



VIDEO UPDATES & OTT TRENDS

ICA ANNUAL MEETING & EXPO: MARCH 26, 2019, 9:45 AM

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Cooperative Network Services (CNS)



Jerry Weber, VP of Voice & Video
Innovative Systems





eLation™ OSS/BSS

- *Billing*
- *Flow-Through Provisioning*
- *Financials*
- *Staking & Mapping*
- *ACS TR-069/143*
- *Mobile Apps*
- *100+ Deployments*



Video Services

- *Multi-Generation TV*
- *IPTV & HLS Together*
- *Time-Shifted Video*
- *Virtual Remote Support*
- *VOD*
- *Mobile Apps*
- *180+ Deployments*



APMAX™ Voice

- *Robo Call Manager*
- *Enhanced Hosted Voice*
- *SIP Phone Provisioning*
- *Call Center Routing*
- *Mobile Apps*
- *800+ Deployments*

COOPERATIVE NETWORK SERVICES MENAHAHA, MN



Content Management

- *Negotiate contracts with broadcasters and other programmers*
- *Leverage agreements for alternative channel package options*
- *Liaison between you and NCTC, ensure compliance and competitive video offerings*
- *20+ years industry experience, passion for video & content consumption*

AGENDA

- What is driving Video in Today's Market
- Why a Content Negotiator is Important
- What a Good Partner Means to your Company
- How to Know your Customer & Their Needs
- Why Linear Video still Relevant

CONTENT FOR TODAY'S WORLD

- Time-shifted Video
 - VOD, Restart TV, Pause Live TV & DVR
 - Technologies that Changed Video Behavior
- Multi-Generation TV (MG-TV)
 - Bridging Linear & HLS video
 - Content for entire market
 - Market ready for new technologies
 - Bringing Mobility



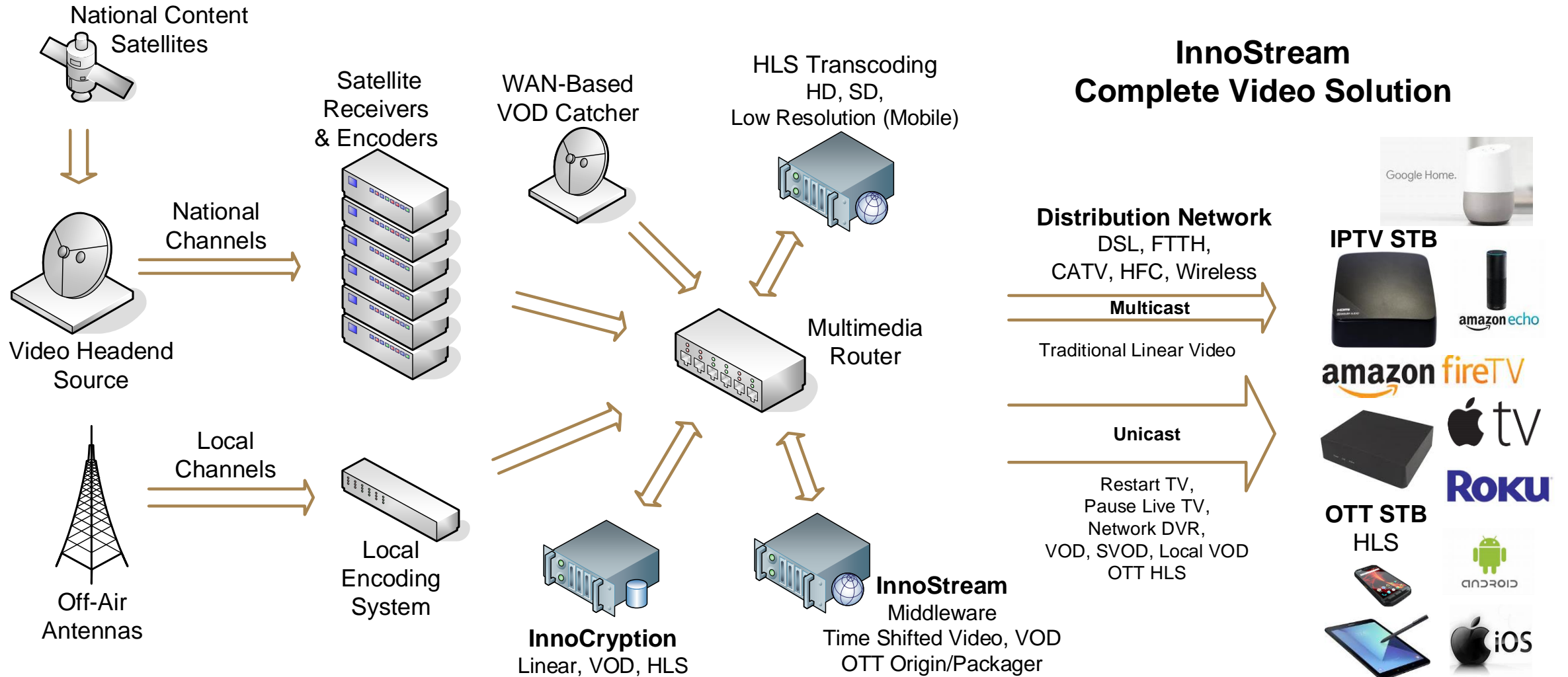
HOT VIDEO TRENDS FOR 2019

- Restart TV Requires No User Education
- Increases Time Spent Viewing

The screenshot shows a TV guide interface. At the top, it displays the Amherst Communications logo, the temperature 92°F, and the date and time: Wed, Aug 8 3:19 pm. The main program being highlighted is 'Wild Kratts' at 3:00 pm, with a description: 'Martin and Chris take Jimmy to a swimming tutor -- a sea otter named Coach.' A white arrow points to the left on the progress bar for this program. Below the main program, there is a grid of other programs. The grid has columns for 3:00 pm, 3:30 pm, 4:00 pm, and 4:30 pm. The programs listed are: 608 Wild Kratts (Sea Otter Swim), Odd Squad (Blob on the Job;...), Odd Squad (Oscar and the ...), and Cyberchase (A Seedy Business); 609 The Real, Steve; 611 The Dr. Oz Show, Dr. Phil; 613 Inside Edition (New), Jeopardy!, and The Ellen DeGeneres Show; 615 Blue Bloods, Blue Bloods; and 617 How I Met Your M... (partially visible). At the bottom right, there are icons for 'Watch from Start', 'Search', and 'Favorites'. A white arrow points to the right on the 'Watch from Start' icon.

	3:00 pm	3:30 pm	4:00 pm	4:30 pm
608	Wild Kratts Sea Otter Swim TV-Y	Odd Squad Blob on the Job;... TV-Y	Odd Squad Oscar and the ... TV-Y	Cyberchase A Seedy Business TV-Y
609	The Real		Steve	
611	The Dr. Oz Show		Dr. Phil	
613	Inside Edition New	Jeopardy!	The Ellen DeGeneres Show	
615	Blue Bloods		Blue Bloods	
617	How I Met Your M...		How I Met Your M... Watch from Start Search Favorites	

MULTI-GENERATION TV (MG-TV)



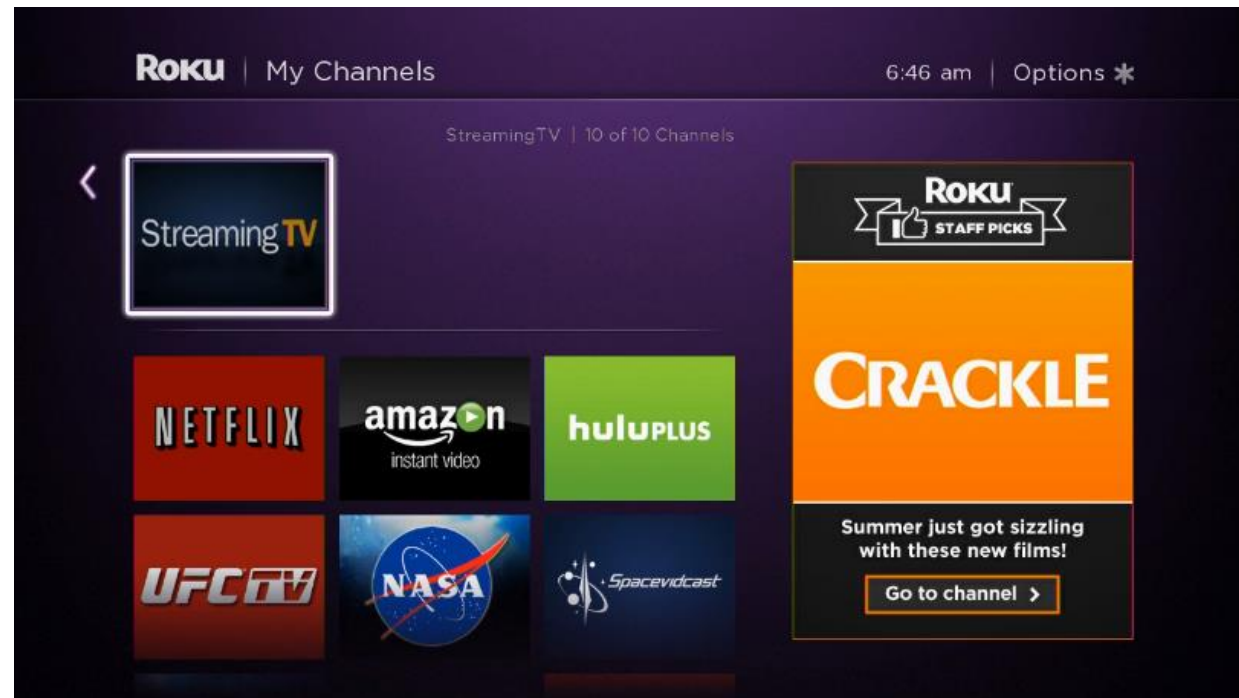
NEXT GENERATION VIDEO INGREDIENTS

- Conventional IPTV
- OTT Components
- ONE-Integrated Platform



HLS (HTTP LINEAR STREAMING)

- HLS and OTT are Not Necessarily the Same
 - Managed Network vs Internet
- Complements Video
- HLS in Rural Market
 - Cronin Study
 - Review Facts not Hype
 - Off-Airs impact



RURAL CONSUMER REFLECTS ON PREFERENCES



MG-TV and CityNet

- Citynet staff expected that the HLS streaming component of MG-TV was going to be the service of choice for their West Virginia customers, but found just the opposite, with the traditional linear IPTV outperforming by a wide margin.
- According to Network Administrator Justin Hayhurst, the single vendor concept for [Streaming](#) and [IPTV](#) provided by Innovative Systems makes their job much easier.



LIVE STREAMING ISSUES WELL DOCUMENTED

downdetector.com 

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Problems and outages for Directv Now

Here you find previous problems for Directv Now. You can also check the [current status](#).

21 February 2019 [Problems at Directv Now](#)

Directv Now is having issues since 10:20 AM EST. Are you also affected? Leave a message in the comments. [More...](#)

19 February 2019 [Problems at Directv Now](#)

Directv Now is having issues since 10:04 PM EST. Are you also affected? Leave a message in the comments. [More...](#)

17 February 2019 [Problems at Directv Now](#)

Directv Now is having issues since 8:20 PM EST. Are you also affected? Leave a message in the comments. [More...](#)

14 February 2019 [Problems at Directv Now](#)

Directv Now is having issues since 3:40 PM EST. Are you also affected? Leave a message in the comments. [More...](#)

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Problems and outages for Sling

Here you find previous problems for Sling. You can also check the [current status](#).

8 April 2018 [Problems at Sling](#)

Sling is having issues since 10:14 PM EDT. Are you also affected? Leave a message in the comments. [More...](#)

5 April 2018 [Problems at Sling](#)

Sling is having issues since 8:14 PM EDT. Are you also affected? Leave a message in the comments. [More...](#)

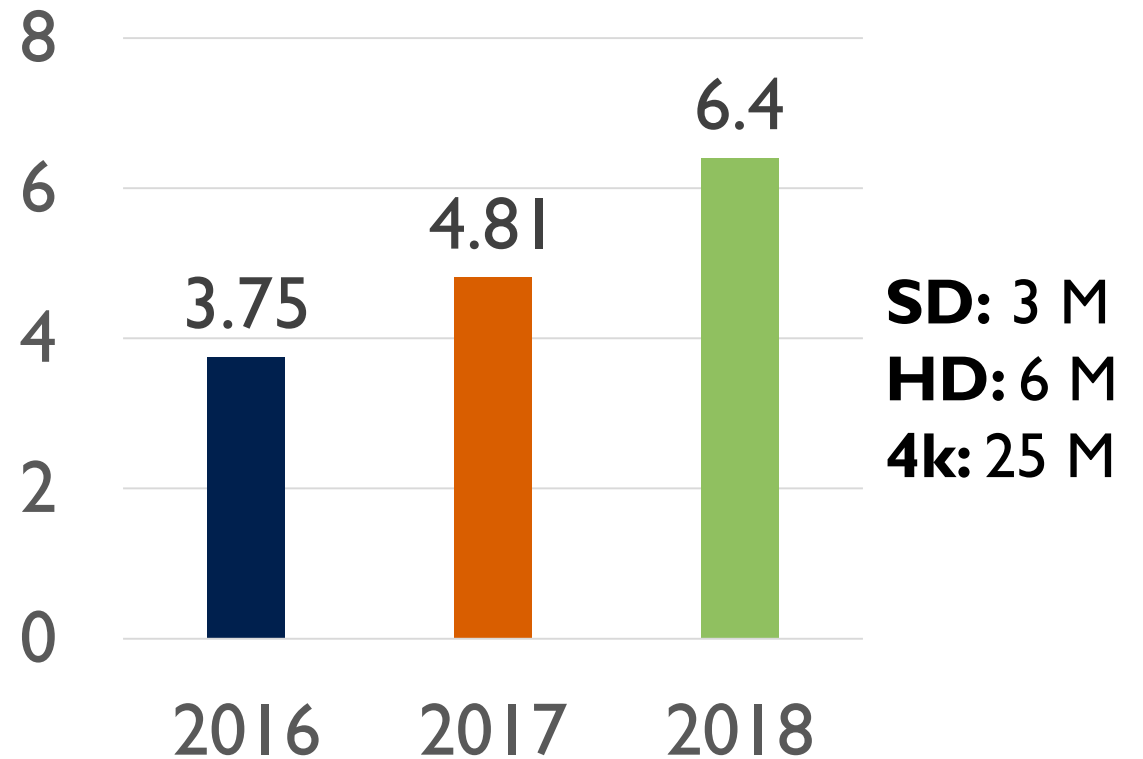
4 April 2018 [Problems at Sling](#)

Sling is having issues since 4:14 PM EDT. Are you also affected? Leave a message in the comments. [More...](#)

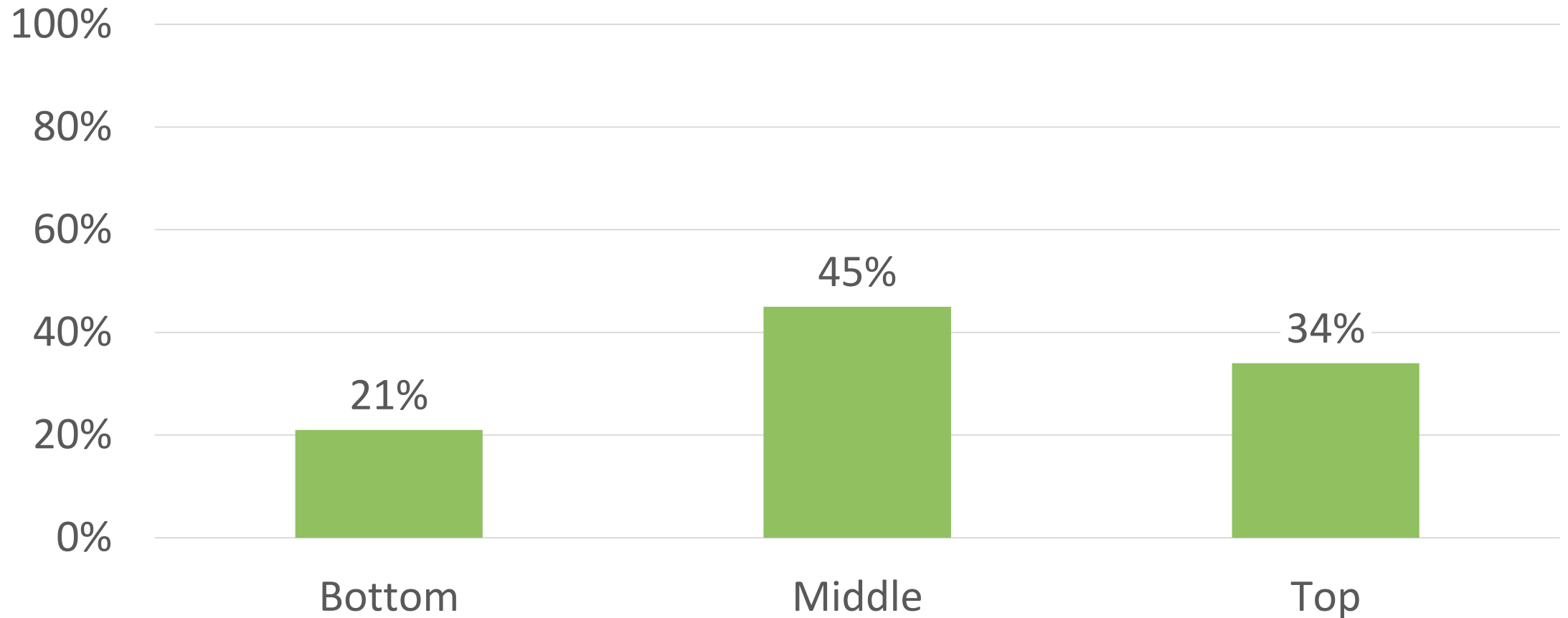
4 April 2018 [Problems at Sling](#)

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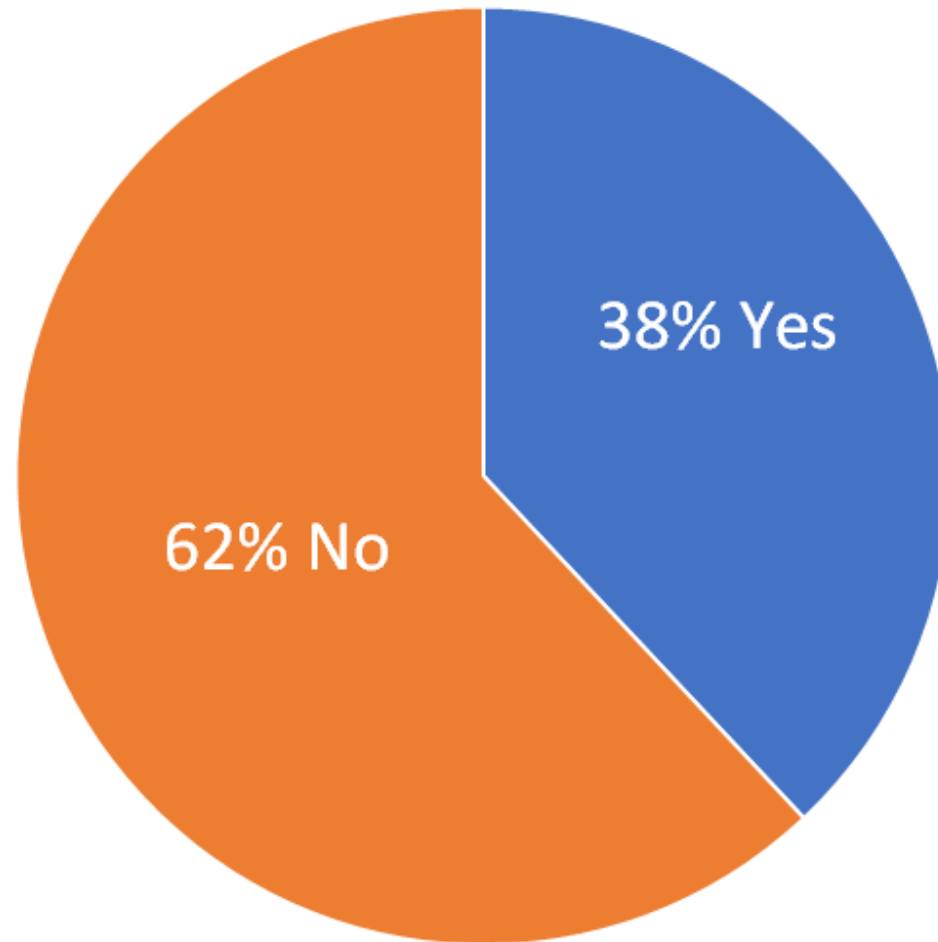
MORE BANDWIDTH TO SUPPORT LIVE STREAM OTT



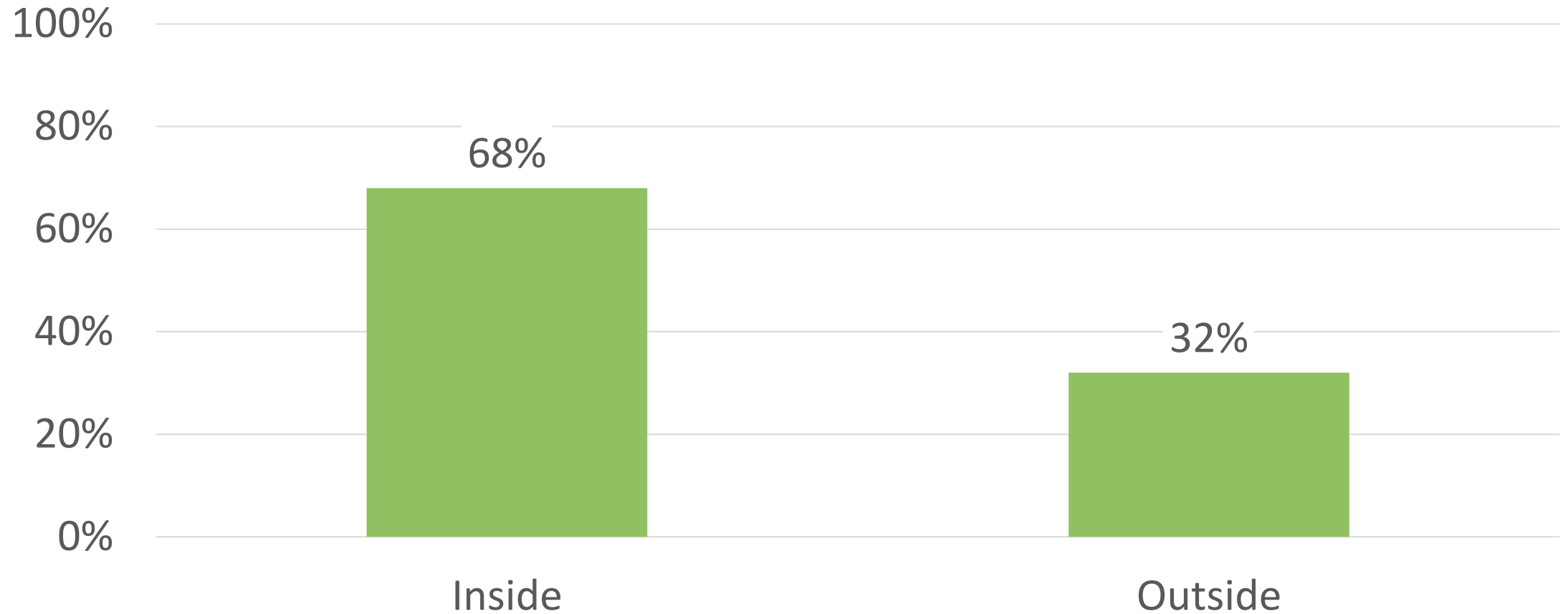
WATCHING TV ON IPADS & OTHER DEVICES



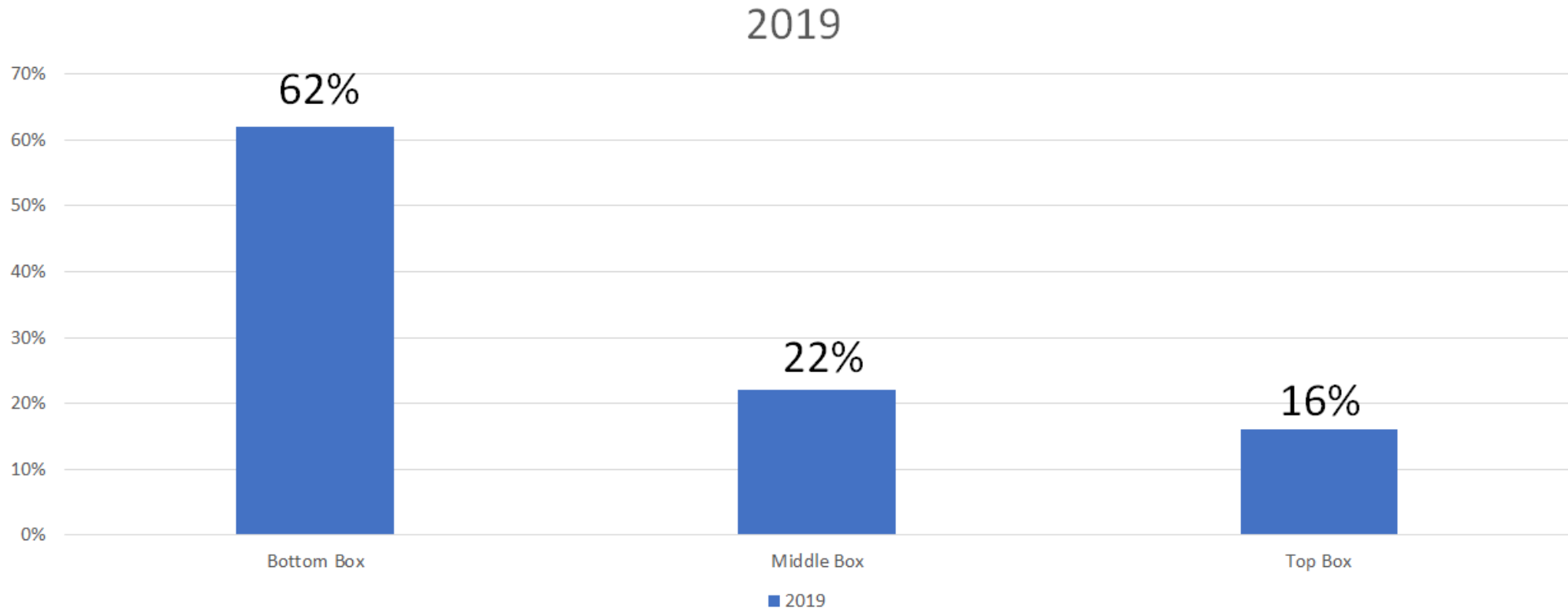
DO RURAL CONSUMERS USE MOBILITY DEVICES TO WATCH VIDEO?



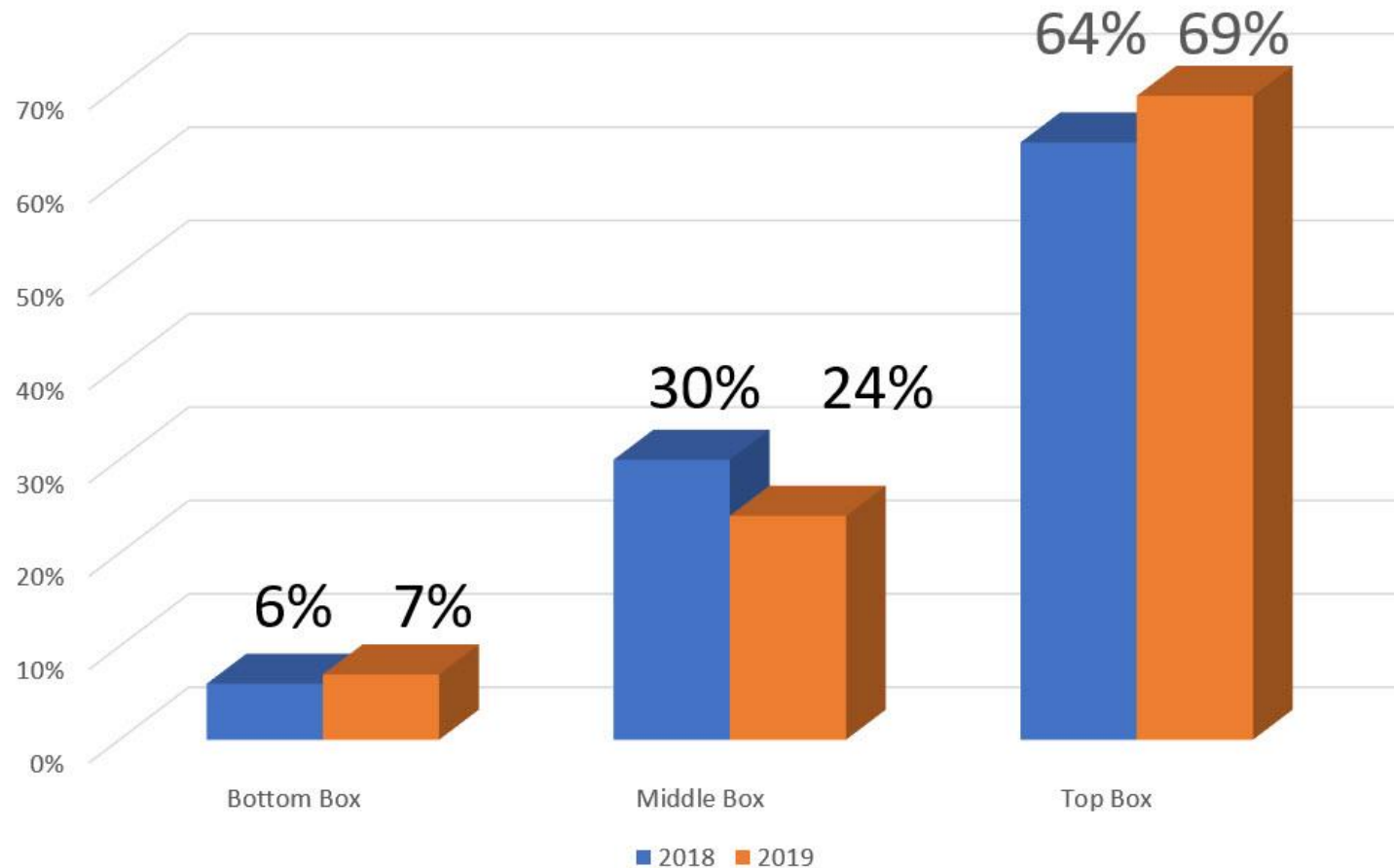
LOCATION OF MOBILE DEVICE VIEWING



DO RURAL VIDEO CONSUMERS REALLY WANT TO DITCH THEIR LINEAR SERVICE FOR STREAMING?



IMPORTANCE OF BUNDLED SERVICES

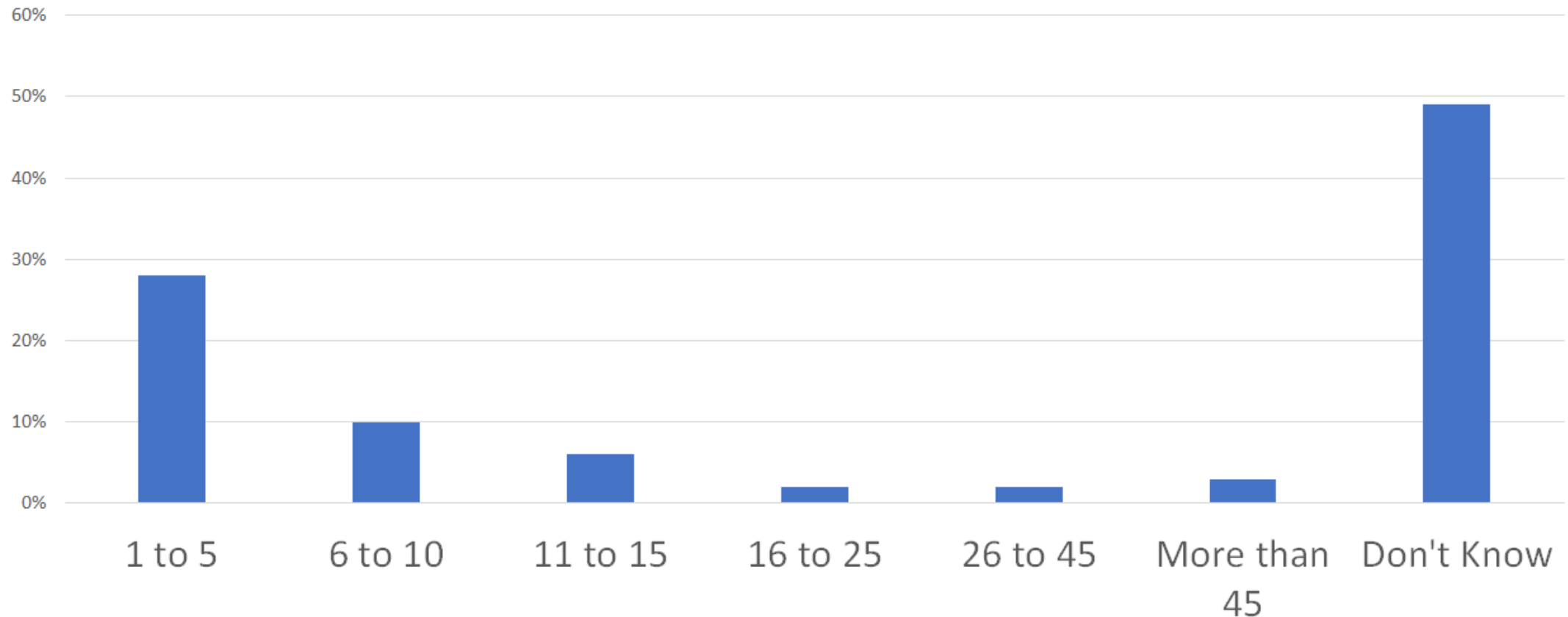


OFF-AIR CHANNELS

- A must in the Rural Market
- Access to Over the Air (OTA)
 - Difficult for most
 - Limited guide & DVR features
 - Contract rules apply

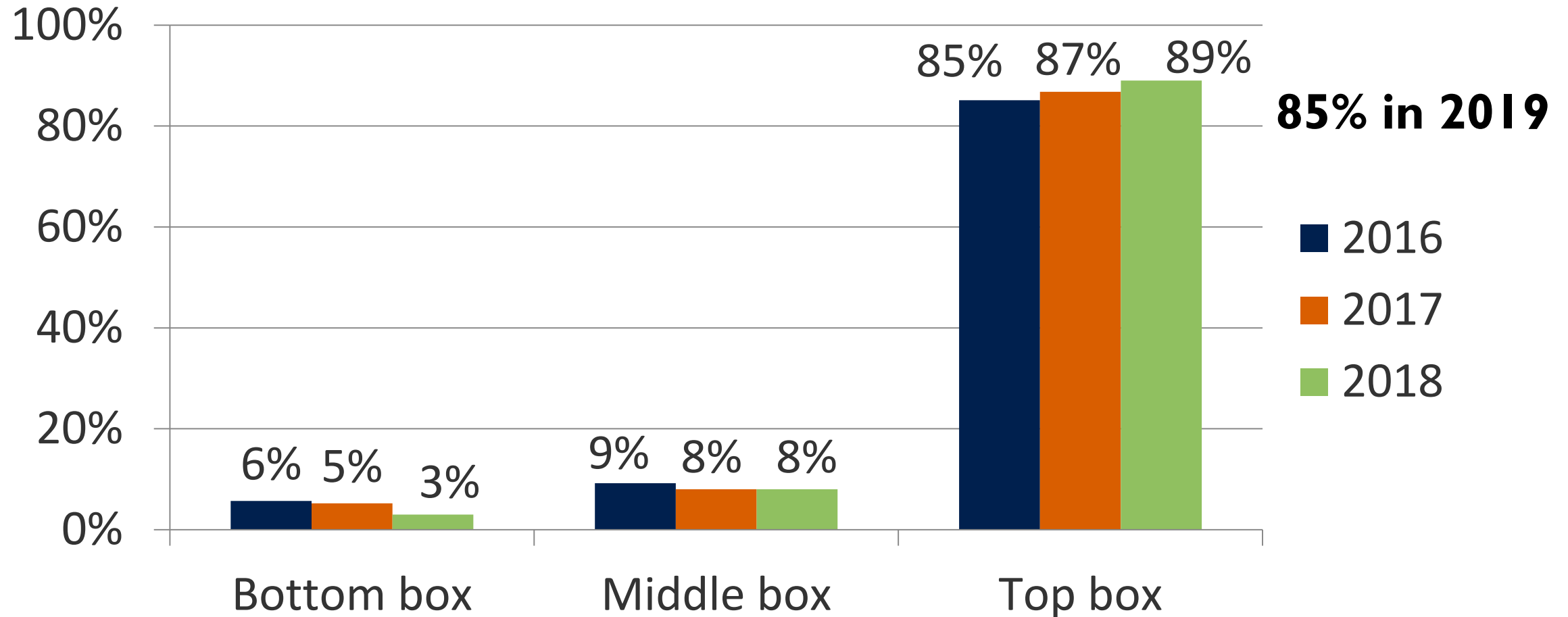


CHANNELS AVAILABLE USING AN ANTENNA: 2019



Innovative
Systems

IMPORTANCE OF LOCAL CHANNELS WITH LOCAL NEWS



LIVE STREAMING SUBSCRIPTION VIDEO: GAME PLAN

- Challenge Your Existing Vendors
- Roadmap For BYO Device
 - Roku, Apple, Phones & Tablets
- Use Existing Vendors
 - Why add new vendors for low margin product?
 - Keep video traffic close to home
 - Less training & quicker uptime

The screenshot shows a live streaming TV guide for the Harry show. At the top, there's a header for 'Harry' with a green checkmark icon, a time slot of '2:00 PM - 3:00 PM', and icons for HD, CC, and TV-PG. Below the header is a description: 'Veteran's Day Show Special With a Military Cook Off & Military Wedding Surprise!, Marvel's The Punisher Star Jon Bernthal An Air Force couple marry in-studio, and Harry performs for their first dance; members of the Navy, Air Force and Army have a cook-off; Jon Bernthal ("Marvel's The Punisher").' To the right of the text is a photo of Harry Connick Jr. sitting on a white chair in a studio setting.

	2:30 PM	3:00 PM	3:30 PM	4:00 PM
abc	Harry Veteran's Da... HD CC TV-PG	Inside Edition NEW Beach Dang... HD CC TV-PG	Jeopardy! NEW HD CC TV-G	The Ellen DeGener... Heidi Klum a... HD CC TV-G
CBS	KELOLAND Living	The Dr. Oz Show	NEW	Dr. Phil
FOX	Maury NEW	The Real		Steve
MeTV	The Rifleman	Wagon Train		Charlie's Angels
NBC	Rachael Ray	Hot Bench	Hot Bench	Judge Judy
PBS	Wild Kratts	Wild Kratts	Odd Squad	Odd Squad

LOOK TO A CONTENT NEGOTIATOR

- Works on Content Contracts Daily
- Contacts within Studios & Affiliates
- Armed to Negotiate Better Rates
- Working for Multiple Companies Simultaneously
- No Learning Curve for EVERY Agreement!
- View as a Great Partner!



EXPERIENCE & MARKET KNOWLEDGE REQUIRED

- Mergers & Acquisitions will continue in full force in 2019
- OTT – Wild West in Content Delivery
 - Don't be fooled by products that are too good to be true.
- Locast.org - OTA non-profit

WHAT A NEGOTIATOR MEANS TO YOUR COMPANY

- Never, Never, Ever "Sign and Send" - even if the rates are acceptable
- Reading the Fine Print
 - Looking out for "gotcha" language
 - Penetration requirements, Assignment clauses
- Preparation is Key, Knowledge is Power.

PARTNERS BRING MARKET KNOWLEDGE

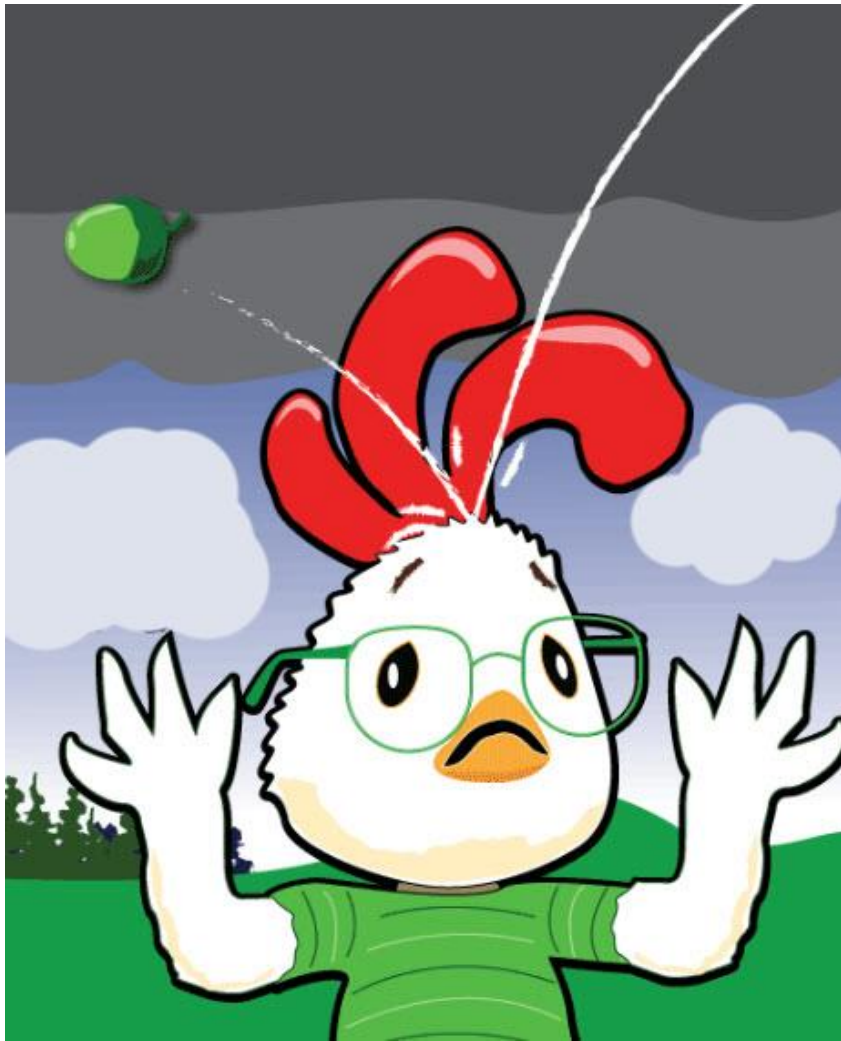
- Removes Negotiations from Staff
 - Frees up internal resources
 - Treat like consulting services
- Group Negotiations give you Leverage
- HLS is not a standalone solution – Part of Agreements

VIDEO STILL RULES

- Content Cost is a Concern
- Time-Shifted Video brings Features
- HLS brings options
 - Mobility is a must
- Importance of a Managed Service



THE SKY IS NOT FALLING!



“Easy to Use” Video Driver for Customers

- Learn What They Watch
- Learn How they Watch
- Adapt and Support Them
- Equal or Surpass their OTT Experience

RURAL CONTENT DIFFERS FROM URBAN DATA COLLECTED FROM 60K STBS!

Some of the Top 20....Are you surprised?



GOOD NEWS/BAD NEWS... BROADCAST NETWORKS RULE



- CBS = 58.4
- NBC = 46.1
- ABC = 34.3
- Fox = 15.2

NOT IN THE TOP 50 – HOW ABOUT THAT!



ENTERTAINMENT
TELEVISION



CNBC



NATIONAL
GEOGRAPHIC
CHANNEL **HD**

HEAD TO HEAD

Hallmark

ME TV

Inspirational

PBS

TV Land

MSNBC



ESPN

CNN

Discovery

Food Network

Disney

Animal Planet

VIDEO & OTT (HLS) UPDATES

- Time-Shifted Video & HLS are Differentiators
- Content Negotiator Brings Experience & Depth
- HLS is allowed, Treat Like Video over Managed Network
- Review your Channels Stats, Know your Important Channels
- HLS is Entering the Market, but NOT the Sole Answer



THANK YOU

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