INVESTMENT BANKING



### Special Highlights in This Issue:

- Radio Industry Key Themes, Radio Works: Local, Mobile, and Social
- Radio Industry Q3 Trends
- U.S. Radio Landscape by Revenue, iHeart Media Business Update
- 3D Digital Signage Beginning to Get its Due
- TV Usage Update
- Digital Impact on In-Store Shopping: Research Debunks Common Myths
- 5 Trends That Are Radically Reshaping Shopper Marketing
- "Shopper Marketing" 5.0: Creating Value with Shopper Solutions
- U.S. Private Equity Groups Prowling for Canadian Buys

### Technology, Media & Telecommunications

#### **Rich Brail**

Head of Tech, Media & Telecomm. 212.508.1628 (w) 646.458.1570 (m) rbrail@pjsc.com

#### Mark A. Boidman Managing Director 212.508.1661 (w) 917.526.1092 (m) mboidman@pjsc.com Twitter: @MBoidman

#### Juan Mejia

Managing Director 212.508.1659 (w) 917.716.8143 (m) jmejia@pjsc.com

# Recent PJSC Transactions



Ben Zinder

Associate Director

212.508.1621 (w)

646.522.8353 (m)

bzinder@pjsc.com

VECTOR

Has received an investment from

SpireCapital Undersigned served as exclusive sell-side advisor to Vector Media

PETER J. SOLOMON COMPANY

November 2016

Has been acquired by



The undersigned served as financial advisor to Mi Pueblo PETER J. SOLOMON COMPANY

### **Capital Markets**

**Joe Stein** Managing Director 212.508.1662 (w) 203.550.2184 (m) jstein@pjsc.com

# The Media Monthly

### Radio Industry Key Themes

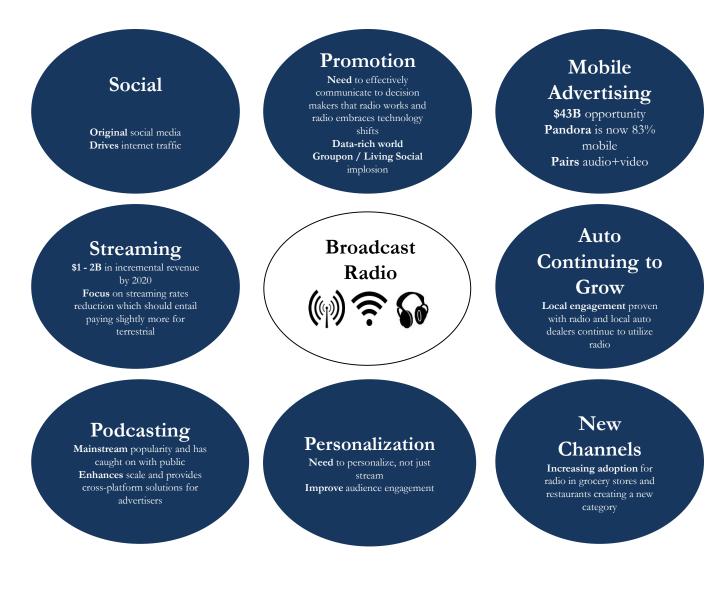
Strong Listenership and Broad Reach		Overall radio listenership remains consistently strong even with heightened competition Rising employment will provide boost to listenership as Americans spend more time at work and in cars
Attractive Operating Model		<ul> <li>Radio remains a high cash flow, low capex business</li> <li>Free cash flow is ~6.0x capex or higher for leading industry participants</li> <li>Recent cost discipline should lead to strong margin growth</li> </ul>
M&A Outlook	•	<ul> <li>M&amp;A environment picking up steam</li> <li>Private equity on the sidelines, but starting to revisit</li> <li>Low-growth environment amid competitive pressures / uncertainty</li> </ul>
	•	Consolidation has made the industry leaner than before with less sales teams needed to drive revenue
Pure-Play Threat Has Been Overstated	•	<ul> <li>Digital competitors have achieved strong user growth, but disadvantages include limited music catalog, lack of non-music programming, lack of a comparable ratings measurement tool and high royalty payments</li> <li>Royalty fees paid by internet broadcasters challenging and these variable costs prevent economies of scale</li> </ul>
		<ul> <li>Profitability / sustainability of the business model unproven</li> </ul>
	•	Digital initiatives by terrestrial broadcasters are capturing a sizable portion of digital listening and are well-positioned to grow and compete profitably
		- e.g., Clear Channel's iHeart Radio as digital solution
Digital Media and Online Radio Distraction		Overall revenue growth has been slowing due to advertisers spending increasing shares of wallet on new digital media Customers continue to be drawn from traditional AM/FM radio by online radio

Source: Company websites, BLA Kelsey and Magna Global. Note: Revenues are estimates categorized by station owner.

ſ

## The Media Monthly

### Radio Works: Local, Mobile, and Social



## The Media Monthly

### Radio Industry Q3 Trends

Q3 Performance	3 performance was mixed for the 13 publicly traded radio companies with stations a multiple markets, as six reported revenue growth and seven experienced revenue eclines year-over-year
	Despite this mixed performance, certain common themes emerged in the most ecent quarter
-	<ul> <li>Political advertising revenue came in lighter than expected and was lower than the previous presidential election cycle for the majority of broadcasters</li> </ul>
-	<ul> <li>Many broadcasters continue to see strength in local radio, which has helped offset some of the weakness in network radio as advertisers question the effectiveness of the channel</li> </ul>
	The Madison Square Garden Company recently became a major Townsquare

Media shareholder by purchasing GE's ~12% stake in the company

The Media Monthly

U.S. Radio Landscape by Revenue



Source: Company websites, BIA Kelsey and Magna Global. Note: Revenues are estimates categorized by station owner.

## The Media Monthly

### iHeartMedia Business Update

New Efforts to Drive Business Expansion	<ul> <li>23% quarterly growth in registered users and 16% quarterly growth in total listening hours</li> <li>Recent addition of upgraded pay offerings:</li> </ul>
	<ul> <li>User ability to replay songs and create playlists from live radio (similar to Spotify and Apple Music)</li> <li>New pay offerings come as music streaming increasingly competitive with Pandora and Amazon</li> </ul>
Programmatic Buying to Fuel Radio Growth	<ul> <li>Recently launched programmatic private marketplace for U.S. digital radio</li> <li>Provides buyers with access to iHeart's radio inventory</li> <li>Allows third-parties to collect audience trend data and develop targeted advertising</li> </ul>
Projected Radio Performance	<ul> <li>iHeart 2016E Revenue growth of 1.4% and 2016E EBITDA growth of 1.3%</li> </ul>

iHeart has ~ \$20 billion, or approximately 11x 2016E EBITDA, in debt outstanding -

\$239 million due in 2017, \$1.3 billion due in 2018 and \$8.3 billion due in 2019

### 3D Digital Signage Beginning to Get its Due

- 3D digital signage penetration has been slower than expected, but the technology is beginning to attract the
  attention of network operators and companies looking to reach customers with engaging content
- The 3D digital signage in the market-place today is based on auto-stereoscopic imaging, which unlike 3D technology at movie theaters, doesn't require glasses to view images in 3D
  - 3D effect is created by fastening a lenticular lens on a standard digital display and displaying content designed to take advantage of the technology and create an image jumping off the screen
- Over the last few years, one of the main factors contributing to the slow growth of glasses-free 3D digital signage is the cost of the technology, but now companies in the 3D space are finding ways to lower manufacturing costs
- 3D technology is also eyeing the consumer segment, entering into a distribution agreement to market the "Clear View" technology developed by Dutch company Dimenco B.V under the Exceptional 3D brand
  - The technology offers the ability to run a stereo-filmed 3D 4K video through their software to do a real-time conversion of the two stereo images, delivering an Ultra HD crisp stereo 3D image
- In the U.S., Catsworth, California-based Provision Interactive Technologies has installed 450 of its 3D Saving Center Kisoks at Ride-Aid drugstores around the country and is expected to deploy 1,000 units by April
  - Each kiosk incorporates a 2D interactive touch screen that provides access to promotions, rewards, coupons and loyalty cards. Brand marketers are also able to showcase their products via 3D advertising
- Redemption rates have topped 85 percent for high-value offers promoted via the kiosks. For out-of-store
  products, redemption rates have measured from 10 percent up to 40 percent on high-value offers,
  compared with industry averages estimated at 2-5 percent
- Demand for 3D digital signage in the Asian and Middle East/ North Africa regions is even stronger as more new networks are seeking the latest technology



### TV Usage Update

- Ericsson Consumerlab interviewed 100,000 people each year in over 40 countries, representing 1.1 billion people showing that the traditional user groups of TV, such as the TV Couch Traditionalists have shrunk by more than 30% since 2010 and switched into the Mobility Centric and Screen Shifters groups
- TV Couch Traditionalists and Screen Shifters spend the most on paid scheduled linear TV services today, while the Mobility Centrics, TV Zeros and Average TV Joes spend much less
  - Screen Shifters and Mobility Centrics pay significantly more for VOD services than ever before
- Total TV and video viewing time increases via major growth in mobile viewing
  - Since 2012, the average consumer increased their viewing on mobile devices by 4 hours/week, while fixed screen viewing declined by 2.5 hours/week. In turn, spending an extra 1.5 hours watching TV and video than they did 4 years ago
  - In the U.S., 20% of the increased mobile viewing is paid-for-premium content
  - 40% of consumers are very interested in a mobile data plan that includes unlimited video streaming capabilities, while a bigger 46% of millennials are interested as they usually use multiple on-demand services and appreciate mobility
- Consumers in the US spend 45% more time choosing what to watch on video on demand (VOD) services than scheduled linear TV services, yet they rate VOD services higher because it enables them to find content they want to watch
- Since 2010, internet-based video content and social media have proliferated and are competing with scheduled linear TV content for the consumer's attention
  - Scheduled linear TV services continue to attract consumers through a shared social experience, relaxing lean-back viewing and instant access to live content
- UGC (User Generated Content) that is either on-demand or live introduces new, stimulating possibilities for consumers and producers of such content
  - Today, 16-34 year olds spend almost 2.5 hours or more a week watching streamed on-demand UGC than 25-69 year olds. However, 16-34 year olds spend almost 4 hours less than 35-69 year olds when it comes to watching live and linear broadcasted content

Source: Center for Media Research

### Facebook Links Actual Store Visits to Marketers' Ads and Sales

- Facebook is giving marketers data about those users served an ad and then traveled into a store
- Store Visits in a new metric in Facebook's Ads Reporting tool that aims to help retailers better understand their foot traffic after running local awareness ads, which are targeted toward people within a certain distance of a store set by the advertiser
  - With this new metric, advertisers can now see how many people come into a store after seeing a
    Facebook ad; optimize the ads' creative, delivery and targeting based on stores visits; and analyze
    results across stores and regions
- Additionally, Facebook's new Offline Conversions API lets advertisers connect in-store transactions or transactions done over the phone to their ads, allowing them to better understand the effectiveness of their ads in real-time
   Source: AdvertisingAge

#### Digital Impact on In-Store Shopping: Research Debunks Common Myths

- The future of physical stores is not compromised with the online marketplace
  - Stores need more information about constantly connected consumers and how they really shop
- **Google** conducted research with **Ipsos** and **Sterling Brands** to explore consumers' in-store shopping behavior in 3 verticals: Retail, Tech, CPG
  - Discovered consumers want information throughout the shopping process, which drives their use of smartphones and their consumption of online information for shopping and those stores that don't take advantage of this, risk losing customers
  - 87% of shoppers look for information before visiting a store, 79% of shoppers while visiting a store, and 35% after visiting a store using search engines, online-only retailer sites/aps, website/apps for retailers with physical stores, social networking websites/apps, online video websites/apps, coupon or daily deal websites/apps
  - Consumers turn to their smartphones in-store to fill an information gap, thus smartphones and online information offer an opportunity for stores to enhance consumers' shopping experience
- Studies showed that shoppers would be more likely to shop in stores that offer:
  - Personalized coupons and exclusive offers provided in stores
  - Recommendations for specific products to purchase
  - Recommendations based on what friends/family have purchased

#### Source: Google

Say Hello to Community Messaging

- Community Messaging puts the power in your hands to use a dedicated space on your TransitScreen to communicate whatever timely information your community needs to know
  - Instead of sending out an e-mail or wasting paper, you can now use the screen you already have to reach your community
  - When you have multiple messages to share they will rotate, changing every few seconds
- TransitScreen recently partnered with MakeOffices, a company specializing in coworking spaces, which has
  recently increased in popularity across startups, independent workers, and companies of all sizes
  - This partnership will allow TransitScreen's real-time transit displays to appear in locations across Chicago, Philadelphia, and Washington, D.C. and allow the respective business users to grow



## The Media Monthly

#### 5 Trends That Are Radically Reshaping Shopper Marketing

- 1. Grocers go Bohemian, a concept of lower-priced, no frills version of common chains (ex. Whole Food's lower-end chain, 365)
- 2. The rise of virtual reality
- Increase in science nonfiction, for example, "mixed reality," a trend in retail that's blurring the line between ecommerce, augmented reality and brick-and-mortar stores, such as the smart dressing rooms at **Rebecca Minkoff's** SoHo boutique that can take care of everything for you from your Champagne order to your vacation wardrobe
- 4. Increase in beacon / proximity network usage, allowing shoppers to receive a personalized flash sales while shopping in the store
- 5. Throwback and Crossovers: Consumers still want high-tech involved in their shopping experience, but still crave the one-on-one service offered at brick-and-mortar locations

Source: Adweek

"Shopper Marketing" 5.0: Creating Value with Shopper Solutions

- In defining winner shopper solutions, the case study found that the best solutions are those that are the simplest
  - One of the displays rattled best by shoppers in the research conducted by Shopper Sciences was a simple s'mores endcap, which brought together three products (graham crackers, chocolate, and marshmallows) into one location to save shoppers time and featured promotional pricing on the ingredients
  - Shopper Sciences research found that the solutions scoring highest tended to be focused on the experience of using the product rather than the product's features or benefits. For example, a Tostitos solution that combined chips and ingredients for fresh dip scored particularly high
- Program scale is needed to make the economics of solutions feasible for the manufacturers. To distribute costs and take advantage of the benefits of a winning shopper solution, manufacturers should spread them out across the retail accounts on which they are focusing their marketing investments
  - To date, the drive for scale in shopper solutions tends to have been focused mainly on traditional vehicles, such as in-store signage and displays. There has been some integration of digital pre-store and in-store vehicles into solutions, but there is opportunity to do more and do it better
  - The best shopper solutions must balance the "natural tension" between customization and scale.
     Customization drives retail influence because it allows individual retailers to differentiate themselves with shoppers

### PJSC advised Vector Media on its investment in Spire Capital

- Spire Capital, a New York based private equity firm, recently closed its investment in Vector Media.
- Vector Media is an innovative Out-of-Home ("OOH") media company, specializing in large-format transit advertising, traditional Out-of-Home media and interactive brand experiences. Headquartered in New York, NY, Vector Media provides its clients with impactful and meaningful brand interactions through its unique platform of double decker transit spectaculars, airport shuttles, custom-route vehicles, street furniture, taxi media, digital advertising, bulletins, building wraps, printed publications and its rapidly expanding experiential marketing division.
- Spire Capital Partners is a New York-based private equity firm specializing in the media and communications, business services, information services and education sectors. "Spire brings a wealth of experience and a proven track record of successfully fueling rapid growth in the media sector. This investment will support and accelerate Vector's growth as we continue to expand our unique platform," commented Bill Schwartz, Vector's founder and an industry veteran with over thirty years of experience in Out-of-Home media. "The Spire team's extensive experience across multiple media channels will be an invaluable resource as the industry becomes more technology-enabled and moves toward audience-based measurement."
- Spire Chairman Andy Armstrong stated, "We are excited to partner with Founder Bill Schwartz and his team as they have built a unique OOH advertising platform with national scale that provides turnkey, one of a kind, large format spectacular campaigns for some of the best brands and agencies in the world."
- Gary Greenstein, Vector's Chief Revenue Officer, adds, "Our most trusted clients have challenged us to continue to be at the forefront of innovation, measurement, and creativity. Advances in LED and LCD technology, 3-D and digital printing, and the ability to access mobile networks for improved audience and ROI measurement, are dramatically changing the way advertisers think about Out-of-Home media. Vector intends to lead the way forward and we expect Spire's vast experience, network and resources to be a key component in this next phase of our growth."
- PJSC acted as the exclusive sell-side advisor to Vector, working closely with Vector's management team and shareholders throughout the investment process. Marc Borzykowski, Chief Operating Officer of Vector, added, "PJSC's industry expertise enabled Boidman and his team to quickly identify Spire Capital as the best financial partner for us. We enjoyed working with the PJSC team and we are incredibly excited to be partnering with Spire on this next phase of Vector's growth."

### US Private Equity Groups Prowling for Canadian Buys

- The strong US dollar and lofty valuations are prompting American private equity firms to look to Canada for bargains, said several speakers and attendees at the recent Association for Corporate Growth Conference in Toronto
  - John Loh, partner with **Birch Hill Equity**, said "non-Canadian PE firms are hunting in our market." He said this is manifesting itself in more US-style financing for Canadian deals. He said there are two companies in the market right now that are getting strong interest from suitors. "If I have to bet, they'll be US PEs," Loh said
- Wole James, principal of **Oncap**, said deal flow for his firm in 2016 is about equal to 2015 but up from 2014. OnCap invests in companies with EBITDA between USD 15m and USD 60m. About half the portfolio is in the US, with the rest in Canada. "We're seeing US bankers spending more time up here. US bankers are bringing US sponsors to meet more Canadian companies." Overall, this trend is good for Oncap because it means more capital is chasing deals and more lenders are providing financing, he said. But the downside is that competition is increasing
  - This month, Citibank agreed to sell CitiFinancial Canada to an investor group led by JC Flowers and Varde Partners for an undisclosed price, according to Mergermarket data. In addition, it was reported that Valeant could see bids for its iNova Australian drug unit from Carlyle Group, Blackstone and KKR at a price that could reach \$773 million
- Stephen Pincus, a partner with **Goodmans**, pointed out that the Canadian IPO market remains stronger than the US market, where regulation has diminished the attractiveness of a public listing for entrepreneurs
  - The IPO market in Canada is far more nimble. It takes a median of 106 days from filing to listing in the US versus 33 days in Canada, Pincus said
  - Geoff Bertram, managing director of Equity Capital Markets at TD Bank said he expects to see more IPOs in 2017 than 2016 based on pitch activity. For example, **SnapChat** is rumored to be filing confidentially, but other companies such as **Shred-It** ended up being acquired instead of going public. The Birch Hill portfolio company sold to **Stericycle** for \$2.3 billion in July 2015
- However, because the conference was held just after the US presidential election, many speakers and attendees weighed in on the President-elect
  - Daniel Sonshine, partner at **TorQuest Partners**, observed that there is concern, especially by companies in southern Ontario, about the potential for Donald Trump to end NAFTA
  - David Hastie, regional director, Ontario for First West Capital, which primarily provides subordinated debt and mezzanine debt to firms with CAD 1m to CAD 5m of EBITDA, said that it may be prudent for smaller companies to diversify beyond the US following the election of Trump

#### Sector News

#### Out of Home Media

- 11/24: The Economist launched a DOOH campaign in the New York City's subway stations using the MTA's "On-the-Go" digital network as part of its marketing efforts in the US
- 11/21:ContextMedia: Health, which makes a healthcare decision-making platform announced its acquisition of point-of-care patient education company, AccentHealth for an undisclosed sum
- 11/7: OUTFRONT Media reported 3Q 2016 results with revenues of \$382.2 million, EBITDA of \$87.2 million, net income of \$38.1 million and quarterly dividends of \$0.34 per share declared. Revenues were up 2.3% compared to the same prior-year period
- 10/25: Clear Channel Outdoor International sold its stake in Australian OOH media company, Adshel to JV partner APN News & Media for \$268.4 million.
- 10/18: Primesight acquired Airport Media, the holder of the outdoor ad sales contracts for Gatwick and Luton airports for an undisclosed sum
- 10/13: Australia's oOh!media Limited announced that it has agreed to acquire 100% of the share capital of Executive Channel International for \$68.5 million
- 10/12: Vision Media Management, a portfolio company of Austin, Texas-based PE firm CenterGate Capital acquired Cinema Scene Marketing for an undisclosed amount
- 10/6: OUTFRONT Media was awarded a majority stake in outdoor advertising rights in Saint-Jérôme, Montreal
- 10/6: JCDecaux announced that its Japanese subsidiary, MCDecaux was awarded the bus shelter advertising contracts by Tokyo bus operators Fuji Express and Tokyo Bus Corporation for 20 years
- 9/30: Nielsen Holdings acquired Arbitron, an international media and marketing research firm, for \$1.3 billion

#### Radio / Music

- 11/29: iHeartCommunications has attempted to avoid triggering springing liens in ~ \$7 billion of bonds. Avoiding this trigger would preserve the ability of the company to offer the additional security in exchange for an extension deal in talks with debtholders
- 11/21: Omnicom launched "We are Unlimited in Chicago," an ad agency unit dedicated exclusively to McDonald's, who is consistently a top weekly radio advertiser
- 11/7: iHearMedia recruited Chris Peterson from TuneIn as senior VP of podcasting
- 11/3: CBS Radio reported that revenues increased to \$319 million in Q3 2016 from \$318 million in Q3 2015 due to higher national ad sales
- 11/3: Bloomberg Media's radio division showed the greatest growth of any sector in the company for the first three quarters of 2016, year-over-year. The business reported total revenue through September is up 8%, while radio rose 20%
- 10/12: Cumulus Media shareholders approved a reverse stock split to boost the company's stock price to conform to NASDAQ's minimum pricing of \$1/share by November
- 10/12: Pandora launched its \$4.99/ month, the ad-free Pandora Plus
- 10/12: Amazon launched its Amazon Music
   Unlimited service at \$4/month
- 10/10: Radio's Nielsen Q2 Comparable Metrics Report disclosed that radio's reach among adults came in at 93%, followed by TV (87%) smartphone (80%), PC(50%), TV connected devices (43%) and tablet (37%)
- 10/10: CBS announced pricing for the debt financing planned for CBS Radio, which will load the radio unit with ~\$1.5 billion in debt, split between bonds and loans, ahead of a planned initial public offering

### Sector News

### Broadcasting / Telecommunications

- 11/21: AT&T, DISH Network, and WPP agreed to acquire Princeton, New Jersey-based INVIDI Technologies, a provider of targeted television advertising solutions for cable, satellite and IPTV service providers. Terms of the deal were not disclosed
- 11/17: AT&T announced that its mobile customers will be able to compose and send text messages using Amazon's Alexa assistant
- 11/17: India-based Reliance Communications has sold Onyx NewCo, a newly incorporated Delawareregistered company, to GTT Americas, a subsidiary of the Virginia-based GTT Communications for \$28 million
- 11/16: Trim, a San Francisco startup, built a bot that logs into your Comcast account and attempts to lower your monthly bill; so far, it has had a 70% success rate
- 11/15: TDS Broadband Service, a subsidiary of Chicago-based Telephone and Data Systems, and operated by TDS Telecom announced an agreement to purchase InterLinx Communications and its subsidiary Tonaquint Networks in Southern Utah
- 11/9: Lumos Networks, a leading fiber-based service provider in the mid-Atlantic region announced its agreement to acquire Clarity Communications Group for \$320 million
- 11/8: Verizon completed its \$2.4 billion acquisition of fleet and mobile workforce management services provider Fleetmatics Group for \$60 per share in cash
- 11/8: Saga Communications, owner and operator of broadcast properties in 26 markets, reported a net revenue increase of 6.8% to \$36.1 million for 3Q 2016
- 11/7: Windstream has agreed to buy internet service provider, EarthLink for about \$1.1 billion

- 11/7: The Switch, a NY-based video solutions service provider secured an equity investment from San Francisco-based private equity firm True Wind Capital and acquired Pacific Television Center, an L.A.-based transmission and live production provider for an undisclosed sum
- 11/4: World class multinational corporation, Dalian Wanda Group announced its acquisition of Dick Clark Productions, a well-known American TV production company for ~ \$1 billion
- 11/2: Broadcom announced its acquisition of Brocade, a leader in Fibre Channel storage area network, switching and IP networking for approximately \$5.5 billion, plus \$0.4 billion of net debt
- 11/1: Premier global provider of managed satellite and wireless communications solutions for the cruise and energy markets, Harris' CapRock, announced its acquisition by Speedcast, a leading global network and satellite communications service
- 10/22: AT&T agreed to acquire Time Warner for \$85.4 billion in a stock-and-cash transaction
- 10/12: Sprint commenced a private placement of up to \$3.5 billion of notes backed by a portion of its 2.5GHz and 1.9GHz spectrum holdings to raise cash to fund its business
- 10/6: Gannett, parent company for the USA TODAY NETWORK, which currently comprises USA TODAY and 109 local media brands, announced the acquisition of an industry leader in golf publications, Golfweek for an undisclosed amount
- 10/5: AT&T entered into an exclusive multiyear, multifaceted partnership with singer Taylor Swift
- 10/3: Carlisle Companies announced its acquisition of Star Aviation, a leading provider of design and engineering services, testing and certification work and manufactured products for in-flight connectivity applications for \$30 million

### Sector News

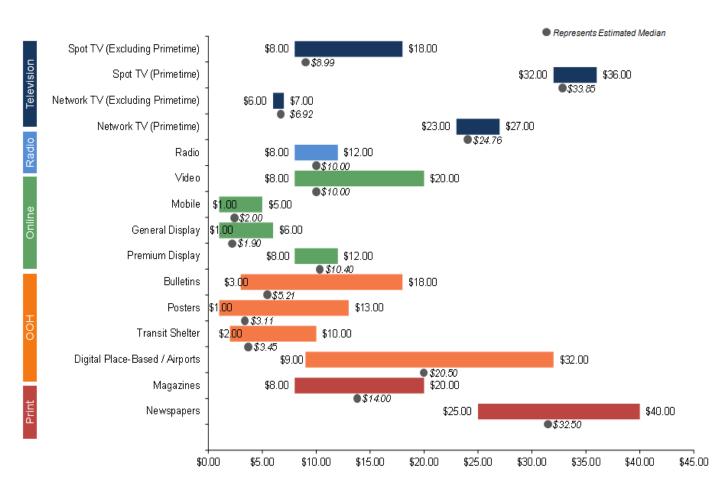
### Other Key Digital Media and Tech Headlines

- 11/22: Security software maker Symantec agreed to buy identity theft protection player, LifeLock for \$2.3 billion
- 11/21: Computer technology corporation, Oracle announced that it agreed to acquire Dyn, the leading cloud-based Internet Performance and DNS provider
- 11/14: Leading Digital Industrial Enterprise company, Siemens agreed to acquire Mentor, a leader in design automation software for an enterprise value of USD \$4.5 billion
- 11/7: Intelligent Technology Solutions provider, Insight Enterprises has agreed to acquire Datalink, a leading provider of IT services and enterprise data center solutions for approximately \$258 million
- 11/7: Blue Nile, a Seattle-based online jeweler, entered an agreement to be acquired by an investor group managed by Bain Capital Private Equity and Bow Street for \$500 million
- 11/4: IT service and solutions company, CenturyLink, announced its agreement to sell its data centers and colocation business to funds advised by BC Partners for \$2.15 billion
- 10/24: Abry Partners agreed to offload IT service provider, Masergy Communications for an undisclosed sum
- 10/24: Storage and information management service company, Iron Mountain received requisite approval from the Australian Competition and Consumer Commission to sell the majority of its Australian records management business to a consortium led by Housatonic Partners for ~\$70 million
- 10/18: Yoh, a Philadelphia based staffing and outsourcing company acquired Starpoint Solutions, a NYC-based IT consultancy firm for an undisclosed sum.
- 10/17: Trans World Entertainment, a leading entertainment specialty retailer, acquired etailz, a leading digital marketplace expert retailer for \$75 million

- 10/13: Snapchat announced that it will be having an upcoming IPO
- 10/13: Auction Mobility, the leader in mobile and online auction software, announced the acquisition of Lofty.com, the trusted online marketplace for fine and decorative art for an undisclosed amount
- 10/12: Google acquired Santa Monica, Calif.-based digital marketing firm, FameBit, which owns an online marketplace that connects video content creators with brands for an undisclosed amount
- 10/11: DigitalGlobe, the global leader in Earth imagery and information about our changing planet, announced its agreement to acquire the premier provider of geospatial technology, The Radiant Group, from Aston Capital for \$140 million cash
- 10/4: Wolters Kluwer Health, a global leader in information services and solutions, announced its agreement to acquire Emmi Solution, a leading US provider of patient engagement solutions for USD \$170 million in cash
- 10/3: Akastor, an oil service investment company, has entered into a definitive agreement to sell Frontica Business Solutions to Cognizant, a leading provider of IT, consulting and business process services for a consideration of NOK \$1.025 billion
- 10/1: Insurance solutions company, Independent Holding Co. acquired Ohio-based PetPlace.com, a subscription-based website providing articles covering pet health conditions and medication
- 9/28: Hangzhou Liaison Interactive Information Technology, a listed software and information services company in China, has signed an agreement to buy a 55.7% stake in Newegg, a California-based ecommerce company, for USD \$264.17 million

Source: Company press releases and Wall Street research.

## PJSC US Major Media CPM Comparison



CPM (Cost Per Mille or Cost Per Thousand) is a commonly used measurement in advertising. Radio, television, newspaper, magazine, out of home 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: Peter J. Solomon Company estimates as of July 2016 based on SEC filings, news, research and other industry sources.

# The Media Monthly

### Market Indicators

			Performance				Bloombe	g Economic For	recast	
		% 52	1-Month	YTD		4Q16E	1Q17E	2Q17E	3Q17E	4Q17E
		Week	%	%	Real GDP	1.80 %	2.10 %	2.30 %	2.20 %	2.10 %
	11/28/16	High	Change	Change	Core CPI	1.80	1.80	1.80	1.90	1.90
Nasdaq Composite	5,369	(0.6%)	3.4%	7.2%	Fed Funds	0.75	0.80	0.95	1.05	1.25
Dow Jones Industrial	19,098	(0.3%)	5.2%	9.6%	3 Mo. LIBOR	0.62	0.79	0.81	0.86	0.91
5	,	· · ·			10 Yr Treasury	2.23	2.25	2.35	2.45	2.53
S&P 500	2,202	(0.5%)	3.5%	7.7%	Unemployment	4.90	4.80	4.70	4.70	4.70

### Share Price Performance

Out of Home Media APG SGA AirMedia Group Clear Channel Outdoor JCDecaux Lamar	11/28/16 \$415.61 2.88 5.65 26.09	Change 2% (9%)	Change 9% (48%)	
AirMedia Group Clear Channel Outdoor JCDecaux	2.88 5.65	(9%)		
Clear Channel Outdoor JCDecaux	5.65	· · ·	(48%)	
JCDecaux			(+0/0)	
•	26.00	(2%)	1%	
Lamar	20.09	(9%)	(30%)	
	66.69	6%	11%	
Mood Media	0.06	(50%)	(42%)	
National CineMedia	15.82	15%	1%	
OUTFRONT Media	25.05	17%	15%	
RMG Networks	0.77	3%	3%	
Ströer	38.80	(9%)	(37%)	
Out of Home Median		0%	1%	
Out of Home Mean		(4%)	(12%)	
Broadcasting				
Entravision	\$6.65	(1%)	(14%)	
Gray Television	9.70	7%	(40%)	
Media General	18.26	8%	13%	
Nexstar Broadcasting Group	58.80	21%	0%	
Sinclair Broadcast Group	31.80	27%	(2%)	
Broadcasting Median		8%	(2%)	
Broadcasting Mean		12%	(9%)	
Diversified Media				
CBS	\$60.49	7%	28%	
Discovery	27.22	5%	2070	
Disney	98.97	5%	(6%)	
Hemisphere Media Group	11.85		(20%)	
News Corp.	11.84	(3%)	(11%)	
Scripps Networks	69.02	9%	25%	
Time Warner	92.90	6%	44%	
Viacom	36.79	(2%)	(11%)	
	50177	(270)		
Diversified Media Median		5%	(2%)	
Diversified Media Mean		3%	6%	
Advertising Technology				
Criteo	\$42.09	14%	6%	
The Rubicon Project	7.74	2%	(53%)	
TubeMogul	14.14	93%	4%	
Rocket Fuel	1.95	(9%)	(44%)	
MaxPoint Interactive	8.41	(2%)	23%	
YuMe	3.46	(8%)	(1%)	
Tremor Video	2.03	19%	(1%)	
Advertising Technology Median		2%	(1%)	
Advertising Technology Mean	16%	(10%)		

	Stock Price	1 - Month %	YTD%	
Radio	11/28/16	Change	Change	
Beasley Broadcast Group	\$6.00	22%	67%	
Cumulus Media	1.34	(9%)	(49%)	
Emmis Communications	3.23	(10%)	26%	
Entercom Communications	15.50	17%	38%	
iHeartMedia	1.50	13%	67%	
Radio One	3.00	18%	74%	
Saga Communications	48.60	13%	26%	
Salem Communications	6.10	9%	22%	
Sirius XM Radio	4.54	10%	12%	
Spanish Broadcasting System	4.05	16%	25%	
Radio Median		13%	26%	
Radio Mean		10%	31%	
Advertising/Marketing				
Dentsu	\$45.01	(1%)	(23%)	
Havas	8.05	3%	(2%)	
Interpublic	24.55	10%	5%	
Omnicom	88.20	11%	17%	
Publicis	64.42	(3%)	(1%)	
WPP	21.45	(0%)	9%	
Advertising/Marketing Median		1%	2%	
Advertising/Marketing Mean		3%	1%	
NI. M. P.				
<u>New Media</u> eBay	<b>\$</b> 28.57	(0%)	4%	
Alphabet	\$20.37 785.79	(070)	470 1%	
LinkedIn	195.12	3%	(13%)	
Twitter	193.12	4%	(21%)	
PavPal	39.96	(4%)	10%	
Facebook	120.41	(8%)	15%	
Amazon	766.77	(1%)	13%	
Netflix	116.93	(8%)	2%	
New Media Median		(3%)	3%	
New Media Mean		(3%)	5% 1%	
Ivew Media Mean		(270)	170	
Advertising Research				
Nielsen	\$43.42	(3%)	(7%)	
comScore	28.76	(376)	(30%)	
GfK	20.70	(9%)	(10%)	
Ipsos	29.08	(8%)	29%	
rpaga	27.00	(070)	2970	
Advertising Research Median		(6%)	(8%)	
Advertising Research Mean		(5%)	(4%)	

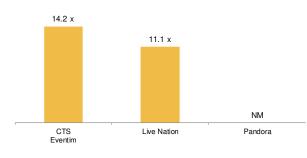
Source: Capital IQ, Bloomberg and Wall Street research.

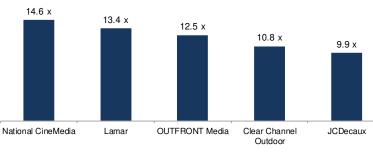
ſ

# The Media Monthly

EV / 2016E EBITDA







Median:15.2x

15.2 x

Electronic

Arts

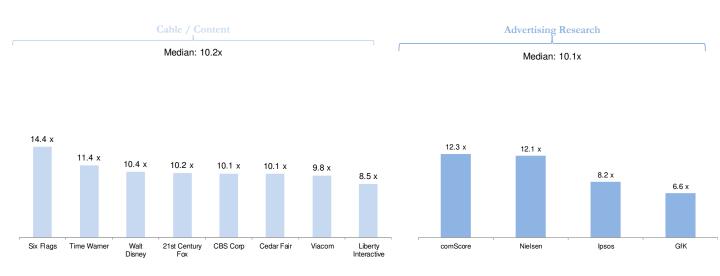
12.3 x

Activision

6.7 x

Ubisoft

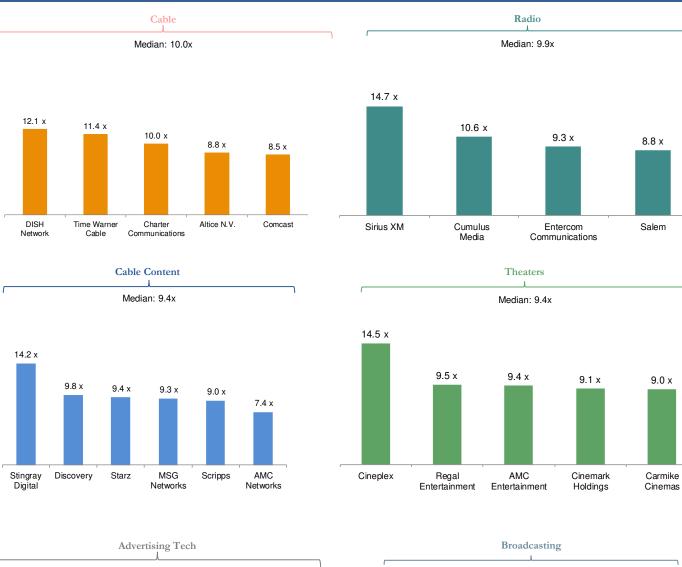
Entertainment



Source: Capital IQ as of November 28, 2016 and Wall Street research.

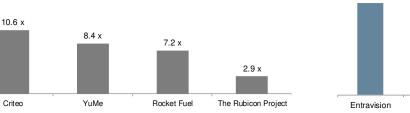
## The Media Monthly

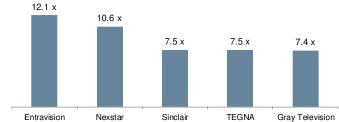
### EV / 2016E EBITDA











Source: Capital IQ as of November 28, 2016 and Wall Street research.

Criteo

## Valuation Metrics

ſ

	Stock Price	52-Week	52-Week	Equity	Entomaioo	EV / Revenue	n Multiples EV / EBITDA		owth 6E CAGI
Out of Home Media	11/28/16	Low	J2-Week High	Equity Value	Enterprise Value	2016E	2016E	Revenue	EBI
Clear Channel Outdoor	\$5.65	\$3.41	\$7.25	\$2,034	\$6,941	2.6 x	10.8 x	(4%)	(50
JCDecaux	\$5.05 24.55	\$3.41 24.14	39.53		5,766	2.0 x 1.7 x	9.9 x	(476)	89
Lamar	66.69	50.13	69.11	5,217	8,833	1.7 x 5.9 x	13.4 x	8%	11
				6,490 2,170					
National CineMedia	15.82	13.46	16.10	2,170	3,290	7.4 x	14.6 x	6%	11
OUTFRONT Media	25.05	18.18	25.05	3,458	5,550	3.7 x	12.5 x	6%	99
RMG Networks	0.77	0.61	1.23	28	28	0.7 x	NM	(0%)	N
Global / U.S. Median						3.1 x	12.5 x	6%	9
Global / U.S. Mean						3.7 x	12.3 x	5%	7
APG SGA	\$420.75	\$372.50	\$425.50	\$1,262	\$1,171	3.8 x	11.8 x	(0%)	16
Ströer	36.50	36.50	59.20	2,018	2,530	2.3 x	9.0 x	25%	51
	50.50	50.50	57.20	2,010	2,330				
Europe Median						3.0 x	10.4 x	12%	33
Europe Mean						3.0 x	10.4 x	12%	33
AirMedia Group	\$2.88	\$2.59	\$5.70	\$180	\$101	NA	NA	NA	N
Clear Media Ltd.	7.37	6.39	8.10	3,992	3,467	NA	NA	NA	Ν
China Median				<u> </u>		NM	NA	NA	N
China Mean						NM	NA	NA	N
Mood Media	\$0.08	\$0.06	\$0.26	\$14	\$802	1.7 x	8.5 x	(2%)	6
Total Out of Home Advertising Median						2.6 x	11.3 x	6%	10
Total Out of Home Advertising Mean						2.0 x 3.6 x	11.3 x	6%	13
						J.0 X	11.J X	0/0	- 13
Radio	er 00	69.02	er oc	0470	2000	NT A	NT A	NTA	
Beasley Broadcast Group	\$6.00	\$3.03	\$6.00	\$173	\$238	NA	NA	NA	NI
iHeartMedia	1.50	0.77	1.50	136	20,205	3.2 x	NA	(0%)	(1
Cumulus Media	1.34	1.00	4.54	39	2,292	2.0 x	10.6 x	(5%)	(1
Emmis Communications	3.23	1.72	4.20	40	315	NA	NA	NA	NI
Entercom Communications	15.50	9.12	15.80	629	1,086	2.4 x	9.3 x	10%	12
Radio One	3.00	1.17	3.48	143	1,088	NA	NA	NA	NN
Salem Media Group	6.10	3.63	8.10	158	428	1.6 x	8.8 x	1%	2
Sirius XM Holdings	4.54	3.35	4.61	21,905	27,435	5.5 x	14.7 x	9%	10
Radio Median						2.4 x	9.9 x	1%	2
Radio Mean							10.8 x		2
						2.9 x	10.6 X	3%	J
Broadcasting			00.75	0507	0011			10/	,
Entravision Communications	\$6.65	\$5.90	\$8.67	\$596	\$844	3.2 x	12.1 x	4%	(4
Gray Television	9.70	7.35	16.94	697	2,222	2.7 x	7.4 x	26%	21
Nexstar Broadcasting Group	58.80	35.55	60.50	1,805	4,239	3.8 x	10.6 x	33%	3
Sinclair Broadcast Group	31.80	24.80	35.50	2,882	6,954	2.5 x	7.5 x	18%	1
Broadcasting Median						3.0 x	9.0 x	22%	1
Broadcasting Mean						3.1 x	9.4 x	20%	10
Advertising/Marketing						5.1 X	7.7 A	2070	11
	67 57	84.40	87.00	62 177	62 270	1.4	07-	100/	12
Havas	\$7.57 17.00	\$6.69	\$7.98 18.50	\$3,177	\$3,279	1.4 x	8.7 x	10%	12
WPP	17.06	13.38	18.50	21,479	26,186	1.8 x	11.1 x	11%	8
Publicis	60.61	50.45	68.94	13,627	16,165	1.7 x	9.5 x	16%	11
The Interpublic Group	24.55	20.30	24.60	9,747	10,874	1.4 x	9.8 x	2%	8
Omnicom Group	88.20	67.94	88.47	20,805	24,590	1.6 x	10.7 x	0%	1
Dentsu	5,150.00	4,435.00	7,050.00	1,468,462	1,716,619	2.1 x	9.9 x	(42%)	6
Advertising/Marketing Median						1.6 x	9.9 x	6%	8
Advertising/Marketing Mean						1.7 x	10.0 x	(0%)	8
Advertising Technology / New Media									
Alphabet	\$785.79	\$681.14	\$835.74	\$535,542	\$456,424	5.1 x	12.6 x	16%	3
Amazon	766.77	482.07	844.36	364,343	364,984	2.7 x	24.1 x	24%	8
Facebook	120.41	94.16	133.28	347,042	320,902	11.8 x	18.2 x	48%	6
Netflix	116.93	82.79	130.93	50,181	51,211	5.8 x	NM	27%	1.
PayPal	39.96	31.20	44.15	48,218	43,130	4.0 x	15.7 x	16%	2
LinkedIn	195.12	100.98	249.82	26,446	24,271	6.4 x	21.3 x	31%	12
Twitter	18.30	14.01	25.91	12,982	10,972	4.3 x	15.4 x	35%	NI
Criteo	42.09	25.95	47.12	2,684	2,296	3.2 x	10.6 x	(15%)	63
TubeMogul	14.14	7.14	14.41	520	451	2.0 x	NM	39%	NI
The Rubicon Project	7.74	6.23	20.18	380	186	0.7 x	2.9 x	42%	N
Rocket Fuel	1.95	1.75	3.88	89	98	0.2 x	7.2 x	5%	N
Advertising Technology / New Media Median						4.0 x	15.4 x	27%	6.
Advertising Technology / New Media Mean						4.2 x	14.2 x	24%	5
Advertising Research									
Nielsen	\$43.42	\$42.59	\$55.81	\$15,520	\$23,232	3.7 x	12.1 x	0%	1
	28.76	23.71	44.46	1,644	1,530	3.0 x	12.3 x	25%	13
comScore				1,019	1,342	0.9 x	6.6 x	1%	0
comScore GfK	27.91	25.87	37.23						
comScore	27.91 27.36	25.87 17.08	37.23	1,165	1,695	0.9 x 2.0 x	8.2 x 10.1 x	4%	3

## Upcoming Events

Dates	Name	Location	Description
December 4-7, 2016	iMedia Agency Summit: Forging Partnerships that matter	Scottsdale, AZ	<ul> <li>Summit delves into how companies can keep their value propositions relevant; topics include tips on direct messaging to across various channels / devices, marketing attribution, what brands, agencies and sellers think of each other and how brands view partnerships</li> </ul>
January 5-8, 2017	International Consumer Electronics Show	Las Vegas, NV	<ul> <li>Event that showcases more than 3,600 exhibitors, including manufacturers, developers and suppliers of consumer technology hardware, content, technology delivery systems and more</li> <li>The conference has 220 sessions with more than 165,000 attendees from 150 countries</li> <li>PJSC's Mark Boidman Will Present</li> </ul>
January 15-17, 2017	Affiliate Summit West 2017	Las Vegas, NV	• Conference includes an exhibit hall with affiliates, merchants, vendors and networks, as well as multiple tracks of educational sessions covering the latest trends and information from affiliate marketing experts
February 7-9, 2017	Social Media Strategies Summit	Las Vegas, NV	<ul> <li>SMSS offers interactive workshops, captivating presentations and opportunities to connect with industry leaders</li> </ul>
February 8, 2017	American Magazine Media Conference 2017	New York, NY	• A dive into what's new in video, data and measurement, advertising, mobile, digital, and leadership
February 13-14	Code / Media 2017	Dana Point, CA	<ul> <li>Conference bringing together 350 of the most influential minds in media and technology for two days of intimate gatherings and game-changing discussions.</li> </ul>
March 6-9, 2017	Satellite 2017 Conference	Washington, D.C.	• Exhibition will feature more than 350 market leading companies showcasing the latest products, services and applications for satellite-enabled communications.
March 7-8, 2017	Media Summit New York, 2017	New York, NY	<ul> <li>Media Summit New York is the Premier Conference on Broadband, Mobile, Advertising, Television, Film, Cable &amp; Satellite, Publishing, Radio, Magazines, News &amp; Print Media and Marketing</li> <li>PJSC's Mark Boidman Will Present</li> </ul>
March 19-23, 2017	2017 Adobe Summit: The Digital Marketing Conference	Las Vegas, NV	• Explore the latest tools and trends, hear from marketing innovators, and see how companies are using Adobe Marketing Cloud to give them the insights they need in mobile analytics, personalization and social media
March 21-22, 2017	2017 Sales & Marketing Leadership Summit	Palm Beach, FL	• 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 27-30, 2017	CinemaCon 2017	Las Vegas, NV	<ul> <li>CinemaCon has evolved and grown to become the largest and most important gathering for the worldwide motion picture theater industry</li> <li>Global event attracting attendees from more than 80 countries</li> <li>PJSC'S Rich Brail Will Attend</li> </ul>

## Upcoming Events

opcoming Events							
Dates	Name	Location	Description				
March 28-31, 2017	Digital Signage Expo	Las Vegas, NV	<ul> <li>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</li> <li>PJSC's Mark Boidman and Ben Zinder will attend</li> </ul>				
May 15-17, 2017	Outdoor Advertising Association of America / TAB Annual Conference and Expo	New Orleans, LA	<ul> <li>Conference will examine shifts in overall media strategies and identify specifically how out of home advertising can amplify a media campaign</li> <li>PJSC's Mark Boidman and Ben Zinder will attend</li> </ul>				
June 19-22, 2017	FEPE Annual Conference	Stockholm, Sweden	<ul> <li>Annual global outdoor advertising conference that explores the broader and fast changing media and technological environment</li> <li>PJSC's Mark Boidman and Ben Zinder will attend</li> </ul>				

PETER J SOLOMON COMPANY



Peter J. Solomon Company (PJSC), an investment banking advisory firm, provides strategic advice to owners, chief executives, senior management and board of directors of companies and institutions worldwide.

PJSC advises clients on mergers and acquisitions, divestitures, financings, recapitalizations, restructurings, and activism defense. To date, the firm has successfully completed more than 500 strategic and financial advisory assignments.

In June 2016, PJSC sold a 51% stake in the firm to Natixis, a French financial services firm owned by Groupe BPCE, France's second largest financial institution. The remaining 49% of PJSC's ownership continues to be held by existing partners, resulting in an entrepreneurially-spirited company with a global M&A and financing platform and an increased breadth of product offerings.

Throughout our nearly thirty-year history, PJSC has served as a trusted advisor to our corporate clients. With this latest development, our tradition of providing unbiased advice, grounded in intellectual integrity, will continue. Our goal is to bring the collective experience and knowledge of our senior bankers and the capabilities of Natixis to each assignment, advising our clients on how to achieve the optimum value and outcome for each transaction.

Prior issues available online: http://www.pjsc.com/insights/tag/Media\_Monthly/

If you wish to subscribe/unsubscribe to The Media Monthly, please contact:

Eric LesorgenDanielSenior AnalystAn646.708.8471646.70elesorgen@pjsc.comdpapin(

Danielle Papin Analyst 646.708.8462 dpapin@pjsc.com