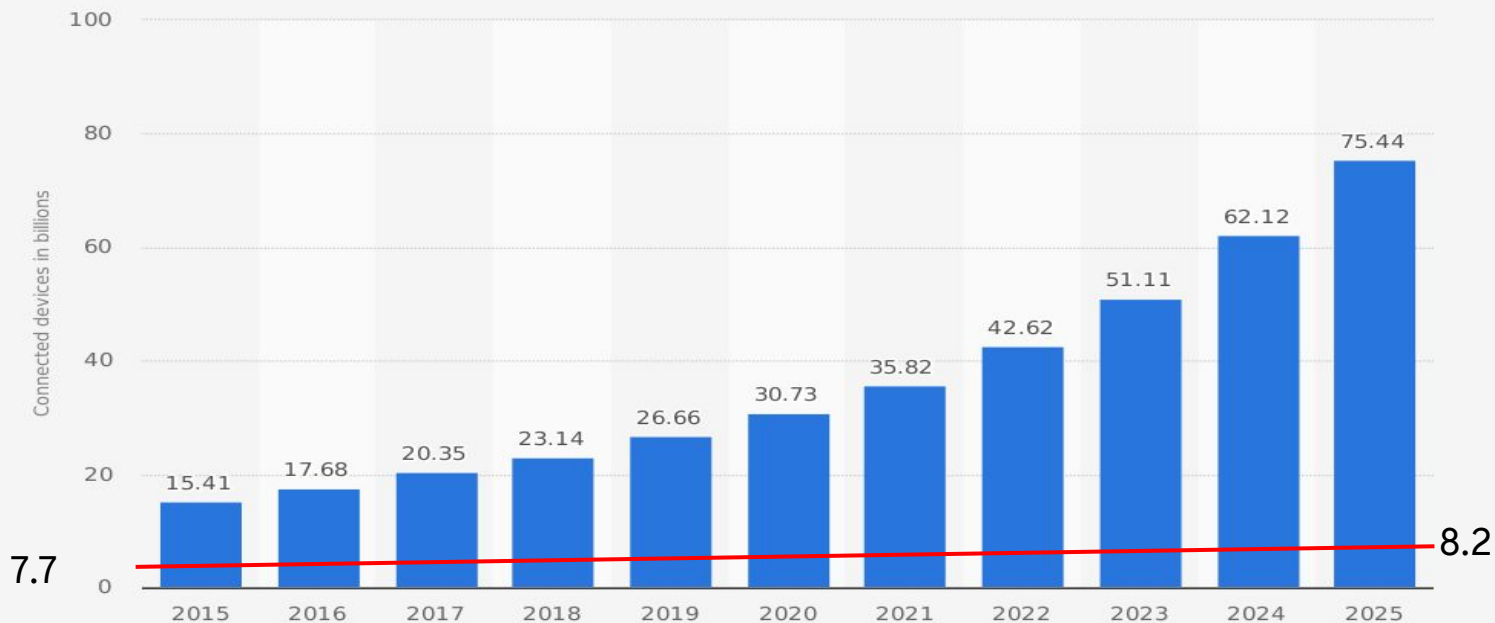
Source
IHS
© Statista 2018

Additional Information:
Worldwide; IHS; 2015 to 2016

http://www.worldometers.info/world-population/world-population-projections/

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Average **annual** wages 2017 inUS$

Country	PPP	Nominal
Switzerld	**62,283**	**88,159**
Iceland	61,787	90,662
USA	**60,558**	**60,558**
Australia	49,126	61,620
Ireland	**47,653**	**53,112**
Canada	47,622	50,033
UK	43,732	45,280
Japan	40,863	38,234
Italy	**36,658**	**32,931**
South Kor	35,191	31,390
Israel	**35,067**	**42,378**
Slovenia	34,933	26,713
Poland	27,046	13,431
Greece	26,064	19,542
Chile	25,879	18,645
Czechia	**25,372**	**15,374**
Portugal	25,367	19,210
Estonia	24,336	17,039
Slovak Rep	24,328	14,881
Lithuania	24,287	14,189
Latvia	23,683	15,412
Hungary	22,576	12,506
Mexico	15,314	8,593

China and India approx 1.3B people each, approx **annual** salary $2000

8593/12=$716

https://en.wikipedia.org/wiki/List_of_countries_by_average_wage

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IOT devices

- Smart Phone
- Car (Tesla)
- Home Security (Cameras)
- Thermostats
- Traffic monitors
- Earthquake monitors
- Hospital BP apparatus locator
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Which industrial sector making the most investment in IOT devices ?

Investments In IoT Solutions By Industry

Source: BI Intelligence Estimates
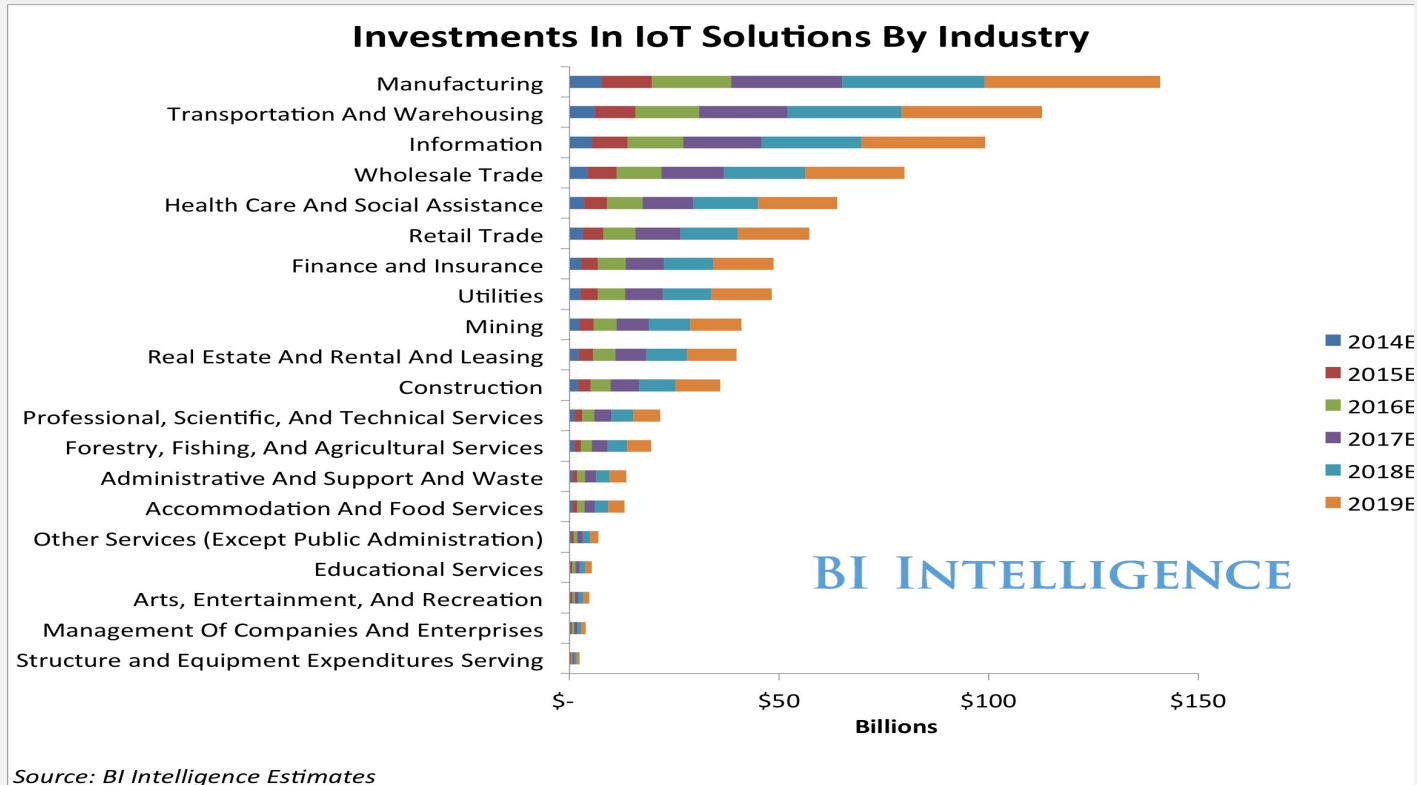
What basic technologies made this possible?

What are the basic ingredients of IOT devices?

What were the non-IOT advancements that
made IOT devices proliferate exponentially ?

IBM introduced the first hard disk drive to break the 1 GB barrier
in 1980. It was called the IBM 3380 and could store 2.52 GB.
Its cabinet was about the size of a refrigerator and the whole
thing weighed in at 550 pounds (250 kg).

https://royal.pingdom.com/amazing-facts-and-figures-about-the-evolution-of-hard-disk-drives/

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