

Welcome to the 2020 **#HPATechRetreat**
both the 25th Tech Retreat & the 25th anniversary

which, thanks to everyone, is

Sold Out, Again!

these slides are already at
bit.ly/hpa2020-intro



Mark Your Calendars!

2021 HPA Tech Retreat

- Week of February 22 through 25, 2021
- Here: Westin Mission Hills, Rancho Mirage, CA
- Submit proposals as soon as you'd like; deadline is October 30, 2020:
 - TVMark@EarthLink.Net or Media.Mark.Schubin@GMail.Com
 - if you don't hear from me, I probably haven't received your proposal



The Basics

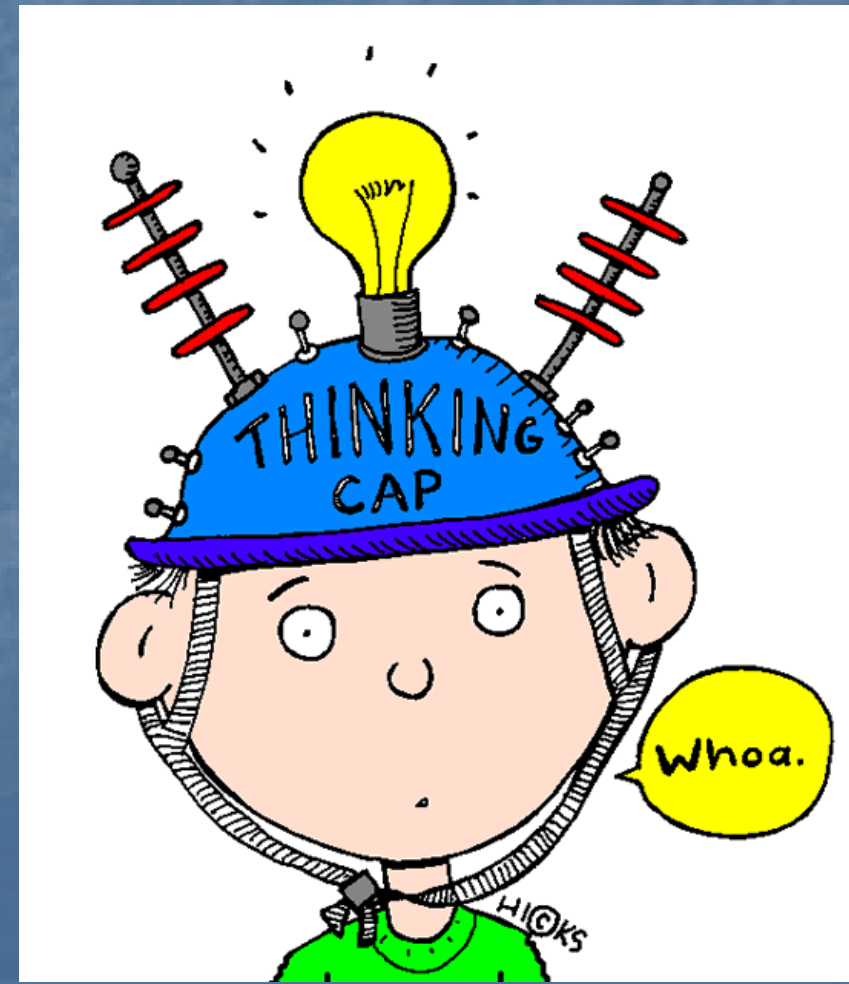


- The schedule rules
 - download the app or check online; there might have been changes
- Power available in all table rows, Wi-Fi in room
 - SSID: Westin_CONFERENCE Code: TECH2020
- Innovation Zone open to 8:30 pm today, tomorrow 8:30 am to 2 pm
- Breakfast roundtables in Oasis Ballroom
 - topic lists will be physically posted
 - breakfast roundtables are Liberty Hall; if you don't like one, move
 - slots still available; if you'd like to moderate one, please let me know
- 25th-Retreat After Party: Pinz & Pints 9 pm to 1 am tonight

for the app
(also at HPA
Tech Retreat
registration)

The Basics – Part II

- Quizzes:
 - all are eligible (except me); any research is ok; cheating is not possible (so go ahead & try)
 - answers *can* be found online (if you know where to look)
 - place entries in bowl by session end (quiz #4 by last refreshment break)
 - have name and quiz # on entry
 - no penalty for wrong answers
 - win at least a sticker or pin!



2020 Active Quizzes

- Quiz 0: Why did the player taken off the HPA Tech Retreat softball field in an ambulance check himself out of the hospital very early the next morning?
- Quiz 1: 1st Tech Retreat was 1995; why is 2020 25th?
- Quiz 4: On January 3, 2003, HPA Exec. Dir. Eileen Kramer called Mark Schubin to say, "Don't worry, but...." What was he not supposed to worry about?



The Basics – Part III

- Speakers: Send presentations or give to Max for posting (optional)
- No recording please (except for personal use)
- Be nice!
 - computer sounds muted
 - communications devices on vibrate or silent
 - **ALL** calls and conversations outside the room
- WiFi: Again, SSID: Westin_CONFERENCE Code: TECH2020
- Please fill out evaluations
 - app or <https://hpaonline.com/form/2020-tech-retreat-survey/>





HPA TECH RETREAT

HPA AWARDS

PROGRAMS

EVENTS

MEMBERSHIP

NEWS & PRESS

ABOUT

HPA Tech Retreat

Upcoming Events

- HPA Tech Retreat 2020
- Women In Post - HPA Tech Retreat Lunch
- NET March Lunch

Past Events

Program Presentations

Event Photo Galleries

password:
techretreat25

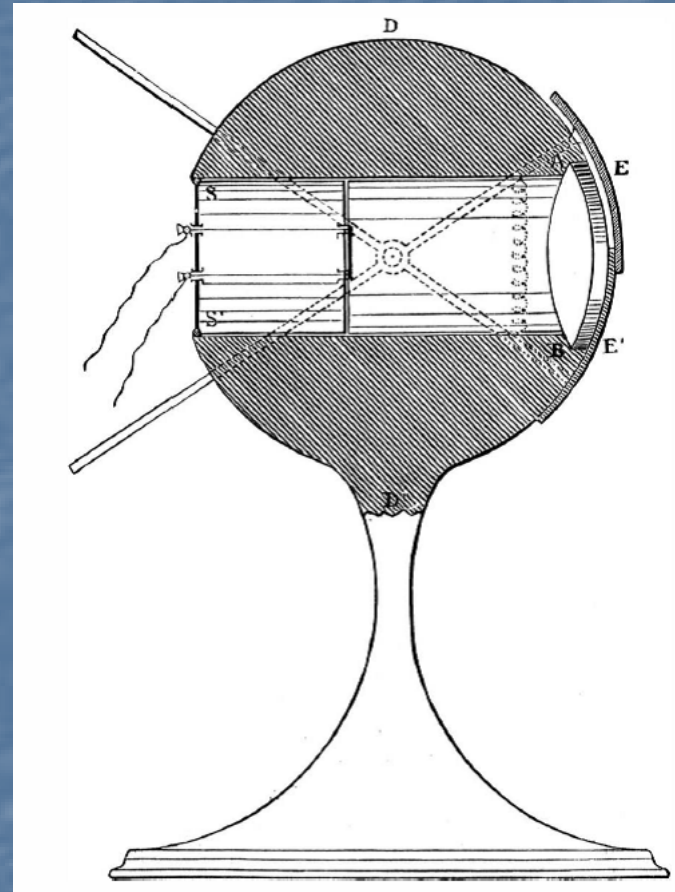
A Tech Retreat
February 17-20, 2020

Sold Out!

There will not be any onsite registration available. Please email events@hpaonline.com

<https://hpaonline.com/events/program-presentations/2020-program-presentations/>

The Technology Year in Review: Wasn't the Future Wonderful?



"Here we have then an
artificial eye which is
sensible to light"
Dr. C. William Siemens
*Proceedings of the Royal
Institution* February 18, 1876

144th year of the future of motion imaging

N INTERACTIVE FILM

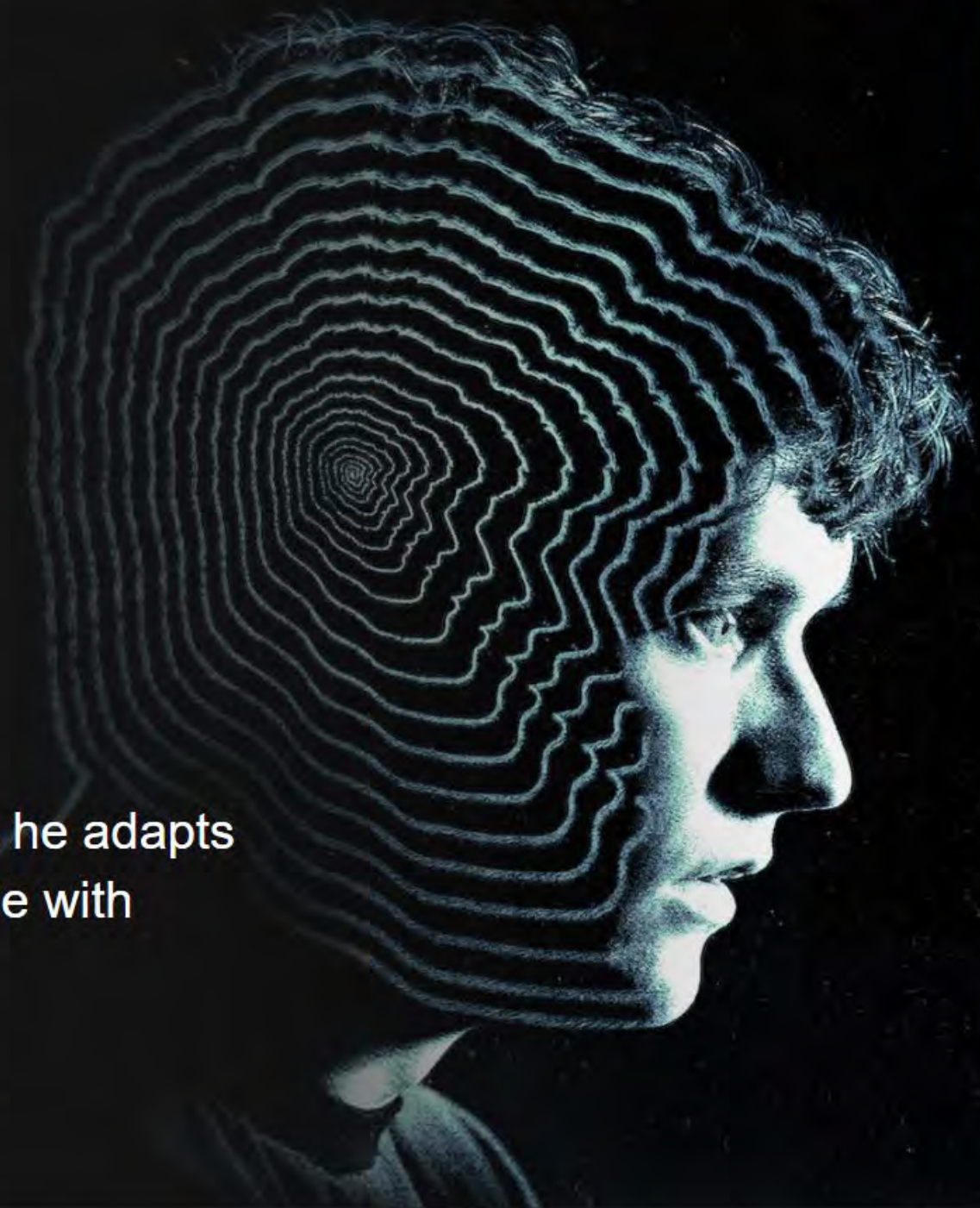
BLACK MIRROR BANDERSNATCH

Black Mirror: Bandersnatch

2018 | TV-MA | 1h 30m | Dramas

In 1984, a young programmer begins to question reality as he adapts a dark fantasy novel into a video game. A mind-bending tale with multiple endings.

Starring: Fionn Whitehead, Will Poulter, Craig Parkinson





US 2019 digital media entertainment spending top \$25BN

Joseph O'Halloran | 15 January 2020

Led by subscription streaming, and an annual rise total of 18% on digital formats, digital media entertainment spending in the US leapt 8.4% in 2019 to a record \$25.2 billion according to data from the Digital Entertainment Group (DEG).



Rush to cord-cutting, online video exaggerated claims VAB study

Joseph O'Halloran | 08 October 2019

The principal myth debunked is that everyone is cutting the cord and moving away from cable for other video substitutes and subscription, yet VAB says that the reality is the vast majority of US households today have a multichannel video programming distributor (MVPD) subscription (82 million) and it's still by far the leading video distribution access point for consumers, followed by over-the-air (OTA) -only delivery (18.4 million); over the top (OTT) -only (16.4 million); and virtual MVPD delivery (9.3 million). VAB noted that in 2020, projections estimate there will be four times more households with MVPD subscriptions (78.8 million) than OTT-only households (18.3 million) and seven times more than virtual MVPD households (10.8 million).

FEBRUARY 03, 2020

10:41 am PT by Rick Porter

TV Ratings: Super Bowl LIV Draws 100M Viewers, Up Slightly vs. 2019

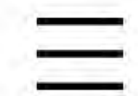


FEBRUARY 03, 2020

10:41am PT by Rick Porter

TV Ratings: Super Bowl LIV Draws 100M Viewers, Up

Super Bowl LIV drew an average of 99.9 million viewers and a 41.6 household ratings, both slight upticks from CBS' broadcast of Super Bowl LIII in 2019 (98.2 million, 41.1). Per Fox Sports, a Spanish-language simulcast on Fox Deportes and streaming on Fox, NFL and Verizon platforms boosted the average viewership to 102 million, a very small increase on last year's multiplatform audience of 101.7 million.



CMO TODAY

The Super Bowl Is Still TV's Ballgame, With Streaming Far Behind

Fox's streaming-only ads for the Super Bowl were priced between \$300,000 and \$400,000 for 30 seconds of ad time

TV beat streaming?



CMO TODAY

The Super Bowl Is Still TV's Ballgame, With Streaming Far Behind

Fox's streaming-only ads for the Super Bowl were priced between \$300,000 and \$400,000 for 30 seconds of ad time

100M viewers - \$5.6M/30 seconds = 5.6 cents/viewer
2M(?) viewers - \$400k/30 seconds = 20 cents/viewer

2020 Oscars Broadcast Hits a New Ratings Low



By John Koblin

Feb. 10, 2020



Viewership for the Oscars plunged to a new low on Sunday night, with an audience of 23.6 million tuning in to watch the broadcast on ABC, according to Nielsen.

That's a 20 percent drop from last year, and roughly three million fewer than the number of people who tuned in for the 2018 ceremony, the previous low. Those numbers do not include viewers who watched the broadcast on streaming platforms.

ABC Sells Out Oscars Ad Inventory, With 30-Second Spots Going for Up to \$2.8 Million

One week after the Super Bowl, advertisers again create custom ads for a big TV audience

By Jason Lynch | 3 days ago



**THE LEADER
IN LOCAL
OTT**

[WATCH NOW >](#)

gamut
TOTAL

How to Navigate a Flood of Streaming TV Subscriptions

We wanted à la carte television, and now we have it — and it costs more than cable. Here's how to watch your favorite shows without overpaying for a dozen apps.

By Eric Ravenscraft

Jan. 14, 2020



Thousands of hacked Disney+ accounts are already for sale on hacking forums

Hackers began hijacking accounts hours after Disney+ launched earlier this week.



By [Catalin Cimpanu](#) for [Zero Day](#) |
November 16, 2019 -- 08:00 GMT (00:00 PST) | Topic: [Security](#)

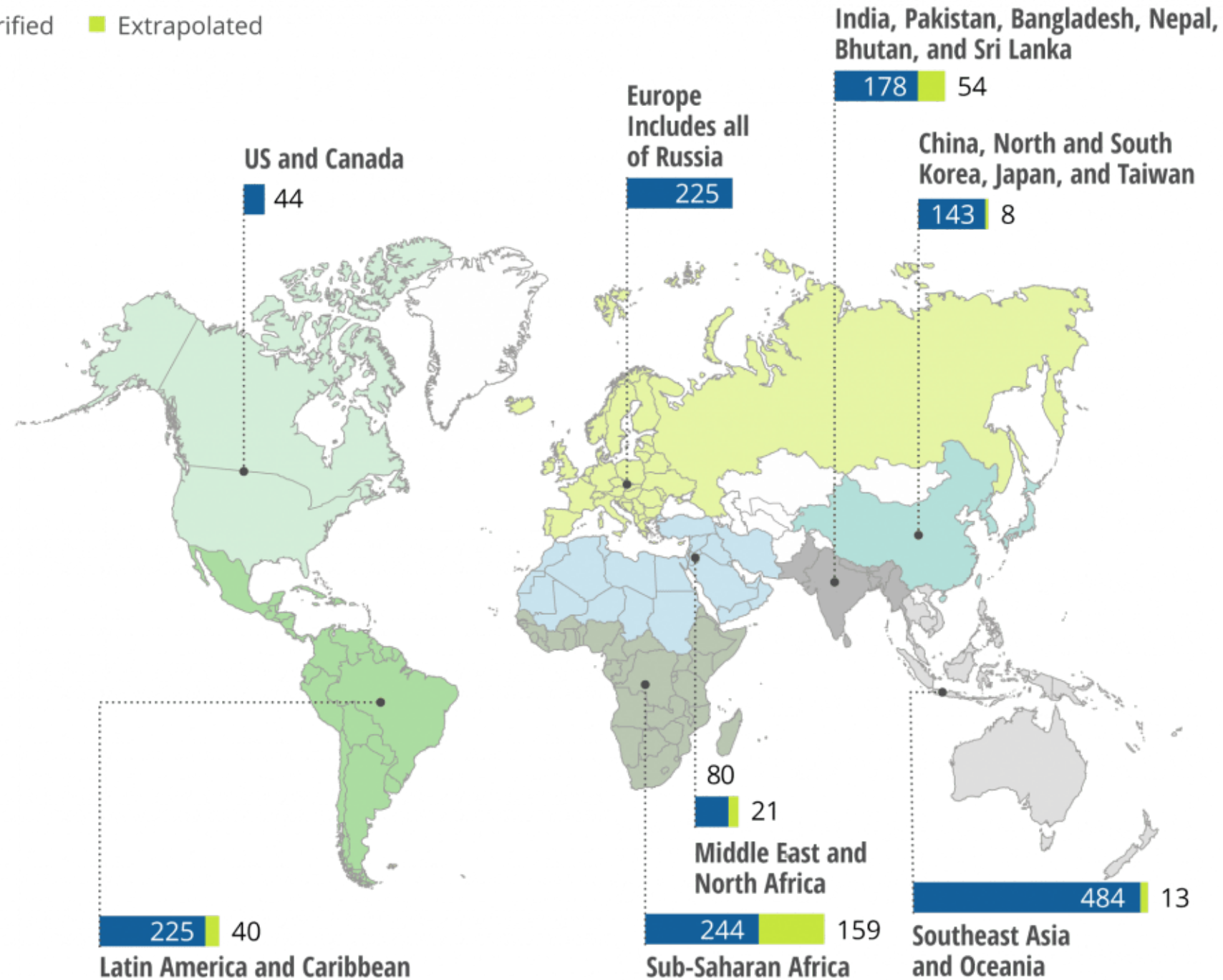


FIGURE 1

Rumors of antenna TV's death have been greatly exaggerated

Predicted number of antenna TV viewers in 2020 (millions)

■ Verified ■ Extrapolated



1.9 billion

Source: Deloitte analysis of public data.



JANUARY 29, 2020 6:17pm PT by Carolyn Giardina

Studios Re-up Kodak Deals to Keep Celluloid Film Alive

The five major studios — Disney, NBCUniversal, Paramount, Sony and Warner Bros. — have inked new deals with Kodak, the film manufacturer said Wednesday, committing to buying undisclosed amounts of motion picture celluloid and thus guaranteeing its continued use for the foreseeable future.

The first such pacts between Kodak and the studios [were struck in early 2015](#), roughly 18 months after the film manufacturer emerged from bankruptcy protection. At the time, its film sales had plummeted as the use of digital imaging

Record Breaking Year for European Cinema Attendance

By Patrick von Sychowski | February 17, 2020 8:46 am PST



0



0



0



0



0



Theater Owners Celebrate A Robust 2019 Box Office And Note Strength Of Upcoming Films

2019 second-highest box office ever

Movies grossing under \$100 million grossed the same in 2018; unaffected by streaming

Despite the focus on the share of the top 10 movies in 2019, movies grossing over \$100 million actually accounted for the same share of the total box office in 2019 as in 2018 (63.8% v 63.9%). More significantly, titles grossing under \$100 million accounted for essentially the same revenue at the box office in 2019 as in 2018 (\$4.41 billion v \$4.43 billion). These are the exact type of movies that streaming is said to be harming.

VARIETY



FILM

TV

MUSIC

TECH

GAMING

THEATER

R

HOME > DIGITAL > NEWS

DECEMBER 5, 2018 7:52AM PT

Tom Cruise Explains Why HDTV 'Motion Smoothing' Is Terrible, Urges Movie Fans to Disable It

By **TODD SPANGLER** 



PRESS RELEASES 1 hour ago

UHDA's Filmmaker Mode Recognized by DGA, ASC, ICG and the Film Foundation as Preferred Way to Deliver Creative Intent for Home Viewing

While Filmmaker mode received a lot of promotion at CES, I am not a fan. That's because Filmmaker mode turns off all the picture processing (motion, noise, sharpness) to theoretically recreate what the content creator intended. But TVs don't behave like grading monitors. As a result, high-contrast scenes in HDR content can exhibit increased judder especially on larger TV screens, in addition to sometimes objectionable motion blur and noise. When SDR content is viewed in Filmmaker mode, the full screen luminance is capped at 100 nits and the gamma is set to 2.4. This is much closer to what the colorist sees in the grading suite, but it is likely to look too dark to most consumers. Both of these issues – lower brightness with SDR and increased judder with HDR may make many consumers want to turn off Filmmaker mode.

LG and Panasonic recognize these concerns. Panasonic specifically announced what they call “Intelligent Sensing” designed to work with both SDR and non-Dolby Vision HDR content when operating in Filmmaker mode. It uses the light sensor to adjust the picture, but details of how it works were not revealed. (Philips has also highlighted in its 2020 European launch that it is using AI to detect different types of content and optimise appropriately - Editor)

DISPLAY DAILY 7 months ago

Games of Thrones: The Very Dark Night - What went wrong (and how can WE fix it)?



Samsung's Adaptive Picture appears to work in a similar manner but leverages the HDR10+ Bezier functions built into

5G

Wash

Hollywood

Friday, December 8, 2019

5G Rescues Kittens & Puppies

Hollywood, HPA News Service

After firefighters declared the five-alarm fire burning at a warehouse at Hollywood & Vine to be hopelessly out of control, the owner said there was a crate of cute kittens & puppies in his office. Fire chief Etaoin Shrdlu said he was very sorry, but there was no way he could rescue them.

Just then, 5G showed up,

leaping over barriers and smashing through walls with record speed. The gathered crowd gasped but cheered and applauded moments later when 5G emerged, holding all of the cute kittens and puppies, which were completely unharmed.

The mayor said 5G deserves a medal and will be given the key to the city at the next HPA Awards ceremony.

Refollimp

The that rela the beh of a exp in l its beh con or v



5G Solves Climate

By I. P. DALEY

Geneva (TVN): Scientists at the International Summit on Climate Change were astonished to discover that 5G had completely solved the climate crisis. Conference leader Professor Sanjay Mehta of Mumbai Institute of Technology said he was skeptical at first.

"I enlisted all of the facilities of the Worldwide Climate Modeling Group," Professor Mehta reported, "and we ran the numbers ten times

5G

Wash

Hollywood

Friday, December 8, 2019

5G Rescues Kittens & Puppies

Hollywood, HPA News Service

After firefighters declared the five-alarm fire burning at a warehouse at Hollywood & Vine to be hopelessly out of control, the owner said there was a crate of cute kittens & puppies in his office. Fire chief Etaoin Shrdlu said he was very sorry, but there was no way he could rescue them.

Just then, 5G showed up,

slapping over banners and smashing through walls with a record speed. The gathered crowd gasped but cheered and applauded moments later when 5G emerged, holding all of the cute kittens and puppies, which were completely unharmed.

The mayor said 5G in deserves a medal and will be given the key to the city at the next HPA Awards ceremony.



5G Solves Climate

By I. P. DALEY

Geneva (TVN): Scientists at the International Summit on Climate Change were astonished to discover that 5G had completely solved the climate crisis. Conference leader Professor Sanjay Mehta of Mumbai Institute of Technology said he was skeptical at first.

"I enlisted all of the facilities of the Worldwide Climate Modeling Group," Professor Mehta reported, "and we ran the numbers ten times

A Real 5G Exhibit at CES





204,879 views | Jan 10, 2020, 05:13pm

Somebody Snuck A Potato Into CES 2020 To Make A Scathing Point About Useless Smart Gadgets



Pete Pachal Contributor ⓘ

Pete Pachal is a veteran tech journalist and the former Tech Editor of Mashable.





SUBSCRIBE

🔍 ≡ SIGN IN ▾

ONE MORE G, BUT NO MORE SPEED —

At launch, AT&T's real 5G will only be as fast as its fake 5G

5G on low-band spectrum will be similar to LTE-Advanced until further upgrades.

JON BRODKIN - 11/22/2019, 12:50 PM

5G Underwhelms in Its First Big Test

In South Korea, where the next-generation wireless network has been rolled out widely, download speeds have risen but many users aren't impressed



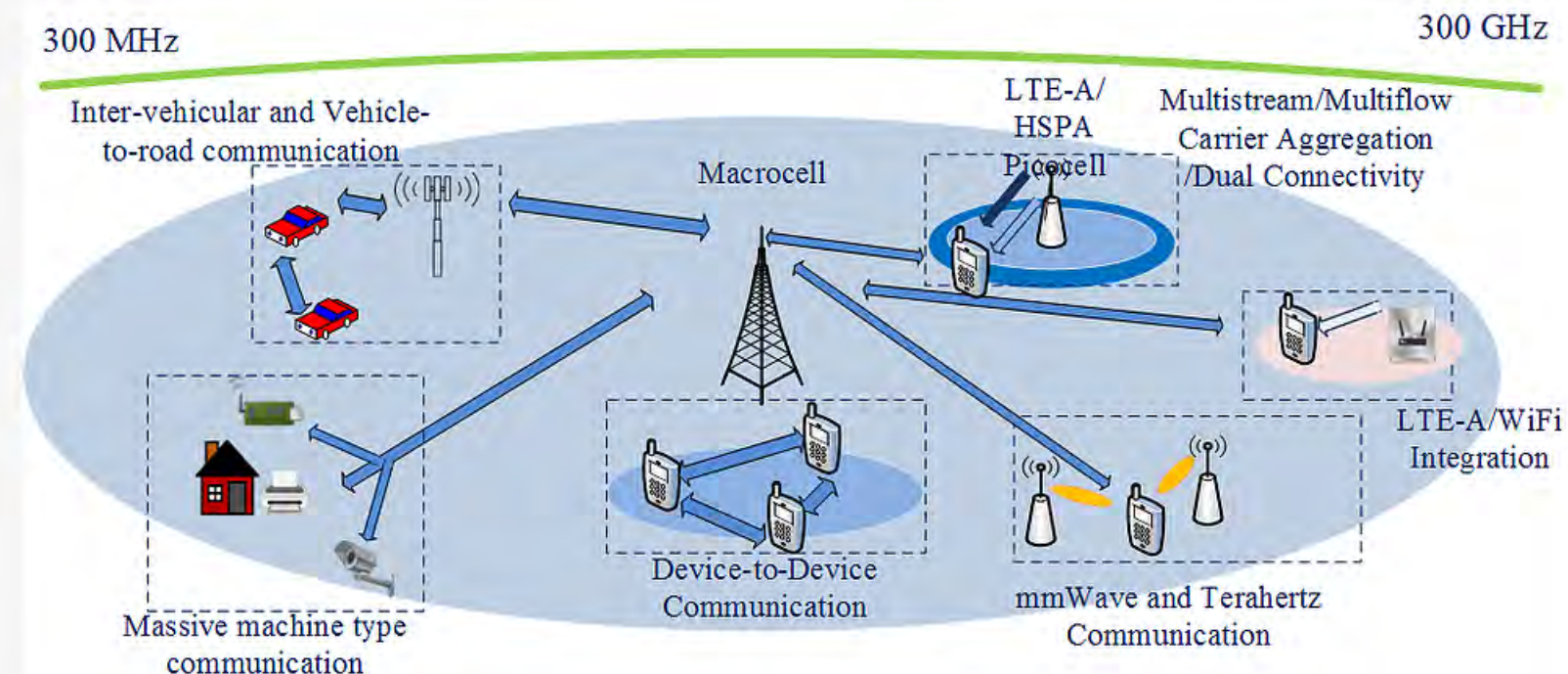
SHELTER ISLAND
FARM

In Addition to All That and Huawei

thefoghornexpress.com/single-post/The-5G-Network-What-You-Dont-Know-Can-Kill-You

The 5G Network: What You Don't Know May Kill You

April 3, 2017 | Reinette Senum





Home Theater

Super Bowl 2020: The madness and magic behind the game's first 4K HDR broadcast

By Caleb Denison

January 30, 2020 10:43AM PST





Home Theater

Super Bowl 2020: The madness and magic behind the game's first 4K HDR broadcast

By Caleb Denison January 30, 2020 10:43AM PST



Thanks to Pete Putman for the term "Faux K"

Consumers Top Cable Data Limits by Streaming 4K Video

By Debra Kaufman

August 19, 2019

Some consumers who binge on Netflix shows and other streaming programs in Ultra HD are beginning to feel the financial pinch. The 4K content quickly eats up users' data caps — and costs them extra money for more high-speed Internet access. The number of such “power users” has reportedly doubled in the past year, and shows no sign of decreasing as more companies are unveiling new streaming video services. Consumers who

also sometimes insufficient bandwidth
(tip o' the hat to Craig Todd)



DISPLAY DAILY 2 hours ago

Your Display's Night Mode Could Keep You Awake





[Home](#) » [Archive](#) » DFL tests world's first football broadcast in 9:16 format

DFL tests world's first football broadcast in 9:16 format





GEMINI MAN

10.11.19

OFFICIAL TRAILER



GEMINI MAN

HFR & De-ageing

10.11.19

OFFICIAL TRAILER

Epilepsy Foundation Was Targeted in Mass Strobe Cyberattack

Hackers sent images of flashing strobe lights to the foundation's thousands of Twitter followers in several attacks.



image
trimmed

The journalist Kurt Eichenwald was sent a strobing image over Twitter that caused him to have an epileptic seizure. Brandon Thibodeaux for The New York Times

Resiliency

← → ↺ ⓘ bbc.com/news/technology-50851420

BBC  [News](#) [Sport](#) [Reel](#) [Worklife](#) [Travel](#) [Future](#) [More](#) 

NEWS

Technology

Google goes offline after fibre cables cut

🕒 19 December 2019    

Eastern Europe & Middle East



Opinion | [THE PRIVACY PROJECT](#)

Jeff Bezos' Phone Hack Should Terrify Everyone

Those with the most to lose don't always safeguard their privacy very well. You can do better.



By [Charlie Warzel](#)

Mr. Warzel is an opinion writer at large

Jan. 24, 2020



289

Home / Hardware
Home / Engineering



f 6.9K

t 58

in Share

✉ Email

OCTOBER 29, 2019 [REPORT](#)

OmniVision announces world record for smallest image sensor

by Bob Yirka , Tech Xplore

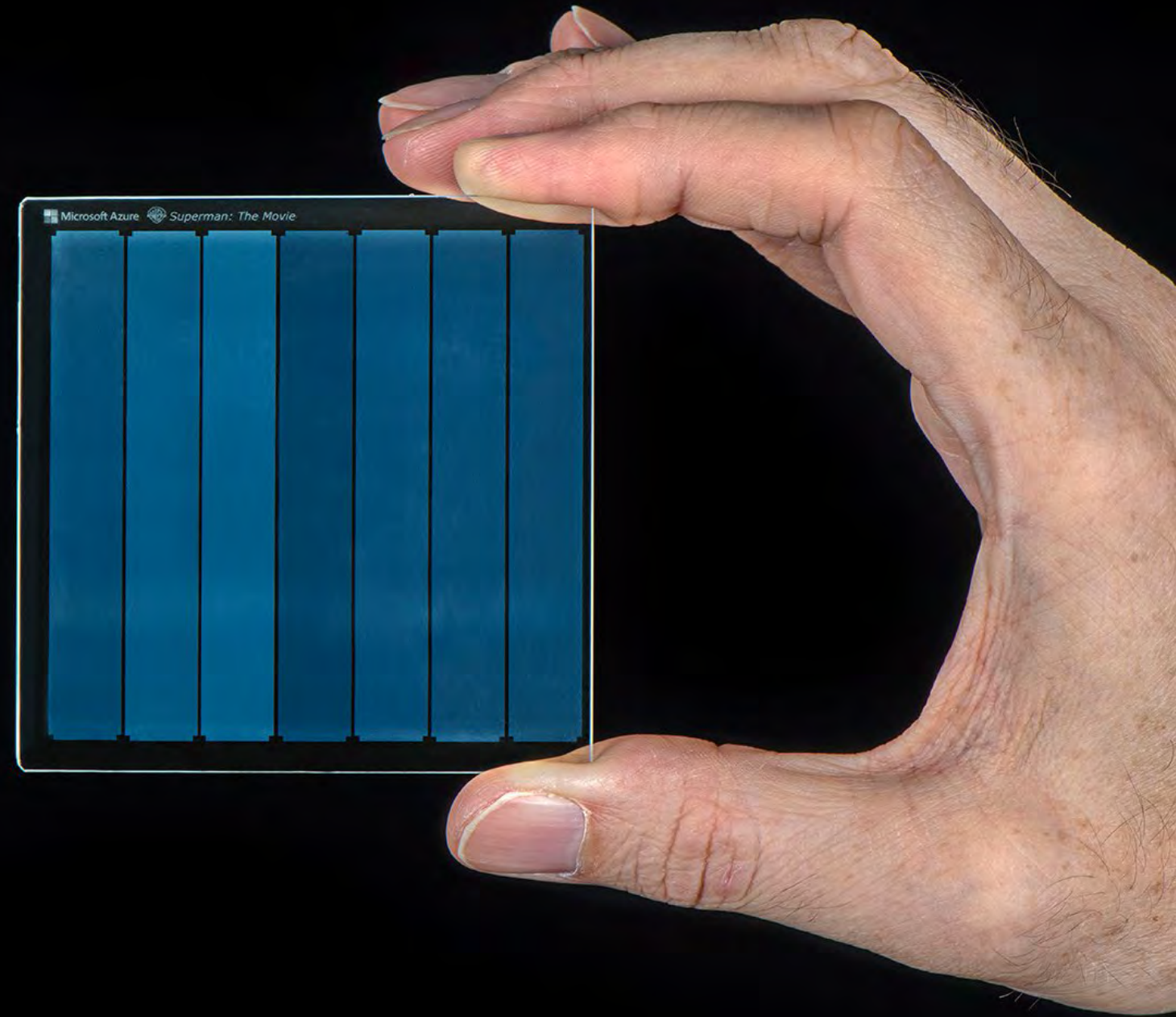


Credit: OmniVision

0.65 mm x
0.65 mm
camera module

Long-Term Storage on Glass

Microsoft Project Silica
proof of concept
all of *Superman* – 75.6 GB
7.5 x 7.5 cm



portion of photo by
Jonathan Banks for
Microsoft



· All topics · Video · Slideshows · Deals · Online Courses · Newsletter · Resources/White Papers



Home > Storage

Optware to commercialize 1T-byte optical disc



By Kuriko Miyake

IDG News Service | FEBRUARY 20, 2002

FEBRUARY 20, 2002

Questions?

(if time allows)

these slides are already at
bit.ly/hpa2020-intro