by Andy Marken

"Not everything ends the way you think it should. Besides, audiences love happy endings," *says John Travolta as Gabriel Shear in Swordfish (an American crime film about a computer hacker).*

Living in Silicon Valley it is very hard to remind myself that everyone doesn't live on three – five devices constantly…24x7, 365 days of the year. It's so cool! It's such a great distortion field I feel sorry for those who don't eat, sleep, live it.

But it's possible everyone is getting with it:

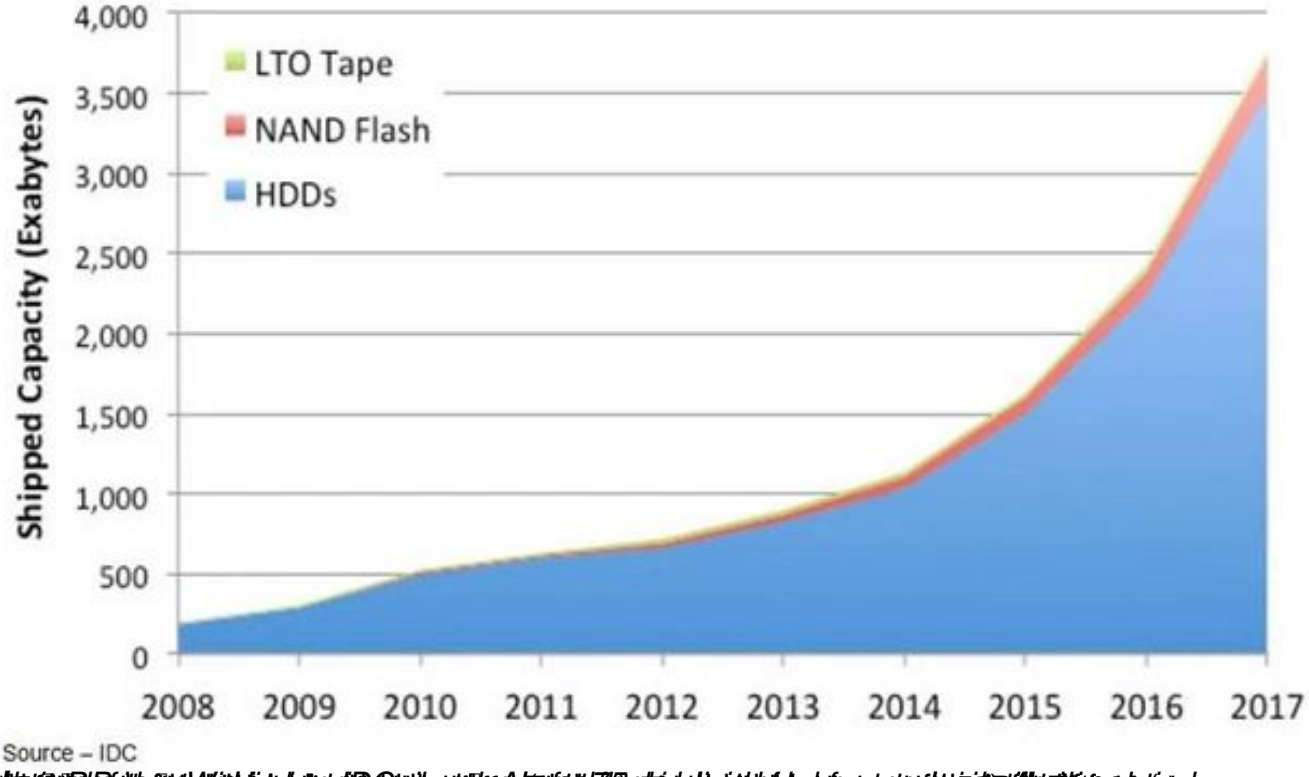
- *Pew Research* reported that 84% of the adults in the U.S. are on the Internet and what the other 16% does, I have no idea.
- *Statista* reports there are nearly 5B mobile phones in use globally (some have 2+) so they can text and occasionally even talk to each other.
- We're inching closer to having everything/anything connected, which is why we ran out of IP(Internet Protocol) Version 4 addresses and moved up to IPv6 so the 50B things can chat.

No wonder attendees at **Flash Memory Summit (FMS) 2015** were positively giddy.

Microprocessor speeds double every two years and device prices get lower, so we can create more things, stuff faster/better to be stored.

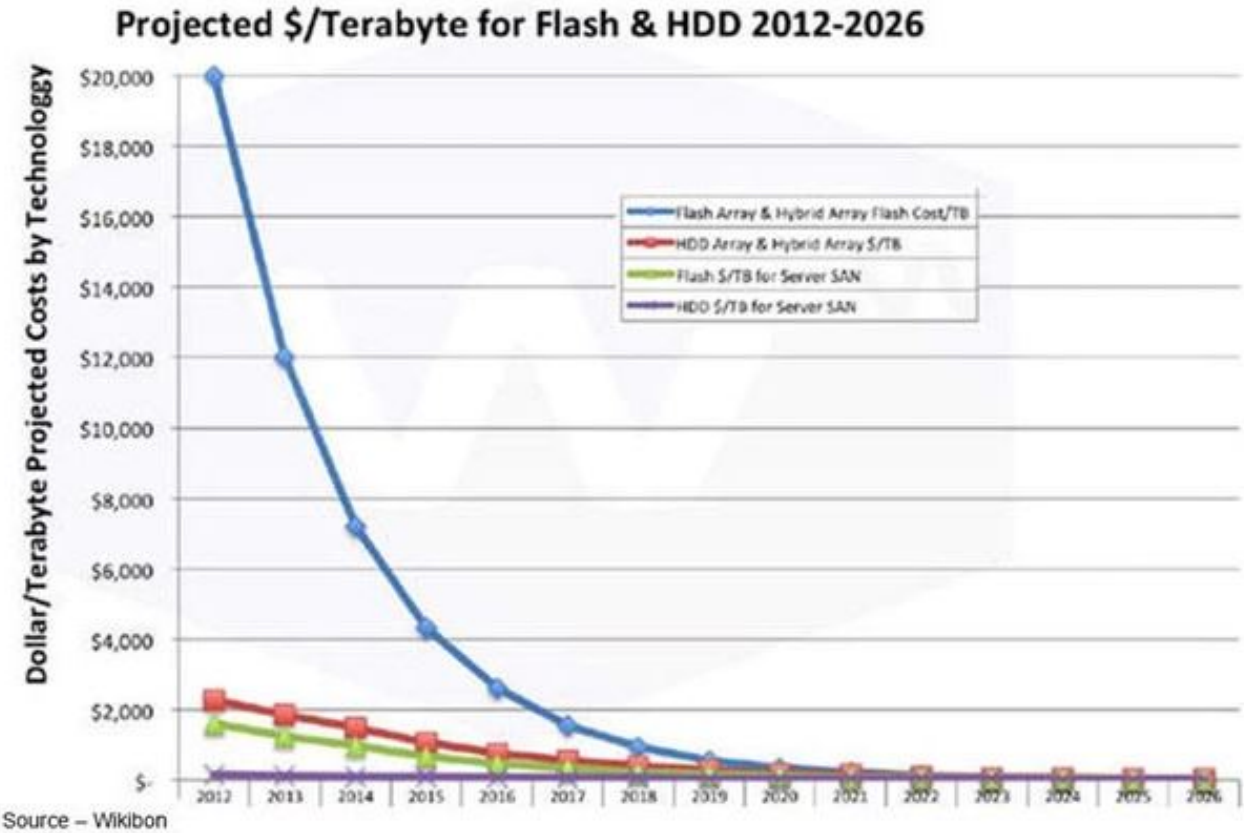
This year, we'll pack away more than 3.5ZB (Zetabytes) of data. By 2020, they'll be hunting for places to put 44ZB.

Yes, 44 000 000 000 000 000 000 000 bytes!

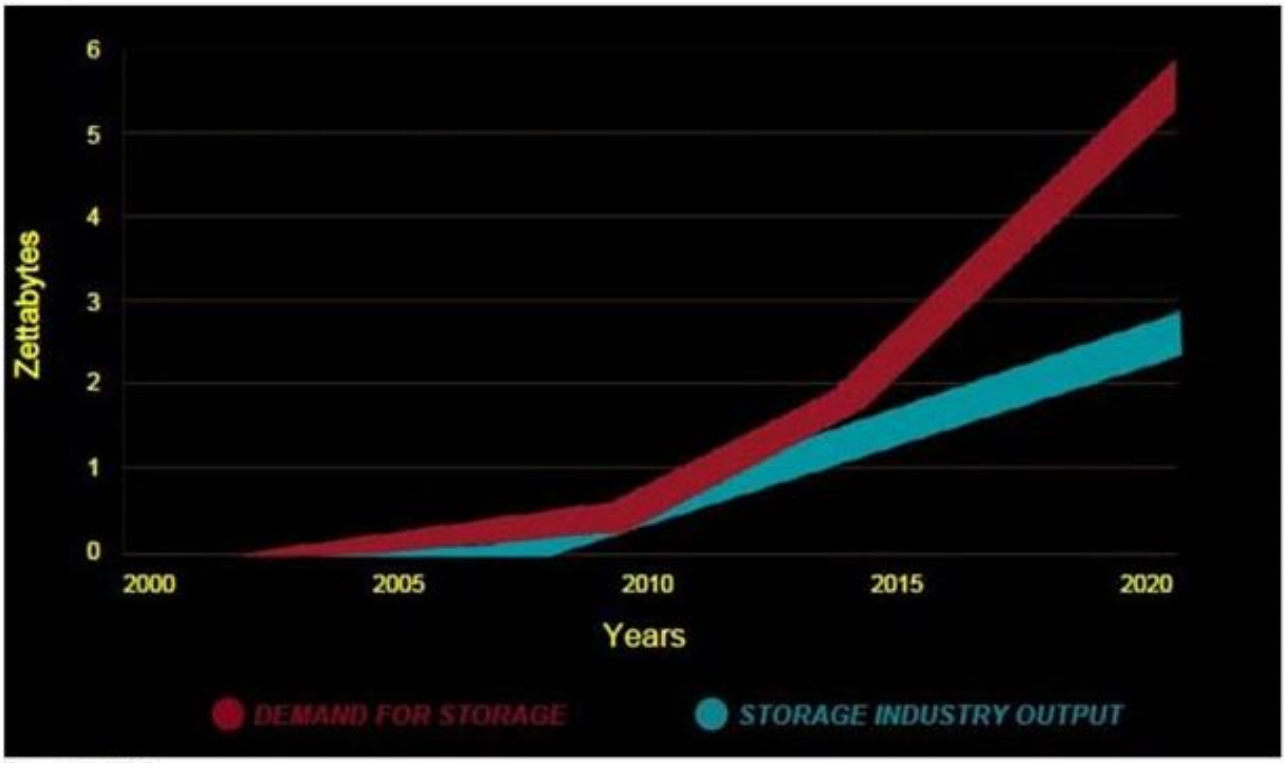
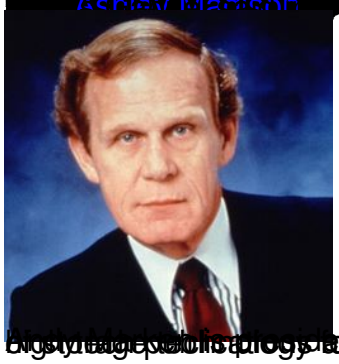

4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Shipped Capacity (Exabytes)
LTO Tape
NAND Flash
HDDs
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017

Source – IDC

Source – OWC



Source – Wikibon


Zettabytes
6
5
4
3
2
1
0
2000
2005
2010
2015
2020
Years
DEMAND FOR STORAGE
STORAGE INDUSTRY OUTPUT

Source – IDC