

MM

Media Monthly

Report Summarizing Select Media & Tech Activity

March 2020



PJ
SOLOMON

Recent PJ SOLOMON Transactions



Sale of Select Stores to



Serving as Financial Advisor to Lucky's Markets



Sold to an affiliate of



Serving as financial advisor to the Special Committee of Stein Mart



Sale of the Joseph Abboud trademarks to




Served as financial advisor to Tailored Brands





Sold to



Served as financial advisor to New Seasons Market LLC



Acquired



Served as financial advisor to Genesco



Has acquired select assets from



Advised Five Below on its acquisition of e-commerce, fulfillment and select other assets from Hollar.com



Formed a JV with Basic Resources for all of its socks and hosiery brands in the US and Canada and agreed to terminate early the licenses for the global Calvin Klein and Tommy Hilfger socks and hosiery businesses

Served as financial advisor to PVH



Acquired San Juan Basin Position of



Served as exclusive financial and technical advisor to IKAV



Sale of



to LE TOTE

Served as financial advisor to Hudson's Bay Company

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The Coronavirus' Impact on Media and Advertising

Key Takeaways and Predictions for Media and Advertising

- Advertising analysts and researchers say if the coronavirus remains more contained with more minor disruption, any displaced ad budgets could be reallocated for later this year
 - If more major disruption occurs, the industry could be more significantly impacted
- Areas such as streaming TV and video games could see higher usage and therefore higher ad spend if consumers are spending more time indoors
- The cancellation of major events such as the Olympics would have a major impact on ad spend
- Unlike other ad mediums, the contractual nature of OOH (out of home) allows operators to withstand changes in short-term advertising behavior

"In short, there appears to be a **basis for optimism** around a resumption of normalcy — or at least a **'new normal'** — in the coming months. Unfortunately, much of the rest of the world is only now going through what China has gone through over the prior two months. This means that we likely have yet to see the worst play out." – *Brian Wieser, Global President of Business Intelligence for GroupM*

"**Advertising's relationship with GDP is strong**, but a slowdown in economic output as a result of the virus will not necessarily translate into reduced advertising investment." – *World Advertising Research Center*

"It does seem safe to say that the aforementioned **supply chain issues** with **China** – and the timing with which Chinese manufacturing returns back to normal – will **disproportionately impact global media owners** whose ad revenues depend on Chinese manufacturers." – *Brian Wieser, Global President of Business Intelligence for GroupM*

"In uncertain times, there's **desire to shift spend** to more measurable media. In today's **OOH (out of home) that delivers up and down the marketing funnel**, mobile ID and other data enable us to see lift and KPIs from store sales and web usage." – *Digital Place Based Advertising Association*

Source: GroupM, CNBC and DPAA.

Digital Signage Trends of the Next Decade

Market expected to grow to \$33B+ by 2026

Continuing Trends

- 1 Display sizes will continue to grow with 55" to 65" being the mainstream and greater than 82" no longer uncommon
- 2 Videowalls will proliferate further with increased focus on encapsulating viewer's attention
- 3 Direct view LED will gain more market share primarily due to image impact (color, contrast and brightness)

New Trends

- 1 Artificial intelligence is increasingly enabling and facilitating the gathering of data, automating processes and making digital signage more efficient
- 2 Increases precision in measurements that feed analysis and decision-making
- 3 Pair anonymous video analytics and actual sales data to compare impact of digital signage to actual results
- 4 IoT, which is about the connectivity and ability to communicate with and among devices, and Big Data, the information flowing between devices, are growing exponentially

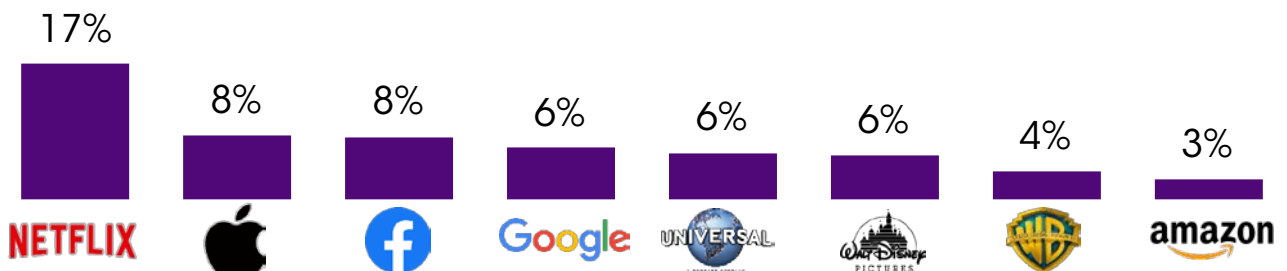
Source: Commercial Integrator interview with digital signage expert Alan Brawn.

Option Overload & the Need for Alternative Advertising

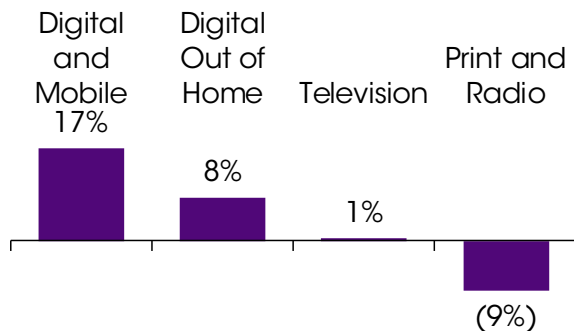
Streaming services must advertise through OOH media to effectively reach consumers

- Streaming services must utilize and embrace out of home (OOH) media, specifically digital out of home media (DOOH), in order to aggregate an audience, reach consumers and win their share of wallet
 - OOH, unlike TV, print and radio, is expected to achieve meaningful channel growth in 2020
 - As customers continue to be bombarded by new options, it will be important for streaming services to showcase relevant content offerings
- The stakes for streaming services are enormous, as the dollars being spent on both content and advertising represent significant portions of total cost structure
- OOH is a native media channel for the largest technology and streaming companies, which have historically spent a meaningful portion of their advertising budget on OOH
- OOH media has been shown to be effective, as Facebook found that exposure to OOH media in isolation led to an 11% increase in reach

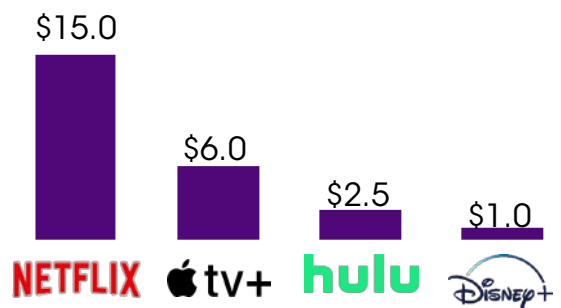
Percentage of Advertising Spend on OOH (2018)



US Channel Growth (2019E)



Content Spend (2019)



Source: eMarketer, Wall Street Research, Kantar Media, OAAA, Facebook and other publicly available information.

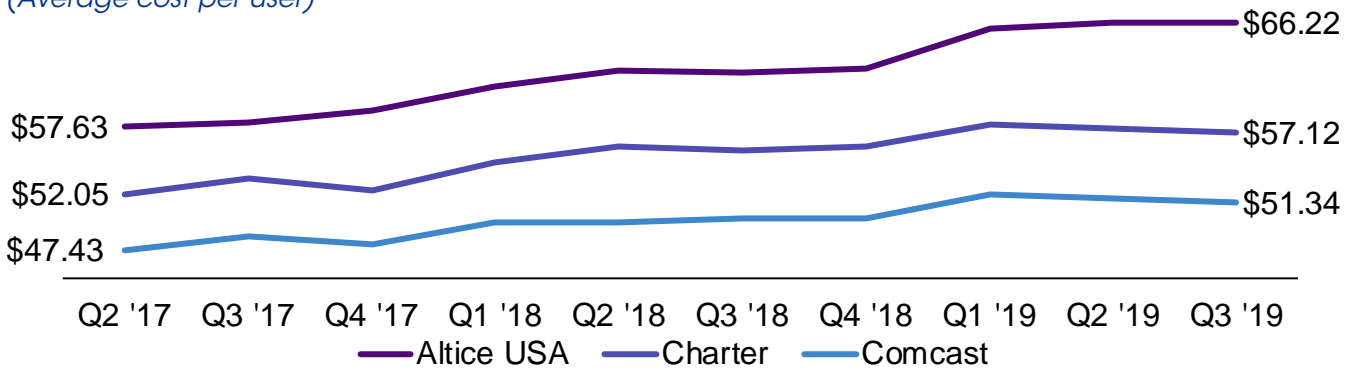
Continued Rise in Cord Cutting

Pay-TV abandonment rate accelerated 70%+ in the U.S. in 2019

- Large U.S. cable and satellite companies lost 5.5 million traditional pay-TV customers last year
 - Significantly greater than 3.2 million customers lost in 2018
- The top three leading cable providers (Comcast, Charter and Altice USA) together lost more than 1 million pay-TV customers
- Satellite providers fared the worst in 2019, with AT&T's DirecTV losing 3.4 million satellite and fiber-optic TV connections in the United States
 - Dish Network lost 500,000 satellite subscribers in 2019
- As of Q3 2019, 93.9 million people utilized internet-based TV services to access content compared to only 84.5 million utilizing pay-TV

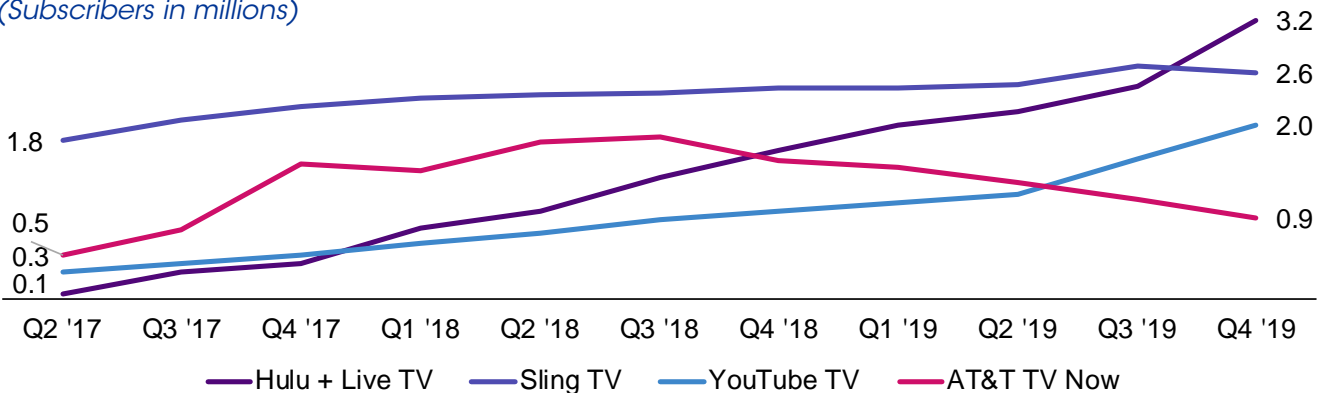
Per-User Costs are Rising for Cable TV Providers

(Average cost per user)



Smaller Streaming Platforms Continue to Take Share and Subscribers

(Subscribers in millions)



Source: Wall Street Journal.

Streaming Services Industry Update

Industry continues to gain momentum as consumers cut the cord

Company

Recent News



- Added 8.4M international subscribers in Q4 2019 (added 400K domestic), increasing its total subscriber count to 167.1M
- Netflix expects cash flow of (\$2.5B) in 2020 as it continues to pursue a cash flow positive business model



- In spring 2020, YouTube TV will offer HBO Max to its subscribers that add on HBO
- By Q4 2019, streaming commissions represented 73% of WarnerMedia's new TV projects, a clear shift from HBO's historical focus on cable programming



- Reported 30.4M subscribers as of February 3, 2020
- 27.2M subscribe to Hulu's SVOD service only and 3.2 million subscribe to both SVOD and live TV
- Hulu with Live TV had 1.7M subscribers a year ago



- Apple TV Plus scored its first major Hollywood award with Jennifer Aniston winning the "Best Female Actor in a Drama Series" at the SAG Awards for "The Morning Show"
- Continued award show success will be critical to solidifying Apple TV Plus as a premium streaming option



- Reported that Disney+ achieved 28.6M paid subscribers as of February 3, 2020
- 20% of subscribers have come from Verizon, who provides certain customers with 12 months of Disney+ for free



- During its investor conference in January, executives announced that Peacock would include a free tier of streaming, as well as premium subscriptions that run for as low as \$4.99 / month
- Premium option will provide users with more than 15,000 hours of content

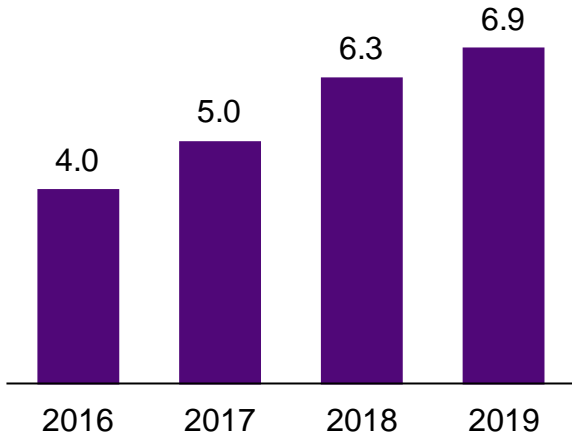
Source: Company websites, Fierce Telecom, New York Times, Hollywood Reporter.

TiVo Video Trends Report

Report highlights consumer trends in pay-TV / streaming in 2019

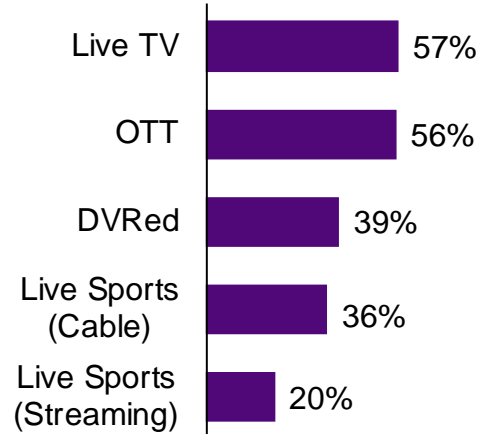
Streaming Accounts per Household

(Streaming services)



OTT Approaching Live TV

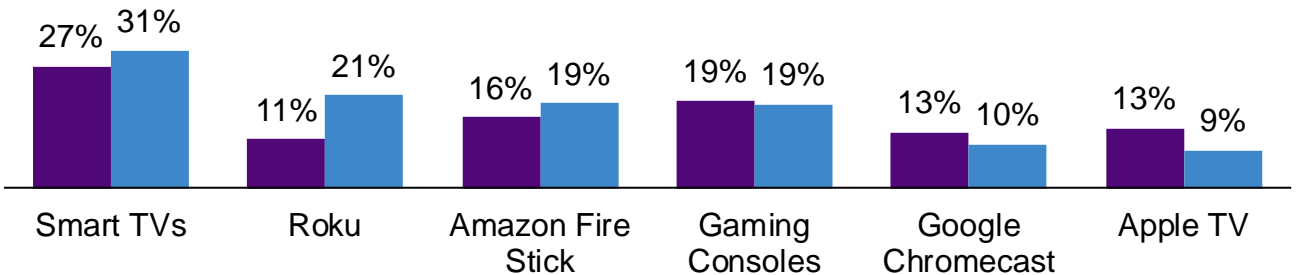
(% that watched 1+ hour of TV per day)



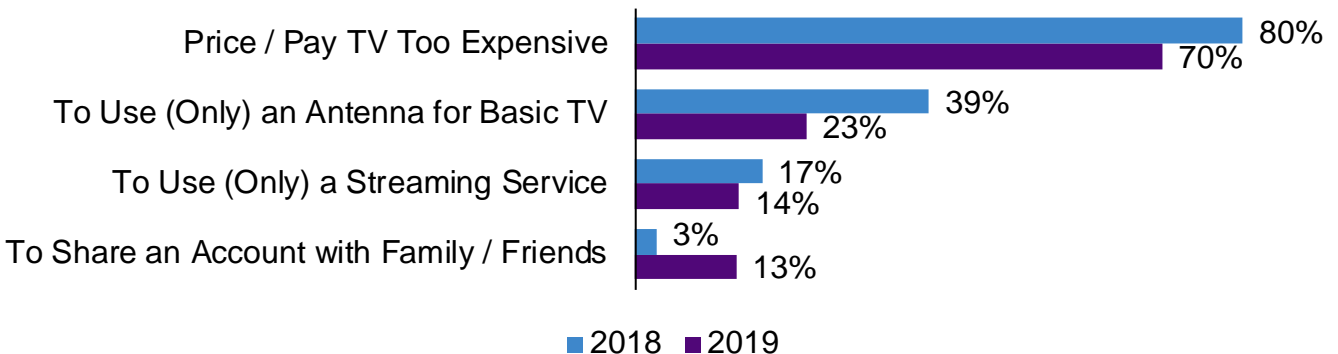
Top Streaming Device Options Ranked by Popularity

(% of survey respondents)

■ 2018 ■ 2019



Reasons for Cutting the Cord

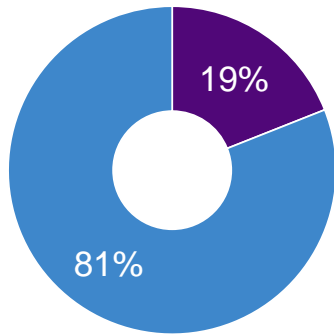


Source: TiVo Video Trends Report Q4 2019.

Streaming Services Consumer Trends

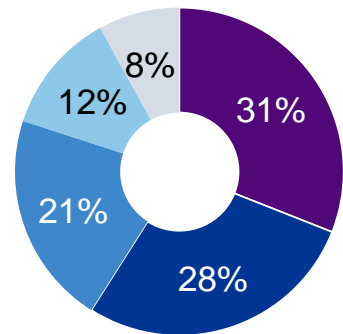
Consumers are increasingly turning to streaming for media content

TV Consumption by Channel



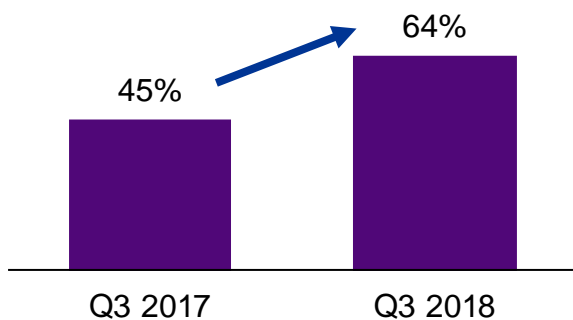
■ Streaming ■ Other TV

Streaming Distribution by Brand

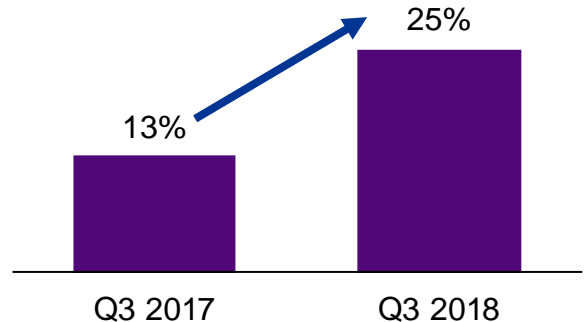


■ Netflix ■ Others ■ YouTube
■ Hulu ■ Amazon

Smartphone Audio Streaming Penetration



Tablet Audio Streaming Penetration



Key Consumer Media Consumption Trends

12 hrs

spent per day across TV, TV-connected devices, radio, smartphones and tablets

646k

unique program titles were available to consumers via streaming services in 2019

91%

of U.S. adults currently subscribe to at least one paid streaming service

30%

of U.S. adults currently subscribe to three or more paid streaming services

Source: TechCrunch, Nielsen.

It's a Done Deal

Federal Court officially signs off on the T-Mobile / Sprint merger

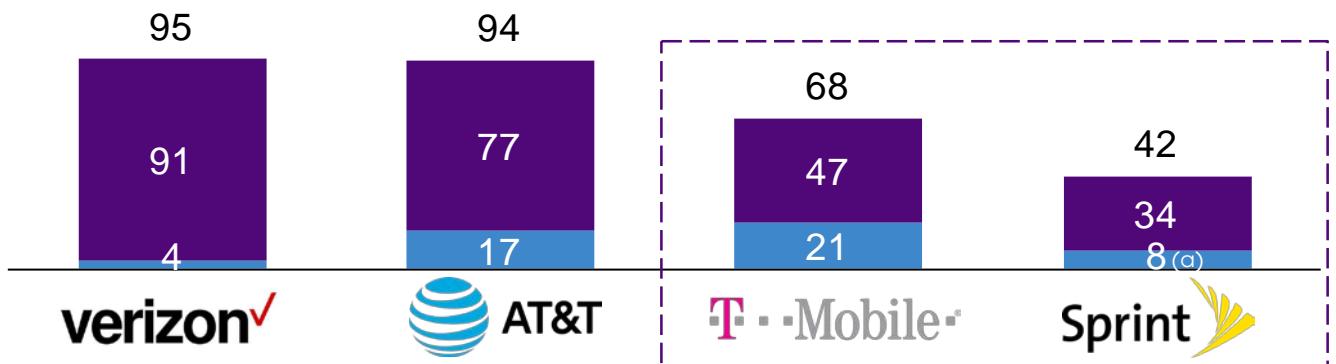
Transaction Overview

- 1 Companies agree to a \$26.5 billion all-stock merger
- 2 Deutsche Telekom will own 43% of the new T-Mobile, while SoftBank and public shareholders will own 24% and 33%, respectively
- 3 Dish set to acquire Sprint's prepaid business and spectrum for \$5 billion
- 4 Following the transaction, T-Mobile CEO John Legere will step down in May 2020, making way for COO Mike Sievert to take his place

Branded Wireless Subscriber Landscape

(Amounts in millions)

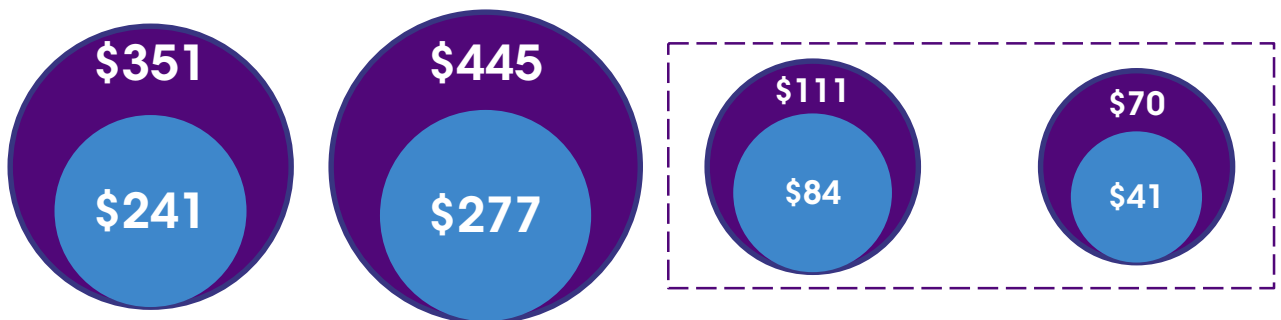
■ Prepaid Subscribers ■ Postpaid Subscribers



Capitalization

(Amounts in billions)

● Market Capitalization ● Enterprise Value



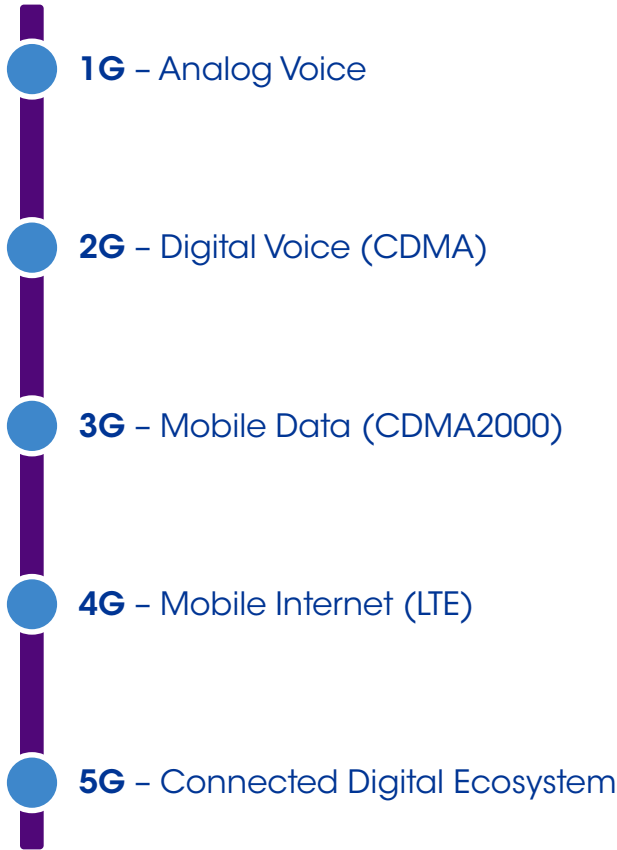
Source: Company filings, Digital Trends, PC Mag and Cnet.

(a) Dish is set to acquire Sprint's prepaid business customers as part of the merger.

The 5G Explosion

5G will revolutionize communications and data exchange

Mobile Network Evolution



Services and Use Cases



Vehicle Telematics



Smart Grid Automation



Mobile and Collaborative Robots



Video Surveillance



Cooperative Intelligent Mobility

5G Fast Facts

\$12T

Global Impact by 2035

20 Gbps

Expected peak data speed

1 - 4ms

Optimal Latency Rate

40%

of the world will be covered
by 5G by 2024

100x

Faster than 4G

\$130 - \$150B

Cost to deploy 5G enabled
Fiber Networks

Source: Qualcomm, VxChnge and IoT Analytics.

Sector News

Broadcasting / Telecommunications

- **2/25: Comcast**
acquired **Xumo**, the advertising-supported streaming service
- **2/23: Fox**
is looking to acquire **Tubi**, an ad-supported free streaming service for \$500m
- **2/21: HBO Max**
landed its first distribution deal with **YouTube TV** as YouTube TV will start offering HBO and HBO Max to its subscribers in the spring
- **2/19: SlingTV**
lost subscribers for the first time in Q4 2019
- **2/18: Dell**
sold **RSA Security** to private equity firm STG Partners for \$2b
- **2/13: Netflix**
deepened its relationship with **Samsung** through content exclusives and deeper device integration
- **2/13: WarnerMedia**
has dramatically shifted its balance for commissioning content away from its cable networks and towards its streaming services like **HBO Max**
- **2/13: Altice**
is raising its prices for new subscribers from \$20 per line to \$30 for its mobile service that launched in September 2019
- **2/12: Samsung**
introduced its new **Galaxy S20** 5G lineup of smartphones, including two 5G models that are capable of tapping both sub-6 GHz and millimeter wave spectrum brands
- **2/12: Siris Capital Group**
completed its purchase of **TPx Communications**, a UCaaS and managed services company
- **2/12: Altice USA**
a Queens, New York-based broadband communications and video services provider, has reached a deal to buy **Service Electric Cable T.V.** of New Jersey, the Sparta, New Jersey-based regional cable operator, for \$150m in cash
- **2/12: Akamai**
experienced dramatic rises in traffic during the fourth quarter in its media and carrier division business thanks to OTT video along with software and gaming downloads
- **2/11: T-Mobile**
received legal clearance to move forward with its \$26.5b all-stock merger with **Sprint**
- **2/11: Dish**
became the fourth-largest wireless carrier in the United States following the **T-Mobile / Sprint** merger approval
- **2/10: Vantage Data Centers**
acquired **Etix Everywhere** for \$800m, expanding its reach into Europe
- **2/10: Comcast**
set a distribution deal with **Future Today**, a provider of ad-supported streaming channels, through its **Xfinity X1** and **Flex** platforms
- **2/7: FCC**
revealed details about its plan to open up the C-band for terrestrial 5G, which includes \$9.7b in accelerated relocation payments for satellite operators to make room for 5G
- **2/4: New York City**
approved 10 franchise agreements with several companies to install 5G equipment on streetlamps and some traffic light poles
- **2/4: Disney+**
announced that it had 28.6m paid subscribers in its first subscriber count update
- **2/4: Google Fiber**
will no longer be offering a traditional linear TV product to its new subscribers and will instead direct them toward some live streaming TV service options
- **2/4: Super Bowl LIV**
delivered an average per-minute livestreaming audience of 3.4m, up 30% year-over-year
- **2/3: Charter Communications**
announced that its mobile virtual network operator service reached a total of 1.1m mobile lines as of 12/31/2019, eclipsing 1m for the first time
- **1/30: AT&T**
expects its fiber-to-the-home (FTTH) subscribers to grow to 7m by 2022, which could include 1-2m more FTTH capable locations

Source: Company press releases and Wall Street Research.

Sector News

OOH Media

- **2/24: Uber**
is in partnership with **Adomni**, an online platform for digital out-of-home advertising, that will allow advertisers to display ads atop Uber vehicles
- **2/13: AdQuick.com**
an OOH advertising software company, announced the close of a \$6m Series A funding round, bringing total funding to \$9.4m
- **2/13: Verizon Media**
has partnered with digital OOH marketplace, **VIOOH**, which provides Verizon Media access to premium digital assets, including some owned by **JCDecaux**
- **2/6: OUTFRONT Media Canada**
officially launched its first foray into the digital outdoor programmatic universe through its partnership with **Hivestack**
- **2/5: New Tradition**
launched **The Reef**, the largest digital OOH billboard in America and the highest Geopath-rated unit in the country, which delivers over 120m weekly impressions to Los Angeles
- **2/4: GSTV**
ran a Super Bowl activation with **Tombras** and **Moonpie** in which ads ran during the Super Bowl only at gas stations
- **1/29: oOh!media**
Founder and CEO **Brendon Cook** stepped down after more than 30 years and more than 40 acquisitions
- **1/29: Clear Channel Outdoor**
recently launched over 1,300 new, printed "Premiere Panels" that bring nearly bulletin-size media down-to-earth for even greater pedestrian and road travel visibility
- **1/17: Billups**
partners with **Dstillery** to track visibility of OOH media campaign

Radio / Music

- **2/13: FUGA**
a Netherlands-based digital music distributor, has been acquired by American music publisher **Downtown Music**
- **2/12: iHeart Media**
rolls out new ad marketplace for podcasts known as **iHeartPodcast AdSuite**
- **2/11: SoundCloud**
received a \$75m investment from **SiriusXM** in exchange for a minority stake in the company
- **2/6: Warner Music Group**
filed a registration statement on Form S-1 with the SEC for a proposed initial public offering of its common stock
- **2/5: Spotify**
has agreed to acquire **The Ringer**, a leading creator of sports, entertainment and pop culture content
- **1/31: WNET**
has acquired Southampton, New York based radio network **WPPB-FM**
- **1/15: iHeart Media**
initiated a round of mass layoffs that were concentrated in small and medium networks where staffs had already been reduced, dealing another major blow to local radio
- **1/9: Cumulus Media**
announced that CFO **John Abbot** would leave the Company at the beginning of March following the reporting of the full-year 2019 financial results
- **1/9: Universal Music Group**
announced a global distribution and marketing agreement with **Saban Music Group**, a music company backed by worldwide entertainment industry pioneer **Haim Saban**

Source: Company press releases and Wall Street Research.

Sector News

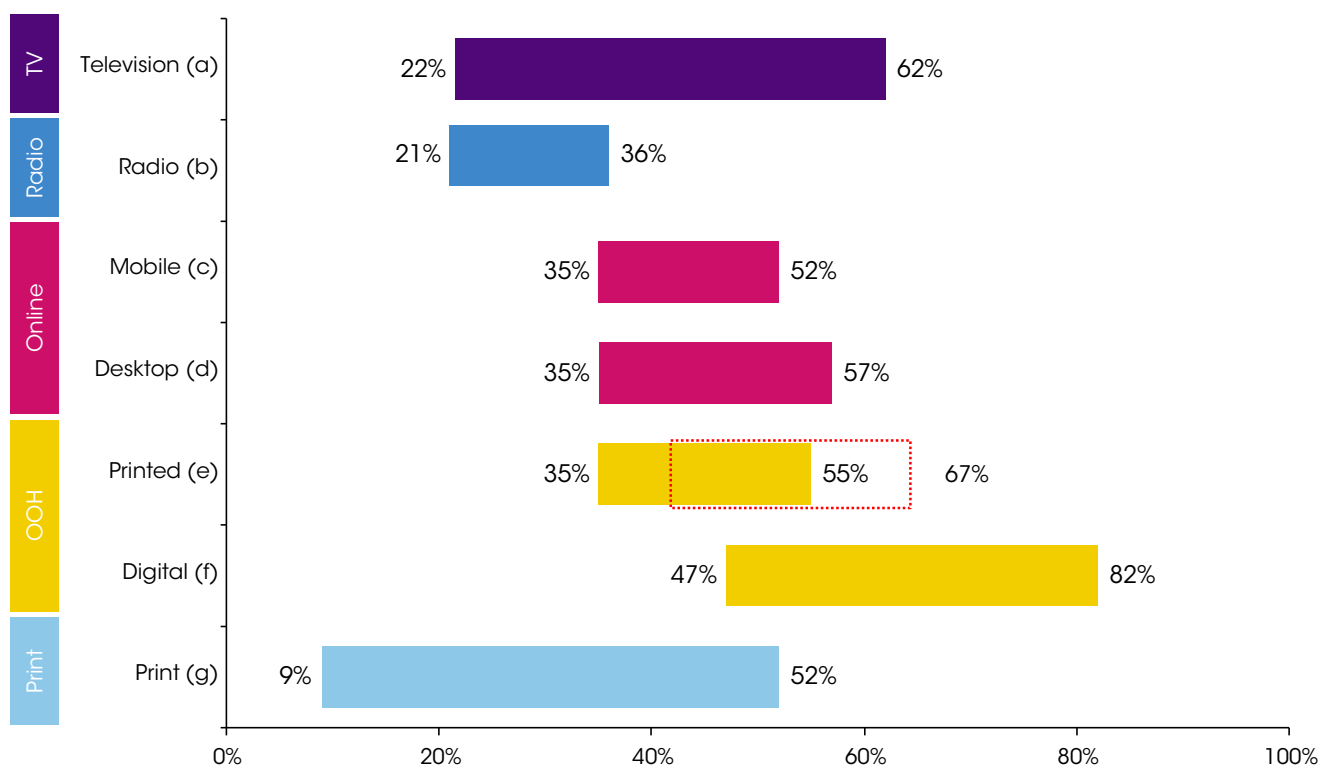
Other Key Digital Media and Tech Headlines

- **2/19: MoffettNathanson**
reported that vMVPD subscribers approached 10 million at the end of Q4 2019
- **2/14: Verizon**
pledged to deploy its **5G Ultra Wideband** service in more than 60 cities by the end of 2020, relying on small cells to do it
- **2/13: Dentsu Aegis Network**
a UK-based digital marketing company, has acquired New York City-based **Media Storm** from founders **Craig Woerz** and **Tim Williams**, as well as **TZP Group**
- **2/13: GumGum**
the Santa Monica, California-based artificial intelligence company specializing in solutions for advertising and media, has raised \$22m in a Series D funding round
- **2/13: Shutterstock**
a New York-based global technology company, has appointed Stan Pavlovsky as its new CEO
- **2/12: Overtime**
a Brooklyn, New York-based sports media company, has acquired Vancouver, British Columbia-based **Evade**
- **2/12: Trader Interactive**
a Virginia-based digital marketing corporation, has acquired four marketplaces from **Cosby Harrison**, a Tennessee-based marketplace provider
- **2/11: RentPath**
a leading digital marketing solutions provider to the multifamily housing industry, announced that it entered into an asset purchase agreement under which **CSGP Holdings**, an affiliate of **CoStar Group**, has agreed to acquire RentPath
- **2/11: Skydance Media**
received a \$275m strategic investment from **RedBird Capital Partners** and **CJ Entertainment and Merchandising**
- **2/10: Sony Interactive Entertainment**
completed the purchase of **Insomniac Games** for \$229m
- **2/6: Liquid Agency**
a San Jose, California-based marketing and advertising agency, has acquired Portland, Oregon-based **Vignette: The Employee Experience Agency**
- **2/5: Digital Media Solutions**
is working towards a \$757m merger agreement with UK-based **Leo Holdings Corp** after which Digital Media Solutions is expected to become a publicly traded company
- **2/5: Encore**
a London-based ticketing distribution network, has been acquired by **TodayTix**, a New York-based online platform that sells tickets to shows and arts and cultural entertainment events
- **2/4: eBay**
received a takeover offer from **Intercontinental Exchange** for \$30b (offer rescinded 2/6)
- **2/4: The Knot Worldwide**
a Chevy Chase, Maryland-based wedding planning company, has acquired **Hitched**, a UK-based digital wedding planning brand, from UK-based **Immediate Media**
- **2/3: Beanfield Technologies**
acquired **Openface**, a Montreal fiber-based telecom services provider
- **2/1: Cision**
a Chicago-based PR and earned media software company, has been acquired by **Platinum Equity** in an all-cash transaction valued at \$2.7b
- **1/30: SPM Marketing & Communications**
a La Grange, Illinois-based brand advisory and marketing services platform backed by **Corridor Capital**, has acquired Ellicott City, Maryland-based **Centretrek**

Source: Company press releases and Wall Street Research.

Advertising Effectiveness - PJ SOLOMON Study and Recall Comparison Analysis

- Based on PJ SOLOMON independent study of the five primary advertising channels
- Advertising recall defined as advertising effectiveness in which respondents were exposed to an advertisement and then at a later point in time, respondents were asked if they remembered the advertisement on an aided or unaided basis

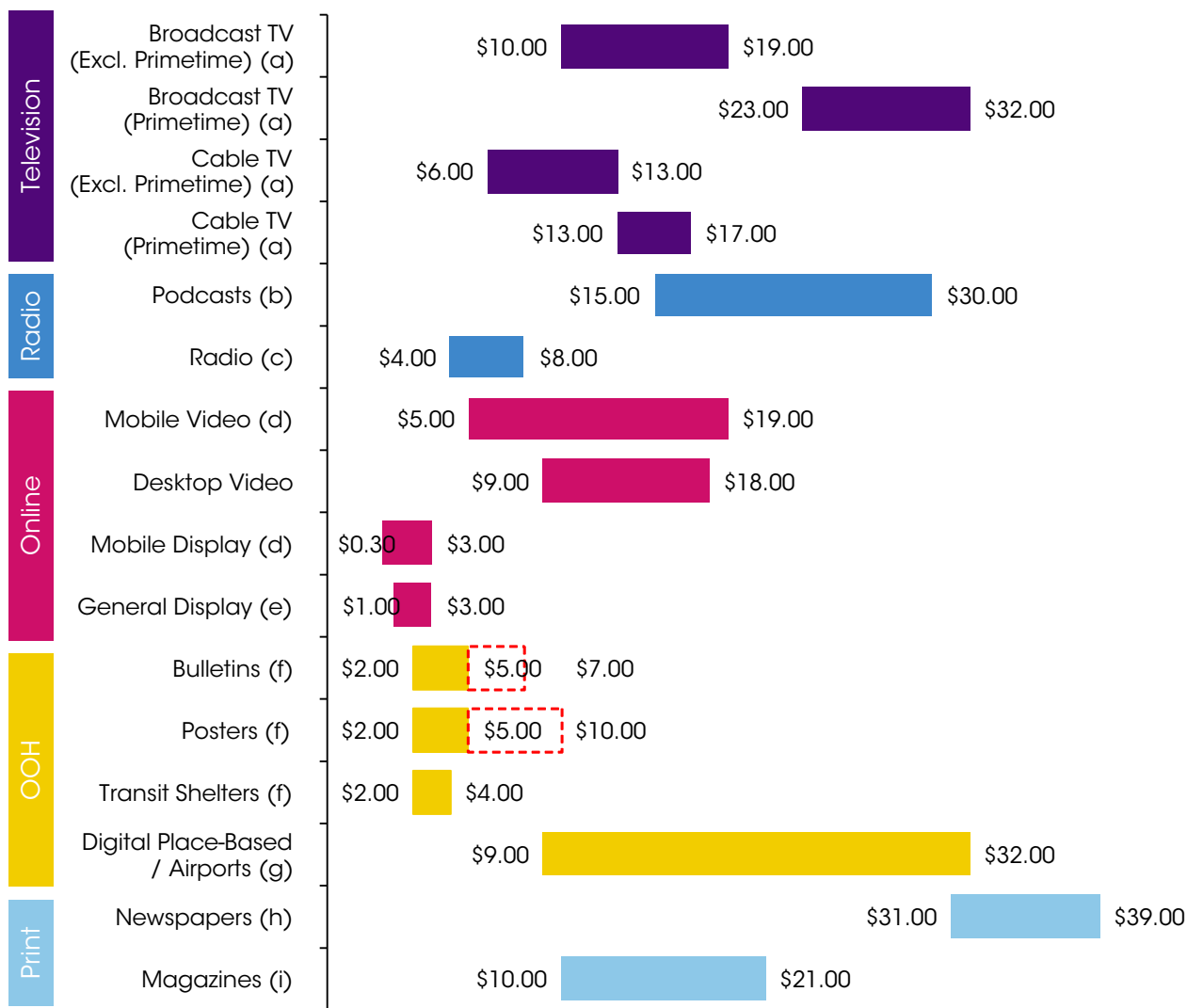


Source: PJ SOLOMON Study as of March 2017 and Wall Street Research.

Note: Ranges shift depending on aided vs. unaided recall basis, length of time for recall and sample size / nature and scope.

- (a) Includes linear and non-linear television.
- (b) Includes terrestrial and non-terrestrial / streaming radio, including either analog radio or digital audio over a variety of radio formats (broadcast, simulcast, satellite radio, internet radio, via streaming, media on the internet).
- (c) Includes interactive and non-interactive banner ads that appear embedded in mobile websites, downloaded apps or in mobile games on smartphones and tablets. Does not include text ads via short message service (SMS).
- (d) Includes all forms of desktop display advertising on websites, including text, image, flash, video and audio.
- (e) Includes all forms of outdoor advertising, including billboards, posters, wallscapes, rotary programs, transit, airport advertising and in retail venues. Dotted box indicates revenue-weighted composite of printed and DOOH channels.
- (f) Includes digital media used for marketing outside of the home and includes digital billboards, digital placed based networks and digital signage.
- (g) Includes advertising in newspapers, magazines, directories and circulars.

PJ SOLOMON US Major Media CPM Comparison



CPM (Cost Per Mille or Cost Per Thousand) is a commonly used measurement in advertising. Radio, television, newspaper, magazine, OOH advertising and online advertising can be purchased on the basis of showing the ad to one thousand viewers. It is used in marketing as a benchmarking metric to calculate the relative cost of an advertising campaign or an ad message in a given medium. The cost per thousand advertising impressions metric (CPM) is calculated by dividing the cost of an advertising placement by the number of impressions (expressed in thousands) that it generates. CPM is useful for comparing the relative efficiency of various advertising opportunities or media and in evaluating the overall costs of advertising campaigns.

Source: PJ SOLOMON Estimates as of November 2018 based on SEC filings, news, research and other industry sources.

- (a) 30-second advertisement.
- (b) 10- to 60-second advertisements. Includes both pre-roll and mid-roll advertising.
- (c) 30-second advertisement. Includes both spot and network.
- (d) Dataset includes mobile web, phone and tablet for both Android and iPhone.
- (e) 300x250 banner ads.
- (f) Calculated using SQAAD reporting from OOH media companies.
- (g) Represents data from 2014.
- (h) 1/2 page ad pre-discount. Calculated using estimated readership.
- (i) Full-page color ad. Calculated using estimated readership.

Market Indicators

Performance

	3/1/2020	% of 52 Week High	1-Month % Change	YTD % Change
Nasdaq Composite	\$8,567	(12.7%)	(6.4%)	12.8%
Dow Jones Industrial	25,409	(14.0%)	(10.1%)	(2.4%)
S&P 500	2,954	(12.8%)	(8.4%)	5.4%

Bloomberg Economic Forecast

	1Q20E	2Q20E	3Q20E	4Q20E	1Q21E
Real GDP	2.00 %	2.20 %	1.80 %	1.70 %	1.70 %
Core CPI	1.80	2.00	2.20	2.00	3.00
Fed Funds	2.00	1.75	1.65	1.60	1.60
3 Mo. LIBOR	2.03	1.90	1.78	1.70	1.69
10 Yr Treasury	1.67	1.69	1.76	1.82	1.89
Unemployment	3.60	3.70	3.80	3.80	3.90

Share Price Performance

	Stock Price 3/2/20	1-Week % Change	1 - Month % Change	YTD% Change
OOH Media				
APG SGA	\$269.54	(9%)	(8%)	(9%)
Boston Omaha	19.46	(5%)	(4%)	(8%)
Clear Channel Outdoor	2.07	(20%)	(24%)	(28%)
Clear Media	0.60	(6%)	(15%)	(27%)
Focus Media	0.77	(7%)	(9%)	(15%)
JCDecaux	23.20	(8%)	(14%)	(24%)
Lamar	83.74	(11%)	(10%)	(6%)
National CineMedia	7.69	(18%)	4%	5%
Ocean Outdoor	7.80	(5%)	5%	8%
OUTFRONT Media	26.34	(13%)	(11%)	(2%)
Standard Diversified	13.61	8%	7%	(7%)
Ströer	74.11	(13%)	(8%)	(9%)
Median		(8%)	(8%)	(8%)
Mean		(9%)	(7%)	(10%)

Broadcasting

Entravision	\$2.01	(5%)	(9%)	(23%)
Gray Television	18.92	(7%)	(7%)	(12%)
Nexstar Broadcasting	114.98	(5%)	(5%)	(2%)
Sinclair Broadcast Group	23.21	(20%)	(22%)	(30%)
TEGNA	14.32	(15%)	(15%)	(14%)

Broadcasting Median		(7%)	(9%)	(14%)
Broadcasting Mean		(10%)	(12%)	(16%)

Diversified Media

CBS	\$24.61	(13%)	(28%)	(41%)
Discovery	25.70	(12%)	(12%)	(22%)
Disney	117.65	(15%)	(15%)	(19%)
Hemisphere Media Group	12.63	(7%)	(6%)	(15%)
News Corp.	12.08	(16%)	(11%)	(15%)

Diversified Media Median		(13%)	(12%)	(19%)
Diversified Media Mean		(13%)	(14%)	(22%)

Advertising Technology

Criteo	\$12.67	(4%)	(18%)	(27%)
HubSpot	179.45	(3%)	(1%)	13%
Telaria	12.22	(10%)	20%	39%
The Trade Desk	287.25	(5%)	7%	11%

Advertising Technology Median		(5%)	3%	12%
Advertising Technology Mean		(6%)	2%	9%

Radio

	Stock Price 3/2/20	1-Week % Change	1 - Month % Change	YTD% Change
Beasley Broadcast Group	\$3.11	(20%)	(18%)	1%
Emmis Communications	3.61	(5%)	(4%)	(10%)
Entercom Communications	3.47	(20%)	(13%)	(25%)
Saga Communications	28.78	(5%)	(5%)	(5%)
Salem Communications	1.23	(9%)	(11%)	(15%)
Sirius XM Radio	6.34	(12%)	(10%)	(11%)

Median		(11%)	(1%)	(11%)
Mean		(12%)	(10%)	(10%)

Advertising/Marketing

BlueFocus Communication	\$1.07	7%	20%	32%
Cheil Worldwide	16.36	(7%)	(9%)	(20%)
Dentsu Inc.	26.21	(15%)	(23%)	(26%)
Huntsworth	0.95	(7%)	14%	(9%)
M&C Saatchi	1.11	(1%)	(13%)	(30%)
MDC Partners	2.51	6%	11%	(10%)
Next Fifteen Communicatio	6.12	(1%)	(6%)	(11%)
Omnicom Group	69.28	(11%)	(8%)	(14%)
Publicis Groupe	39.01	(15%)	(13%)	(13%)
The Interpublic Group	21.36	(12%)	(6%)	(8%)
Viad	50.20	(19%)	(23%)	(26%)
WPP	9.63	(22%)	(20%)	(29%)

Advertising/Marketing Median		(9%)	(8%)	(14%)
Advertising/Marketing Mean		(8%)	(6%)	(14%)

New Media

Alphabet	\$1,339.25	(10%)	(7%)	(0%)
Amazon	1,883.75	(10%)	(6%)	2%
eBay	34.64	(9%)	3%	(4%)
Facebook	192.47	(8%)	(5%)	(6%)
Nefflix	369.03	(3%)	7%	14%
Snap	14.17	(15%)	(23%)	(13%)
Twitter	33.20	(13%)	2%	4%

New Media Median		(10%)	(5%)	0%
New Media Mean		(10%)	(4%)	1%

Advertising Research

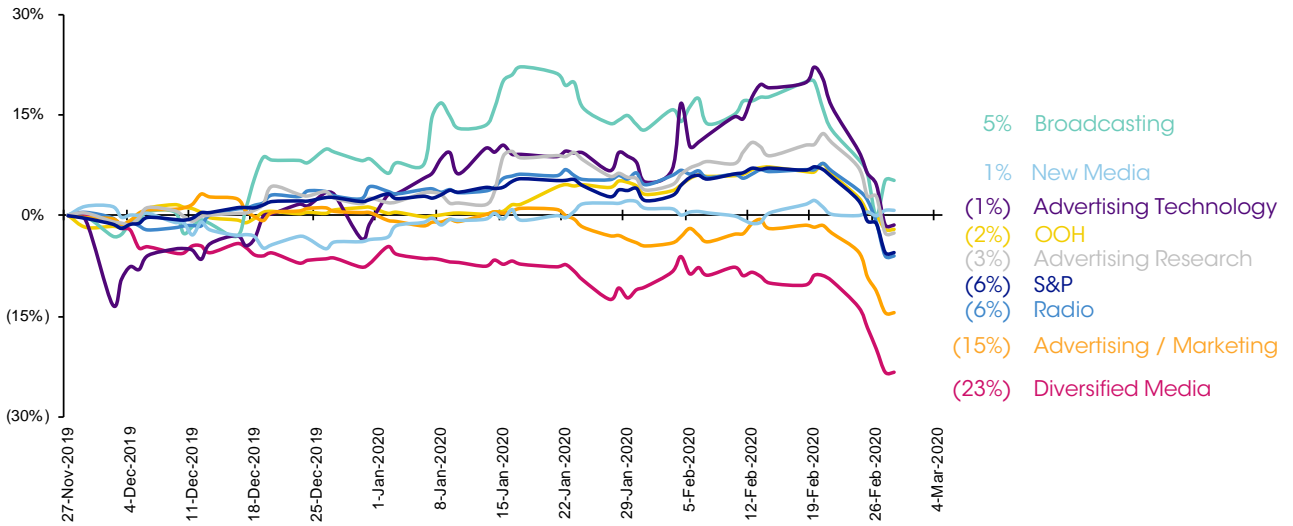
comScore	\$3.50	(5%)	(11%)	(29%)
Nielson	18.21	(17%)	(11%)	(10%)
Ipsos	31.06	(10%)	(5%)	(4%)

Advertising Research Median		(10%)	(11%)	(10%)
Advertising Research Mean		(10%)	(9%)	(14%)

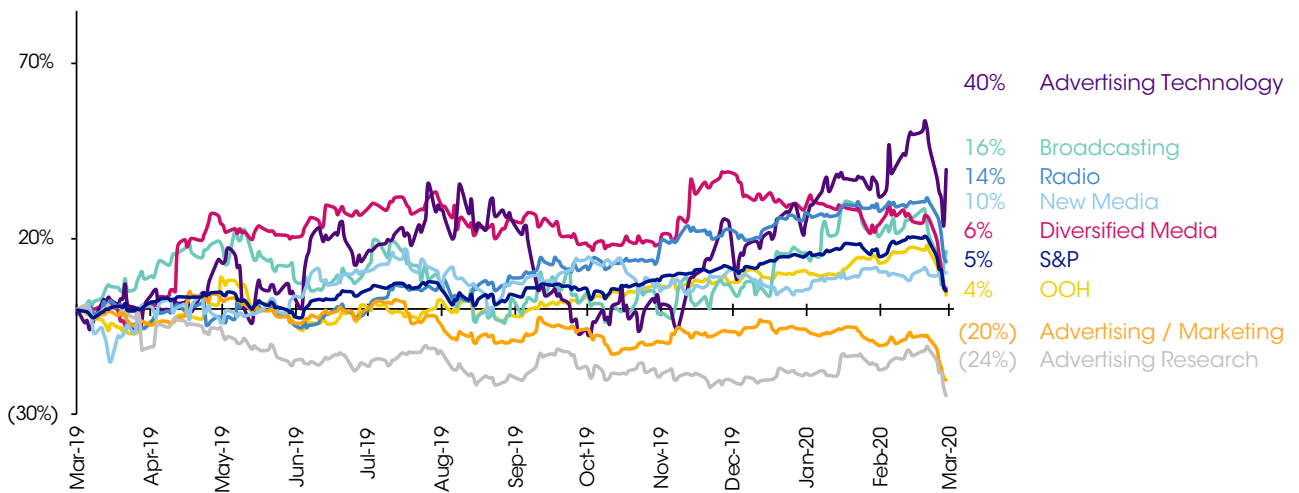
Source: Company information and Capital IQ as of March 1, 2020.

Industry Share Price Performance

Last Three Months



Last Twelve Months (LTM)

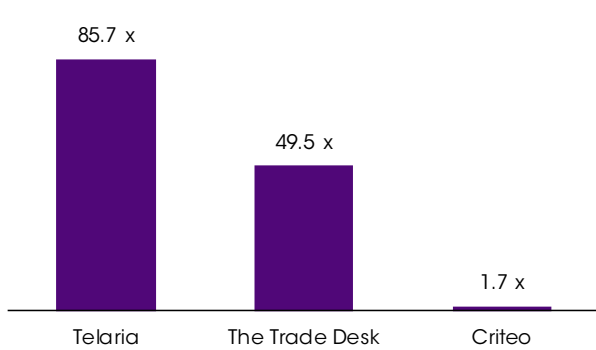


Source: Capital IQ and Wall Street Research as of March 1, 2020.

EV / 2020E EBITDA

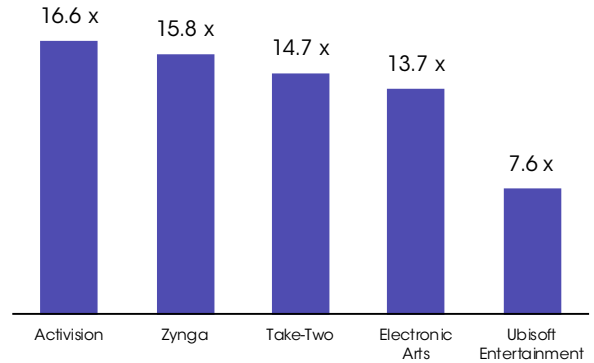
Advertising Tech

Median: 49.0 x



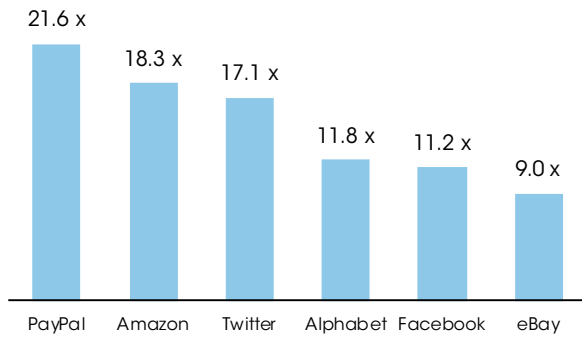
Video Games

Median: 14.7 x



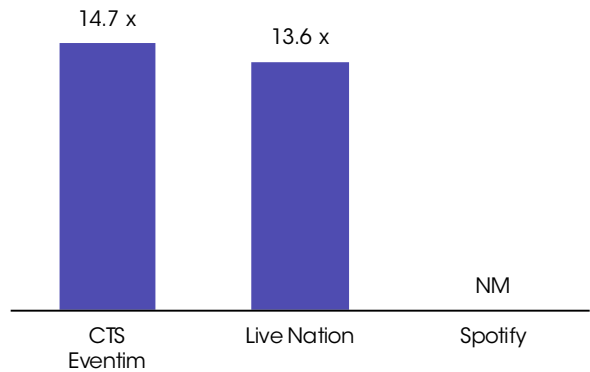
New Media

Median: 14.4 x



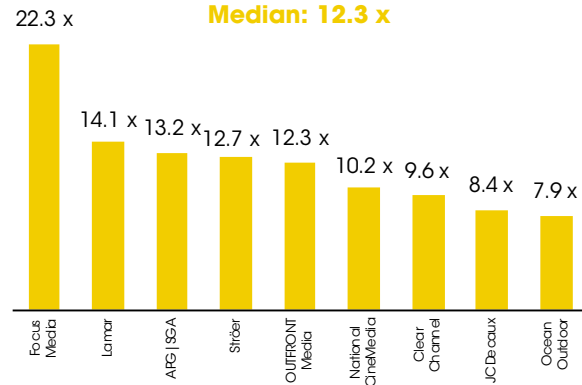
Music / Events

Median: 14.2x



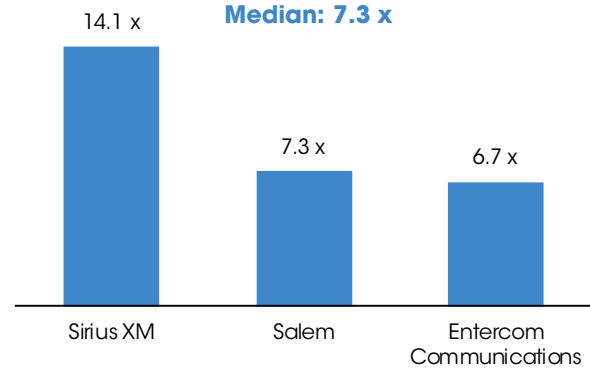
OOH Media

Median: 12.3 x



Radio

Median: 7.3 x



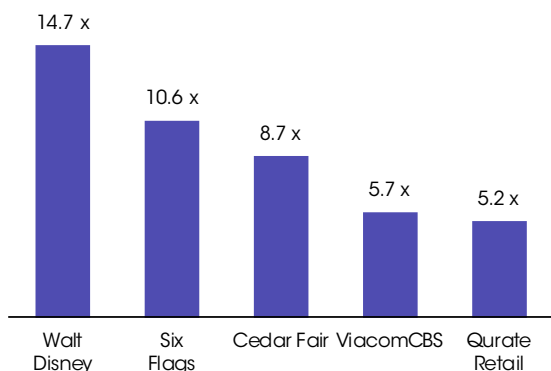
Source: Capital IQ as of March 1, 2020, Bloomberg and Wall Street Research.

Note: OUTFRONT is adjusted to expense lease acquisition costs for purposes of multiple comparability.

EV / 2020E EBITDA

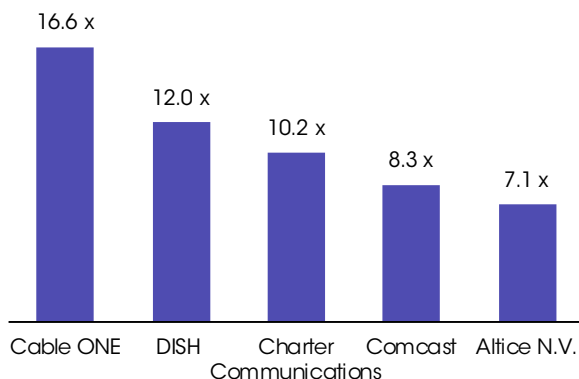
Cable / Content

Median: 8.7 x



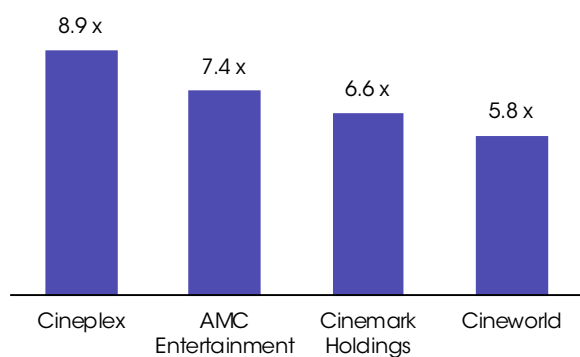
Cable

Median: 10.2 x



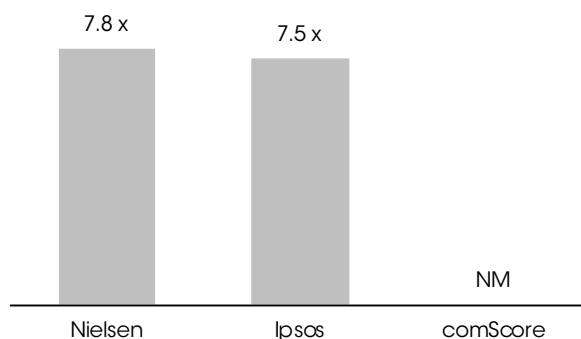
Theatres

Median: 7.0 x



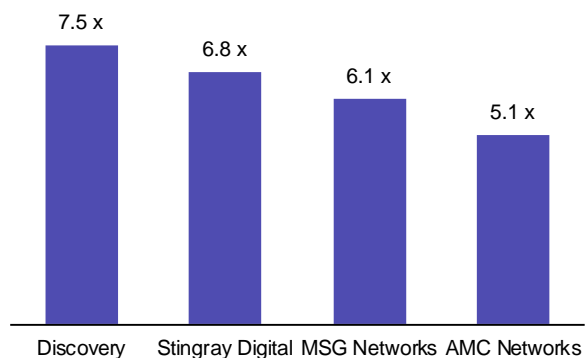
Advertising Research

Median: 7.6 x



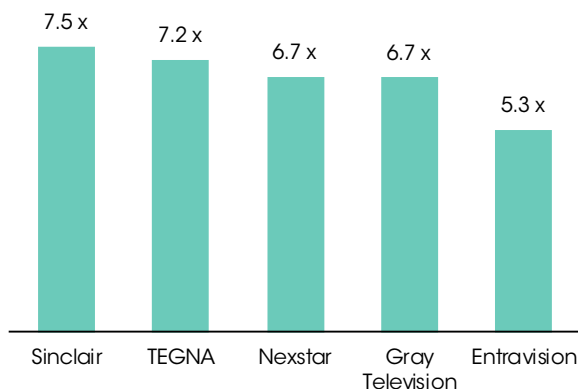
Cable Content

Median: 6.4 x



Broadcast

Median: 6.7 x



Source: Capital IQ and Wall Street Research as of March 1, 2020.

Valuation Metrics

	Stock Price 3/1/20	52-Week Low	52-Week High	Equity Value	Enterprise Value	Valuation Multiples		Growth	
						EV / Revenue	EV / EBITDA	'18A - '20E CAGR	
						CY2020	CY2020	Revenue	EBITDA
Advertising Technology									
Telaria	\$12.22	\$4.95	\$14.03	\$580.9	\$515.2	6.2 x	NM	22.3%	NM
The Trade Desk	287.25	176.76	315.4	13,091.0	12,836.1	14.8 x	NM	34.6%	50.3%
Criteo	12.67	12.47	28.3	789.3	405.6	0.5 x	1.6 x	(39.2%)	5.7%
Advertising Technology Median						6.2 x	1.6 x	22.3%	28.0%
Advertising Technology Mean						7.2 x	1.6 x	5.9%	28.0%
Video Games									
Activision	\$58.13	\$41.42	\$64.37	\$44,714.8	\$41,530.8	6.1 x	16.6 x	(4.9%)	(0.1%)
Zynga	6.71	5.08	7.2	6,384.9	5,593.9	3.5 x	15.8 x	33.6%	NM
Take-Two	107.48	87.04	134.2	11,538.6	9,554.4	3.7 x	14.7 x	0.6%	48.2%
Electronic Arts	101.37	87.50	113.5	29,364.3	24,757.3	4.8 x	13.7 x	(0.9%)	3.2%
Ubisoft Entertainment	75.14	52.35	94.8	8,987.5	9,475.9	4.0 x	7.6 x	4.3%	48.0%
Video Games Median						4.0 x	14.7 x	0.6%	25.6%
Video Games Mean						4.4 x	13.7 x	6.5%	24.8%
New Media									
PayPal	\$107.99	\$95.69	\$123.91	\$126,667.5	\$120,915.5	5.8 x	21.6 x	16.3%	43.0%
Amazon	1,883.75	1,620.80	2,170.2	937,750.4	934,429.4	2.8 x	18.3 x	19.9%	35.7%
Twitter	33.20	28.89	45.4	25,924.5	21,818.0	5.5 x	17.1 x	14.4%	29.1%
Alphabet	1,339.25	1,038.74	1,524.9	920,475.2	805,354.2	4.2 x	11.8 x	18.1%	27.9%
Facebook	192.47	160.47	223.2	548,626.2	494,521.2	5.8 x	11.2 x	23.9%	22.7%
eBay	34.64	33.56	41.6	27,576.2	32,511.2	3.4 x	9.0 x	(5.1%)	9.7%
New Media Median						4.8 x	14.4 x	17.2%	28.5%
New Media Mean						4.6 x	14.8 x	14.6%	28.0%
Music / Events									
CTS Eventim	\$53.35	\$43.27	\$68.36	\$5,121.2	\$4,729.7	2.9 x	14.7 x	7.8%	21.0%
Live Nation	60.77	57.75	76.1	12,819.8	14,426.1	1.1 x	13.6 x	8.6%	24.4%
Spotify	137.12	112.24	158.8	25,274.8	24,184.0	2.6 x	NM	26.0%	NM
Music / Events Median						2.6 x	14.2 x	8.6%	22.7%
Music / Events Mean						2.2 x	14.2 x	14.2%	22.7%
OOH Media									
Clear Channel Outdoor	\$2.07	\$2.04	\$5.65	\$965.5	\$5,847.5	2.2 x	9.6 x	(0.3%)	2.6%
JCDecaux	23.20	23.20	32.9	4,938.5	7,040.7	1.6 x	8.4 x	11.6%	20.9%
Lamar	83.74	74.56	96.2	8,417.1	11,371.1	6.2 x	14.1 x	6.1%	7.9%
National CineMedia	7.69	6.25	9.4	1,223.3	2,091.3	4.6 x	10.2 x	1.5%	3.4%
OUTFRONT Media (a)	26.34	21.93	31.0	3,797.2	6,192.4	3.3 x	12.3 x	7.9%	9.5%
APG SGA	269.54	256.48	329.6	808.1	764.4	2.2 x	13.2 x	5.6%	(11.6%)
Ocean Outdoor	7.80	6.80	8.2	418.9	387.3	1.9 x	7.9 x	NM	43.9%
Ströer (b)	74.11	55.20	86.3	4,224.2	6,071.0	3.2 x	12.7 x	4.1%	17.2%
Focus Media	0.77	0.68	1.0	11,076.1	10,547.5	6.0 x	22.3 x	(8.5%)	(26.8%)
OOH Media Median						3.2 x	12.3 x	4.8%	7.9%
OOH Media Mean						3.5 x	12.3 x	3.5%	7.4%
Radio									
Entercom Communications	\$3.47	\$3.08	\$6.88	\$477.6	\$2,456.6	1.6 x	6.7 x	2.9%	11.8%
Salem Media Group	1.23	1.23	3.1	32.8	279.2	1.1 x	7.3 x	(2.0%)	(2.5%)
Sirius XM Holdings	6.34	5.27	7.3	27,984.4	35,722.4	4.3 x	14.1 x	19.5%	10.0%
Radio Median						1.6 x	7.3 x	2.9%	10.0%
Radio Mean						2.3 x	9.4 x	6.8%	6.4%

Source: Capital IQ as of March 1, 2020 and Wall Street Research.

(a) OUTFRONT is adjusted to expense lease acquisition costs for purposes of multiple comparability.

(b) EBITDA adjusted for IFRS 16.

Valuation Metrics (cont'd)

	Stock Price 3/1/20	52-Week Low	52-Week High	Equity Value	Enterprise Value	Valuation Multiples		Growth	
						EV / Revenue	EV / EBITDA	'18A - '20E CAGR	
						CY2020	CY2020	Revenue	EBITDA

Cable / Content

Walt Disney	\$38.51	\$8.99	\$49.57	\$212,409.9	\$267,977.9	3.3 x	14.7 x	17.7%	2.2%
Six Flags	25.28	25.28	59.2	2,140.1	4,773.1	3.2 x	10.6 x	0.2%	(16.2%)
Cedar Fair	45.69	44.63	61.1	2,589.2	4,583.3	3.0 x	8.7 x	7.0%	7.4%
ViacomCBS	24.61	23.89	53.5	15,385.9	33,808.9	1.2 x	5.7 x	3.6%	(0.9%)
Qurate Retail	6.82	6.14	18.4	2,834.4	9,886.4	0.8 x	5.2 x	(3.5%)	(1.5%)
Cable / Content Median						3.0 x	8.7 x	3.6%	(0.9%)
Cable / Content Mean						2.3 x	9.0 x	5.0%	(1.8%)

Cable

Cable ONE	\$1,573.02	\$920.19	\$1,807.25	\$9,004.3	\$10,715.3	8.2 x	16.6 x	10.2%	15.8%
Dish	33.52	30.63	43.3	17,532.5	29,363.4	2.3 x	12.0 x	(4.2%)	(7.8%)
Charter Communications	493.17	337.54	542.5	103,553.8	186,576.8	3.9 x	10.2 x	5.3%	7.0%
Comcast	40.43	38.19	47.5	184,079.2	288,482.2	2.5 x	8.3 x	10.0%	7.7%
Altice N.V.	5.40	2.04	7.5	6,435.8	49,435.4	2.9 x	7.1 x	3.4%	26.4%
Cable Median						2.9 x	10.2 x	5.3%	7.7%
Cable Mean						4.0 x	10.8 x	4.9%	9.8%

Theatres

Cineplex	\$24.68	\$16.71	\$25.59	\$1,563.0	\$3,042.7	2.3 x	9.3 x	4.0%	29.2%
AMC Entertainment	6.26	5.93	16.6	652.6	5,240.9	1.0 x	7.3 x	(1.2%)	(7.6%)
Cinemark Holdings	25.96	25.17	42.4	3,020.9	4,495.5	1.4 x	6.2 x	0.1%	0.2%
Cineworld	1.99	1.93	4.1	2,724.0	9,784.7	2.2 x	6.2 x	3.2%	39.7%
Theatres Median						1.8 x	6.7 x	1.6%	14.7%
Theatres Mean						1.7 x	7.2 x	1.5%	15.4%

Advertising Research

comScore	\$3.50	\$1.48	\$23.21	\$245.4	\$421.9	1.1 x	NM	(2.5%)	NM
Ipsos	31.06	24.45	35.4	1,364.1	2,224.6	1.0 x	7.5 x	8.8%	17.0%
Nielsen	18.21	18.21	27.4	6,489.5	14,559.5	2.2 x	7.8 x	1.0%	12.5%
Advertising Research Median						1.1 x	7.6 x	1.0%	14.7%
Advertising Research Mean						1.4 x	7.6 x	2.4%	14.7%

Cable Content

Discovery	\$25.70	\$24.67	\$33.36	\$17,527.2	\$33,708.2	2.9 x	7.5 x	5.5%	4.1%
MSG Networks	12.64	12.64	23.6	760.5	1,738.7	2.5 x	6.1 x	(0.7%)	(6.2%)
AMC Networks	31.00	28.30	63.1	1,722.4	4,358.9	1.5 x	5.1 x	0.5%	(3.9%)
Stingray Digital	4.05	4.05	5.9	304.5	587.6	2.5 x	6.8 x	35.4%	40.1%
Cable Content Median						2.5 x	6.4 x	3.0%	0.1%
Cable Content Mean						2.3 x	6.4 x	10.2%	8.5%

Broadcast

Entravision Communications	\$2.01	\$1.91	\$3.98	\$169.9	\$255.2	0.9 x	5.3 x	(1.7%)	(2.9%)
Gray Television	18.92	14.36	24.5	1,853.5	5,990.5	2.5 x	6.7 x	48.8%	39.7%
Nexstar Broadcasting Group	114.98	91.24	131.1	5,254.6	13,732.9	2.9 x	6.7 x	29.8%	39.6%
Sinclair Broadcast Group	23.21	23.21	61.8	2,138.2	14,995.2	2.1 x	7.5 x	51.6%	47.1%
TEGNA	14.32	13.43	18.1	3,106.1	7,388.3	2.5 x	7.2 x	16.3%	14.6%
Broadcast Median						2.5 x	6.7 x	29.8%	39.6%
Broadcast Mean						2.2 x	6.7 x	29.0%	27.6%

Source: Capital IQ and Wall Street Research as of March 1, 2020.

Upcoming Events

Dates	Name	Location	Description
March 29 – April 2, 2020	Adobe Summit	Las Vegas, NV	<ul style="list-style-type: none"> The event annually convenes the advisory solutions industry's most senior marketing and sales executives for an exclusive, closed-door session devoted to strategies to build stronger relationships and grow assets
March 31, 2020	Digital Signage Expo	Las Vegas, NV	<ul style="list-style-type: none"> World's largest and longest-running conference and trade show exclusively dedicated to showcasing innovative digital communications and interactive technology solutions for customer and employee-facing organizations
April 27 – 29, 2020	Geopath/OAAA Media Conference	Phoenix, AZ	<ul style="list-style-type: none"> Attracts the best and brightest in the industry who gather each year to discuss the challenges & opportunities in the industry PJ SOLOMON's Mark Boidman and Ben Zinder to attend
May 11 – 15, 2020	London Digital Signage Week	London, United Kingdom	<ul style="list-style-type: none"> Like its counterpart in NY, the week includes events for retail, employee communications, digital out of home and digital signage
May 26 – 28, 2020	Code Conference	Beverly Hills, CA	<ul style="list-style-type: none"> Code Conference is the world's premier technology conference
June 3 – 5, 2020	World Out of Home Congress 2020	Toronto, Canada	<ul style="list-style-type: none"> Annual global outdoor advertising conference that explores the broader and fast changing media and technological environment PJ SOLOMON's Mark Boidman and Ben Zinder to attend

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