



Cutting the Cable

Part 1



“If your cable television bills seem to be getting more expensive it's because they are.

The Federal Communications Commission reported this week that average cable television bills nationwide jumped by 5.8 percent in the one-year period through July, considerably higher than the 3.7 percent increase in the price of all goods and services.

Consumer advocates pounced on the news, saying the report proves that telecommunications deregulation has failed to deliver the promised benefit of lower cable rates.

The cable industry said the single biggest factor behind the higher rates is the increased costs for programming, including sports and entertainment.”

ABC News Feb 2016

The new Pew Research Center data suggest 15% of American adults are now “cord cutters” – that is, they indicate that they once had a cable or satellite TV connection, but no longer subscribe.

Another 9% of Americans have never had a cable or satellite subscription at all, meaning that a total of 24% of Americans currently do not subscribe to cable or satellite TV in their homes (76% of Americans subscribe to pay TV service at home).

Setting the Stage

- What exactly is meant by “Cutting the Cable” or “Cutting the Cord”?
 - Television content provided by traditional service providers
 - Comcast\Xfinity
 - Charter & TimeWarner
 - CenturyLink
 - Dish Network
 - DirectTV
 - Cox
 - Verizon FiOS
 - Technology changes
 - TV - Internet – Telephone (Triple Play)

Technologies Are Changing

- **Analog → Digital → IP**
- OTA (Over the Air)
- xDSL (CenturyLink)
- Fiber (Verizon FiOS, AT&T U-Verse)
- Coax (Comcast\Xfinity)
- Satellite (Dish, DirectTV)
- IP (Roku, Hulu, Netflix, Kodi, Apple TV, Amazon FireTV, others...)

Digital Packaged Services

- Internet
 - You are still going to need this!!
 - But this cable can be cut too. Will be addressed in Part 2
- Telephone
 - Old Telco going away
 - VoIP becoming the norm
- Television
 - Bundled packages to offset costs
 - Hundreds of channels available
 - Do you need all of them? Some of them? None of them?

Price Plans (Packaged Entertainment)

- Comcast\Xfinity: \$50 → \$170 month
- Dish Network: \$50 → \$80 month (TV only – no phone, Internet)
- DirectTV: \$50 → \$125 month (TV only – no phone, Internet)
- Cox: \$90 → \$160 month
- Verizon FiOS: \$50 → \$270 month

**SO, IF I GET RID OF CABLE OR
REDUCE MY CHANNELS,
HOW DO I RECEIVE THE CONTENT
I WANT?**

Streaming Media Devices



Roku



FireTV



Chrome



Apple TV



Nvidia Shield

Streaming Media on Smart TVs



Streaming Entertainment Systems



- Replaces leased hardware – you own it
- Requires CableCard
- Has good DVR capabilities
- Has decent EPG
- Streams popular content as well as OTA

Streaming Services



App now on Apple TV



**\$20
month**

BASIC	Pause/Rewind?	Replay Past Shows?	Video On-Demand?
A&E	✓	3 Days	✓
ABC Family	-	-	✓
AMC	-	-	✓
Cartoon/Adult Swim	-	-	-
CNN	-	-	-
Disney	-	-	✓
E! Rey	✓	3 Days	✓
ESPN	-	-	-
ESPN2	-	-	-
Food Network	✓	3 Days	✓
Galavision	✓	3 Days	✓
H2	✓	3 Days	✓
HGTV	✓	3 Days	✓
History	✓	3 Days	✓
IFC	-	-	✓
Lifetime	✓	3 Days	✓
Maker	✓	1 Day	✓
TBS	-	-	-
TNT	-	-	-
Travel Channel	✓	3 Days	✓

“The Times They Are a Changin’”

- Service Providers are beginning to unbundle packages
- 3d party content providers are demanding it
- We’re not there yet, but slow progress is being made
- Most premium channels now offer individual subscriptions
- New providers, like Sling, are packaging content in smaller bites
- Apple has tried to break up the bundling, but lost...at least for now
- Eventually, we’ll be able to subscribe just to the services we want

A Caution...

- Nothing is free
- Primary providers and new services all want to monetize in order to pay for content they resell to you
- Everyone wants to sell you a service
- Netflix = \$9 - \$10 a month
- Hulu Plus = \$8 a month \$12 for no commercials
- Amazon Prime = \$8 a month
- Sling = \$20+ a month
- Other content monetizing (A&E, ShowTime, HBO...)
- You can easily be paying over \$50 a month for basic content

S0, where do I do with this info
and where do I go from here?

Initial Steps for Cutting the Cable

1. Buy your own cable (or xDSL) modem
 1. Eliminate monthly lease fees
 2. Control your own WiFi network and network addressing
 3. DOCSIS3 and speed capable for increased bandwidth
 4. Be careful with the brands (read Amazon reviews)
2. Review your current cable content packages
 1. Do you need all those channels?
 2. Reduce premium channels and other unnecessary content
3. Establish OTA HD feeds for your TVs and distribute
4. Subscribe to Hulu Plus and/or Netflix and other services
5. Buy an Apple TV (or Roku or FireTV, or Chrome)

Additional Steps

- Pick a system that will meet your needs and reduce monthly costs
 - Tivo
 - Tablo
 - HD HomeRun
 - Streaming media devices
- Replace leased devices (connected to each TV) with your own
- Find a DVR system that meets your needs
- Settle on an EPG (Electronic Programming Guide)
- ***And when you're ready – tackle Kodi***

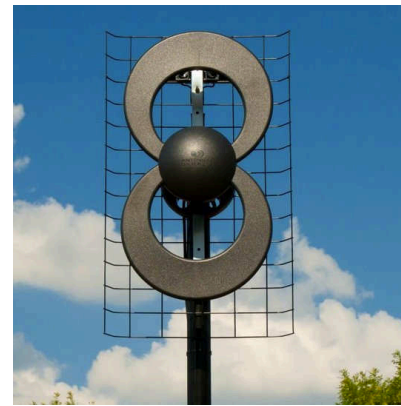


OTA (Over the Air)

- Local broadcasts over the air
 - Picked up on various forms of local home antennas
 - Line of sight
 - Free
 - Very good quality of HD – generally uncompressed
 - Supplements other content providers easily



























Spania



What Channels are Available?

Channel Results

Network	Station	Channel	Strength
 CBS	KKTV-DT1	11-1	
 MYNET	KKTV-DT2	11-2	
 NBC	K30JM-D1	5-1	
 NEWS	K30JM-D2	5-2	
 CBS	KZCS-LP	-	
 PBS	KTSC-DT1	8-1	
 V-ME	KTSC-DT2	8-2	
 CREATE	KTSC-DT3	8-3	
 DAY	KJCS-LD1	38-1	
 UNIVIS	KVSN-DT1	48-1	
 UNIMAS	KVSN-DT2	48-2	
 LA-TV	KVSN-DT3	48-3	

Distributing OTA Feeds at Home

- Splitters – Coax to TVs
- HD HomeRun (Silicon Dust silicondust.com) - network



HD HomeRun Distribution

- OTA feeds over home network
- Requires Ethernet from device to network or router
- WiFi distribution from there
- Has apps for Apple TV, Amazon FireTV, Roku, Nvidia Shield
- DVR still is the major issue – not isolated to HD HomeRun
 - More solutions on the horizon
 - Tivo, Tablo, and others are developing
 - Kodi

HD HomeRun Apps

- Apple TV: Channels, InstaTV
- Amazon FireTV: Native HD HomeRun app,
- Roku:
- Nvidia Shield (Android TV): Native HD HomeRun app,



Take It a Step at a Time

- Study your options
- Decide upon what you need and what you can afford
- Stay current with the rapidly changing technologies
- Create an action plan
- Execute the plan



**Part II of
CUTTING THE CABLE**

What's New? 4k

- 4k capable TVs are becoming the norm
- HDR – High Dynamic Range is the next evolution
- More providers of 4k content (Netflix, YouTube, Hulu, and Amazon)
- Streaming devices becoming 4k capable
 - Roku, Amazon FireTV, Nvidia Shield
 - AppleTV 4th Gen NOT 4k capable
- New Vizio TVs becoming Theater Displays (not really a TV)
 - No tuners or coax inputs
 - Only HDMI, USB-C, and Ethernet ports

What's New? Roku

Roku TV™



Brilliant picture quality. Smart and simple features.

Roku Express



Fast. Affordable. 1080p HD streaming.

Roku Express+



Turn your older TV into a smart TV.

Roku® Streaming Stick®



Powerful & portable.

Roku Premiere



Powerful streaming. Stunning 4K resolution.

Roku Premiere+



Powerful streaming. Stunning 4K and HDR. Advanced remote.

Roku Ultra



Our ultimate player. Stunning 4K and HDR. Advanced technology.

Accessories



What's New? Sling

30+ CHANNELS ESPN, CNN & MORE \$20 - SLING ORANGE		40+ CHANNELS FOX, NBC & MORE \$25 - SLING BLUE			ALL CHANNELS BEST VALUE \$40 - ORANGE + BLUE	

What's New? Tivo Bolt



Up to
6
Tuners

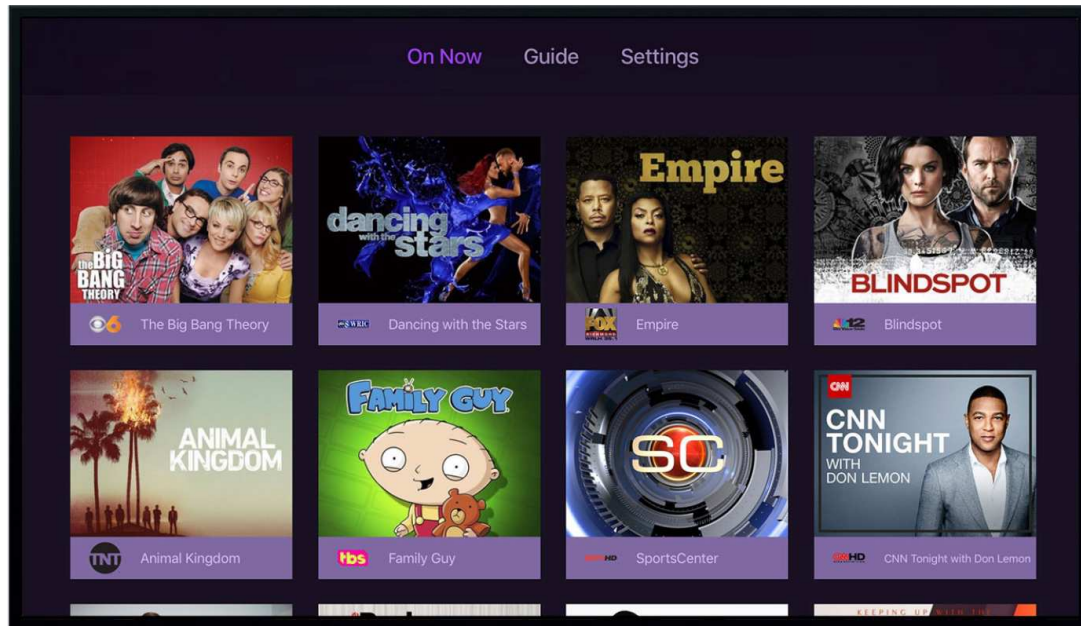
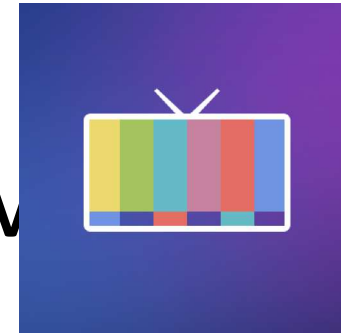
Up to
3TB
Storage

4K
Ultra HD

Sticking Points: DVRs

- Tivo devices have great DVR capabilities
- Tablo devices are fine
- HDHomerun (Silicon Dust) DVR is in beta
- Plex Server DVR is in beta

Sticking Points: EPGs Channels App for Apple TV



Grid



Listing

Sticking Points: Controlling It All

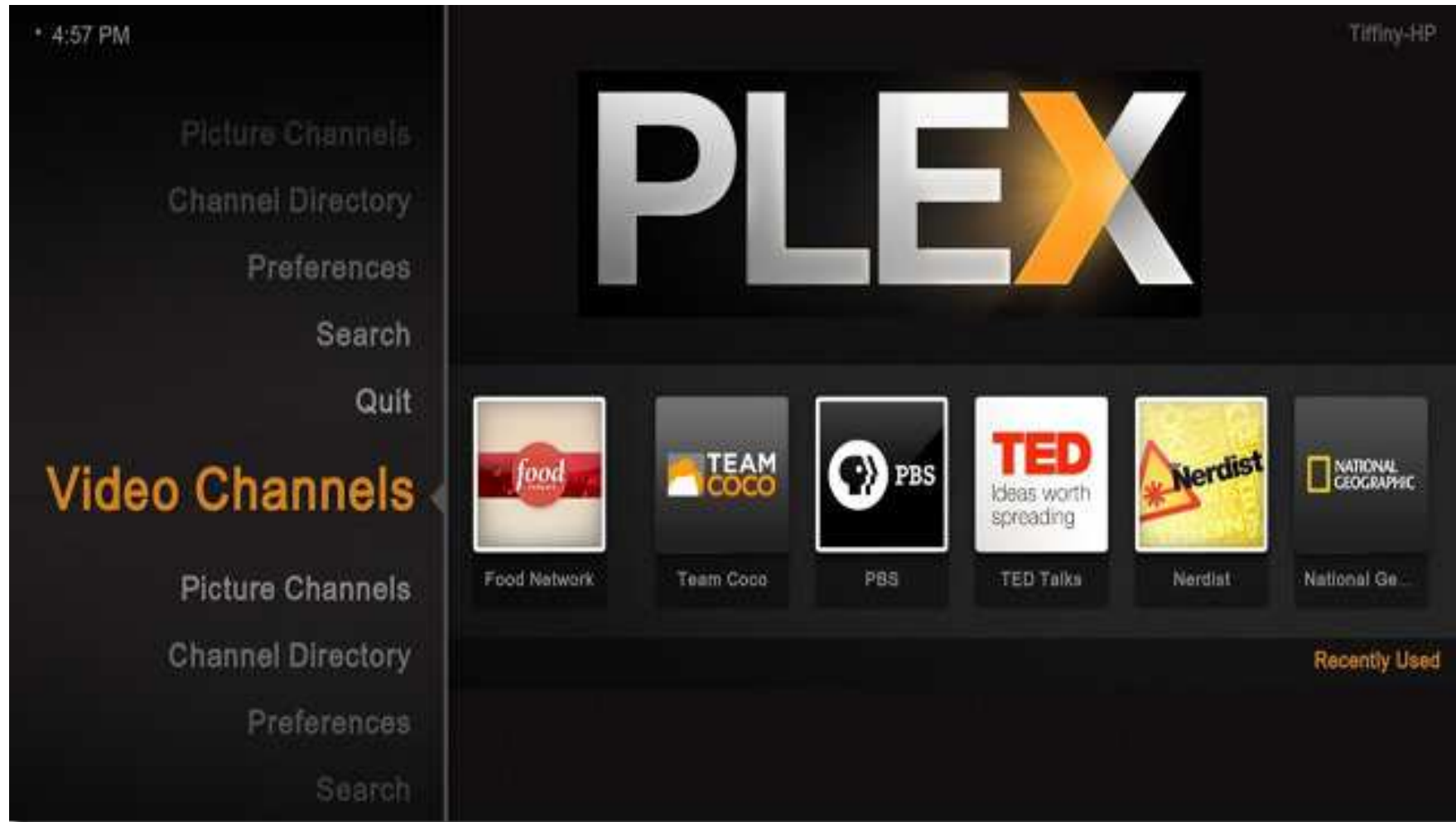
- You'll go mad trying to control all these devices with individual remotes
- Best option out there is the Logitech Harmony Hub and Remotes
- Improved setup and use
- Easy UI
- IR



Sticking Points: Trading Convenience for Cost Savings

- Apple: “The future of TV is Apps.”
- Yeah, well, our future also has devices – lots of ‘em
 - No one streaming device has all of the desired services
 - You want Apple movies, or iTunes, or Apple Music – go to AppleTV
 - You want Amazon Prime content – go to Roku or FireTV
 - You want Google Play – go to ChromeCast or Roku or Nvidia Shield
 - You want 4k content - go to Roku or FireTV
- Hulu, YouTube, Netflix, Vimeo, Vudu, and other frontrunner streaming services are on all devices and Smart TVs

Free: Plex Media Server (XBMC Spinoff #1)



Free: Kodi XBMC Spinoff #2)



- Free!!
- Geeky
- Legit use
- Semi-legit use
- Ported to Windows, MacOS, Android, some streaming devices
- Can be added to Apple TV 4th gen, but it's hard to do

It Comes Down to Cost Cutting...

- ...And how much cost you want to cut
 - All?
 - Some?
- ...And what your tolerance is for geekiness
 - Multiple devices
 - Multiple apps
 - Duplications
 - More and more useless crap