

# PWC Gr8 Gals@Technology

May 2019 Technology Lifetime

### **Current Topics**

- Cord Cutting
  - AT&T Watch TV (<u>\$15 a month</u> or free with certain AT&T wireless plans)
  - Philo (<u>\$16 a month</u>)
  - Sling TV (<u>\$25 a month</u>)
  - Hulu With Live TV (<u>\$45 a month</u>)
  - PlayStation Vue (<u>\$45 a month</u>)
  - Fubo TV (<u>\$45 a month</u>)
  - DirecTV Now (<u>\$50 a month</u>)
  - YouTube TV (<u>\$50 a month</u>)

https://www.cnet.com/news/best-live-tv-streaming-services-for-cord-cutters

	Hulu with Live TV	YouTube TV	Sling TV	PlayStation Vue	DirecTV Now
Base price	\$45/month for 60+ channels	\$50/month for 70+ channels	\$25/month for 30+ channels	\$45/month for 55+ channels	\$50/month for 40+ channels
Free trial	Yes	Yes	Yes	Yes	Yes
ABC, CBS, Fox and NBC channels	Yes, in many markets	Yes, in many markets	FOX and NBC only in select cities	Yes, in many markets	Yes, in many markets
Video on demand from local channels	Yes	Yes	No	Yes	Yes
Step-up packages with more channels	No	Νο	Yes, an extra \$5/month each	\$50/month, \$60/month or \$80/month	\$70/month
Simultaneous streams per account	2 (\$15 option for unlimited)	3	1 or 3	5	2 (\$5 option for 3)
Family member/user profiles	i Yes	Yes	No	Yes	No
Pause, rewind, fast-forward	Yes	Yes	Yes, except for Disney or ESPN channels	Yes	Yes
Record shows for later (cloud DVR)	Yes	Yes (keep for 9 months)	Yes (\$5 per month, can't record Disney or ESPN channels)	Yes (keep for 28 days)	Yes (20GB, keep for 30 days)
Fast-forward through or skip commercials with cloud DVR	No (Yes with \$15 option)	Yes	Yes	Yes	Yes
DVR show replaced by on- demand version	No	Yes	No	No	No
Video on demand/3-day replay	Yes	Yes	Yes	Yes	Yes
Parental controls	Yes	No	Yes	No	No
Bandwidth limiter	No	No	Yes	No	No

#### **Current Topics**

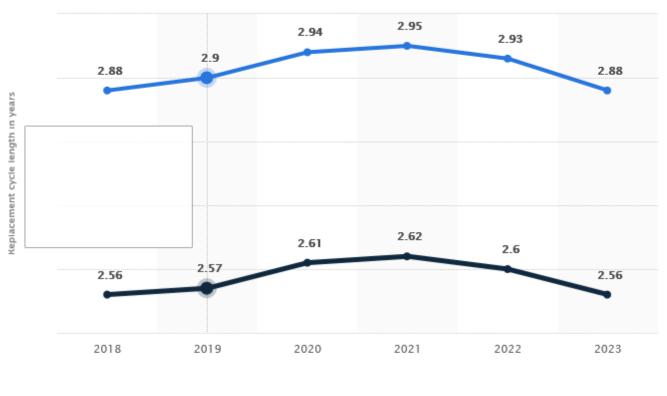
- Verizon 5G "real world" testing in Chicago with Samsung S10
  - S10 device has Qualcomm X50 modem chip
  - Speed test show 1.3<u>G</u>bps
  - Download of 1h 43m movie from Netflix in 8 seconds!
  - Verizon say "30 markets by the end of 2019"
  - AT&T, Sprint, and T-Mobile are behind in development and deployment
  - Widespread availability will take time, but this is very encouraging

## How Long Will My Technology Last?

- Generally, technology is designed for a 5-7 year lifespan under normal usage
  - Power supply design objective is 5 year
    - Fan bearing wear
    - Capacitor heating
  - Hard drives design objective is 3-7 years
    - 90% last at least 3 years
    - 80% last at least 4 years
  - Average lifetime for circuit boards and chips is 20-30 years
  - Software does not age but will react differently to different usage

### How Long Will My Technology Last?

- Average life expectancy for a mobile device is 4.7 years
- Average replacement cycle is approaching 3 years



Consumer Enterprise

## Major Factors In Technology Lifespace

- Heat!!
  - Keep good airflow around the unit
  - Dust is a great insulator to capture heat
  - Fans are a mechanical item that WILL fail



#### Major Factors In Technology Lifespace

- Power fluctuations
  - Surge protector average surge is only 10 joules. Most power strips are rated at 200+ joules
  - UPS unit 5 minutes of run time to shutdown. Average PC is about 100 watts







# Major Factors In Technology Lifespace

Understand that mechanical parts WILL break over time

#### Laptop Battery Lifetime

- Most laptop batteries start to fail in 1-2 years
- Average laptop battery is good for around 400-500 recharge cycles
- Failure scenario is usually "charge memory" for older batteries. Lithium-ion batteries do not have this issue.
- Best practice is to let the battery discharge to about 20% before recharge.
- Most new laptops will stop charging at 100%. OK to keep laptop plugged in.
- Again, heat is not a friend to Lithium-ion batteries

## Migrating To New PC

- Migrate your data
  - Use Cloud (OneDrive) to transfer your data
  - Use an external drive to transfer your data
  - Use a migration/backup utility
    - Acronis True Image



### "Nuke" The Data On Your Old PC

- Darik's Boot and Nuke (aka DBAN)
  - Free utility to COMPLETELY erase your system. It erases EVERYTHING!
  - https://dban.org/
  - Comes as "ISO" format to create a bootable CD
  - https://sourceforge.net/p/dban/discussion/208932
  - We can make bootable CDs or even USBs available to the group if there is interest

#### "Nuke" Your Phone Data

••••• A	T&T 🗢 5	32 PM	≠ 100%	-
	Se	ettings		
-			$\sim$	
?	Wi-Fi	D	T-Private	ş
*	Bluetooth		Off	>
<b>%</b> )	Cellular			2
	Notification	Center		2
8	Control Cer	nter		>
C	Do Not Dist	turb		>
0	General			>
-0	Sounds			Σ
*	Wallpapers	& Brightr	ness	Ş.
100	Deliverant			-

5:32 PM	🕈 100% 🗩
General	
ck	Off >
	Off >
	>
	>
	>
Sync	>
Not Co	onnected >
	General ck Sync

5:32 PM Reset	✓ 100% ■
22 20 2000 A	2015
	ungs
Screen Layo	
on & Privacy	
	Reset tings ntent and Set rk Settings ard Dictionar

#### "Nuke" Your Phone Data

#### 🚡 📶 54% 🛢 11:23

#### FACTORY DATA RESET

All data will be erased from your device storage, including your:

- Google account
- · System and app data
- Device settings
- · Downloaded apps
- Music
- Pictures
- · All other user data
- The decryption key for files on the SD card
- (You will not be able to use encrypted files on

the SD card after you reset your device to factory defaults.)

You are currently signed in to the following accounts:.



	🕅
SETTI	NGS Q
Ş	Wallpapers and themes Wallpapers, Themes, Icons
P	Lock screen and security Lock screen, Fingerprints, Find My Mobile
Ø	Cloud and accounts Samsung Cloud, Backup and restore, Smart Swit
G	Google Google settings
ŵ	Accessibility Vision, Hearing, Dexterity and interaction
	General management Language and input, Date and time, Reset

Software update Download updates, Scheduled software updates

User manual

About device Status, Legal information, Device name

RESET			
Reset setting	S		
Reset all settings	to their default	S.	
Reset networ	k settings		
Reset Wi-Fi, Blue defaults.	tooth, and other	network settir	ngs to their
Factory data	reset		
Reset your device erase all data, inc			
DEVICE MANAGEM	IENT		
Auto restart			
Optimise your de automatically at will be lost when	set times. Any u	nsaved data	

#### "Nuke" Your Phone Data

• If you have a removeable SIM card, remove it



## Technology Disposal

- Purge all data first
  - Reset factor defaults
  - "Nuke" the data
- Use Electronic Recycling



