



THE MEDIA Monthly

Report Summarizing
Select Media and Retail
Tech Sector Activity

October 2017

Special Highlights in This Issue:

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- Through Focus on Customer Interactions, Consulting Firms Build Compelling Advantages Over Traditional Advertising Agencies
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- E-Commerce Performance: What Works, What Doesn't
- Organic LCD Technology – A Flexible Display is a Reality Now
- AR Experts Believe the New iPhone Will Usher in Two Billion AR Users

Recent PJ Solomon Transactions

September 2017 (Pending)

has been sold to

The undersigned served as advisor to Cobb Theatres

PETER J. SOLOMON COMPANY

August 2017

Sale of 50% stake in Compañía de Puertos Asociados S.A.

The undersigned served as financial advisor

PETER J. SOLOMON COMPANY

July 2017

Has sold select assets to

INDIANA GROCERY GROUP

The undersigned served as financial advisor to Central Grocers

PETER J. SOLOMON COMPANY

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System-on-Chip: Not Yet Ready for Prime Time

By PJ Solomon's Mark Boidman, Managing Director, Ben Zinder, Associate Director, and Gilbert Baltzer, Associate

- System-on-Chip (SoC) is an integrated digital signage solution where media player hardware is embedded within a display, eliminating the need for third-party, external media players
 - These external media players are the commercial equivalent of consumer products such as Roku, Chromecast and Amazon Fire

Initial System-on-Chip Products Had Limited Capabilities

- First-generation SoC products from Samsung and Sony launched in 2013, followed by second generation displays and the entrance of LG into the market in 2014
 - First- and second-generation products had minimal processing and graphics power, which restricted capabilities to playback of images and basic video
 - Content creators and software developers often faced a substantial learning curve when required to use proprietary operating systems (e.g., Samsung Tizen OS, LG WebOS)
 - Finally, adoption was hindered by skepticism about long-term commitment and focus of manufacturers to what will always be for them a relatively niche product
- Subsequent generations have addressed some of the issues encountered by early adopters, as improved hardware offerings have greatly improved the functionality and flexibility of SoC displays
- New entrants into the market (Panasonic, Philips, Sharp, Toshiba, etc.) have adopted Android as a standard and Samsung and LG have made their operating systems more developer friendly
 - However, Android remains a consumer-grade operating system and the proprietary OSs are derivatives of consumer TV platforms
 - They are primarily based on the world of streaming and there's not a lot of focus on software development
 - The core hardware is good but the software ecosystem is changing all the time and that makes life difficult for end-users and developers
- What the industry needs are very stable application programming interfaces (APIs) because so many software developers are developing on these platforms; when the software changes with every new version of the consumer TV models, development is quite difficult

System-on-Chip Now Offers Some Advantages

- The primary selling point for SoC is that the upfront cost is approximately 25-40 percent lower than comparable solutions
 - Users also typically experience a reduction in hardware support expense due to fewer points of failure
 - Power consumption is usually lower, as an integrated design improves energy efficiency
 - In addition, with no need for configuration, the installation process is straightforward and requires less technical expertise
- Most display manufacturers require screens to have constant internet access both to stream data and to download software updates, which is convenient but also creates a potential security concern

External Hardware Remains Essential in Certain Situations

- Despite recent improvements, SoC devices continue to face some limitations in their ability to support the breadth of features needed for many types of digital signage projects
 - Consequently, external media player solutions remain the solution of choice for businesses aiming to ensure seamless transitions between media content, complex video layering and HTML rendering, or synchronization between multiple displays
- External hardware also accommodates applications that vary from touch screens to complicated display solutions and/or video walls with a range of display sizes mounted at various angles
 - An additional consideration for many buyers is external hardware's upgradeability, the ease of which helps to "future-proof" the display, not locking buyers into a specific product ecosystem

Another Option for All-in-One

- Displays and players that have adopted Intel's Open Pluggable Specification (OPS) are offering the Pro AV market a solution that's both powerful and integrated
 - The combination of an OPS display and a commercial-grade OPS media player delivers an all-in-one signage solution that is powerful and feature-rich while still being simple to install, eliminating the need for wiring and technical expertise
 - This OPS combination can offer all of the benefits of a commercial-grade media player, a purpose-built OS, stable software with open APIs and an all-in-one solution without any of the downfalls

To Date, SoC Has Struggled to Gain Widespread Adoption

- Despite most display manufacturers now bundling SoC at minimal incremental cost, it is estimated that fewer than 10 percent of displays with SoC have their capabilities used by operators, who still prefer external hardware solutions
- Ultimately, the decision to purchase external hardware, an integrated OPS solution or a SoC display must be made on a case-by-case basis
 - For many basic digital signage needs, SoC may very well be an adequate solution
 - Customers who place a premium on performance, reliability and scalable software will likely continue to rely upon external hardware or integrated OPS solutions for the foreseeable future

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Through Focus on Customer Interactions, Consulting Firms Build Compelling Advantages Over Traditional Advertising Agencies

The advertising agency model is lagging and consulting firms are eagerly picking up the slack

By PJ Solomon's Mark Boidman, Managing Director, and Carter Rauch, Analyst

- Advertising has long been dominated by the “Big Six” holding companies: WPP, Omnicom, Publicis Group, Interpublic, Dentsu, and Havas
 - These firms, the top six global advertising agencies by revenue, are responsible for a significant portion of all advertising content
- Pure-play advertising firms maintained a stranglehold on the industry until 2014, when IBM iX became the first consultancy marketing arm to crack the international top 10 by revenue
 - Consulting firms have since pushed higher, placing four groups—Accenture Interactive, PwC Digital Services, IBM iX, and Deloitte Digital—in the top ten, with Accenture Interactive outpacing Havas in revenue
 - This shift is born of a number of factors, most notably the inorganic growth of the consultancies and the increasingly challenging landscape faced by the agencies
- Seeking to provide a more comprehensive suite of services to clients, consultancies have recently purchased many high-profile creative agencies
 - Traditional agencies, meanwhile, rely on a less-efficient business model ill-equipped for the digital age
 - By merging creative expertise with large-scale business solutions experience, consultancies formerly considered outsiders in advertising are gaining market share and delivering innovative, cost-saving solutions
- Until recently, consultancies operated almost exclusively in the customer interaction side of marketing, which was reflected in their acquisitions of agencies focused on web and mobile development and user experience design
 - That changed in 2016 when IBM iX acquired Resource/Ammirati, Deloitte Digital acquired Heat and PwC Digital Services bought Fluid
 - Each of these agencies is considered a leader in agile, creative design
 - Accenture Interactive has been even more aggressive, buying Karmarama in 2016 and Brand Learning and Wire Stone in 2017 to expand its creative platform
 - This pace of acquisition activity is expected to continue and potentially escalate; some industry insiders anticipate the acquisition of one of the Big Six by a consultancy in the near future
- While consulting firms and advertising agencies offer increasingly similar services, important differences remain
 - Despite the acquisition push by consultancies, agencies maintain a distinct advantage in creative reputation and a history of success in message-based advertising
 - As once-common “agency of record” deals dwindle, traditional agencies must move to become more agile, breaking down departmental divisions and developing content on faster timelines

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Through Focus on Customer Interactions, Consulting Firms Build Compelling Advantages Over Traditional Advertising Agencies (Cont.)

- Consultancies, by contrast, come equipped with stronger business and data analytics and a broader base of client solutions resources
 - They bring a focus on holistic business goals and customer experiences, aimed at building brand loyalty through constructive interactions rather than TV spots and other traditional messaging
- Consulting firms also have a distinct advantage in originating business; while agencies generally pitch costly campaigns to CMOs to win business, consultancies use CEO and board relationships to gain top-down access and pitch broader, sometimes organization-wide projects as cost-saving measures—for a fee, of course
 - While these projects may include traditional advertisements, they will typically focus on customer experience products such as digital content management systems for stores (e.g. adaptive advertising signage, ordering kiosks), improved mobile and web interfaces and loyalty programs
- Consultancies are beginning to encroach on another domain of traditional advertising and marketing agencies: media buying
 - Agencies frequently package creative and media buying assignments, which has led to concerns about conflicts of interest and transparency
 - These concerns, which are especially pronounced as they relate to online ad placement, have driven many advertisers to take stronger control of media-buying practices
- Consultancies, with their broader business advisory capabilities, are well positioned to help
 - Some, like Deloitte Digital, provide objective media buying services as an alternative to potentially conflicted media buying services from advertising agencies
 - Others, like PwC Digital Services, offer auditing services, or “media assurance,” to ensure that ad content appears on the right websites, at the right times, accompanying the right content
- Accenture Interactive is helping companies build in-house media buying, allowing advertisers to bypass traditional media buyers altogether and guarantee transparency in costs, placement and effectiveness
- These broad industry trends are starting to manifest in industry earnings
 - WPP, the world’s largest advertising company, recently reported a surprising decline in ad buying from the consumer goods sector
 - On August 23, after three consecutive years of 3% or better sales growth, WPP reported a 0.5% first-half sales contraction, resulting in its stock price falling 14% in the weeks since
 - Given WPP’s reputation as a consumer goods industry bellwether, this drop is troubling for other traditional agencies

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Through Focus on Customer Interactions, Consulting Firms Build Compelling Advantages Over Traditional Advertising Agencies (Cont.)

- Consumer goods manufacturers—traditionally some of the largest advertisers—are facing a host of pressures, from a millennial preference for healthier, locally sourced products to the intervention of activist investors
 - They have responded by cutting costs, particularly on advertising
 - Many of these manufacturers are shifting focus to trendy, low-cost social media campaigns and online influencers, frequently at the behest of strategy consultants
- The pressures facing the traditional agency model are evident and it remains to be seen how or if the agencies will cope
 - Maybe they will become more agile, rapidly deploying their considerable creative resources to address their clients' needs
 - Maybe they will follow the consultancy model, diversifying their business lines to create value in more situations
 - Maybe, as the agencies have long claimed, the power of creative will win out over the brawn of their business strategy-focused competitors
 - It is more likely, however, that the consultancies will prove capable of creating and delivering advertising content more accurately and effectively than the agencies ever could

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Transforming the In-Store Experience with the Help of the Right Digital Signage CMS

- Amidst a climate of exponential e-commerce growth and economic uncertainty, U.K. retailers are facing unprecedented pressure when it comes to keeping consumers shopping
- One significant way that retailers are trying to keep consumers on the High Street, and in business districts and retail hubs around the world, is by creating more interactive and immersive shopping experiences
 - Retailers are addressing this by incorporating intelligent digital signage networks made up of touchscreen information stations, interactive menus and window displays as well as LED screens displaying live social media feeds
- Implementing the right Content Management System (CMS) platform is essential to help retailers get the most out of these technologies and understand the ROI of digital signage and interactive experiences
- A CMS platform can be considered the backbone of any digital signage network, enabling retailers to upload and promote content that will populate any screens inside the store and also to mobile e-commerce sites to attract people to the store and then convert them

Key Considerations for Retailers Looking to Transform their In-Store Experiences

1. **Be able to access data and analytics** – Having interactive displays is a great way to gather data about your customers
 - For example, having a screen in the store that enables customers to flick through an ‘e-wardrobe’ can help you gather data about which items are most popular
2. **Enable you to create and publish content across all devices** – Omnichannel customer engagement remains a huge focus for retailers, hence it is important that you can use a CMS platform to engage customers both in-store and on mobile
3. **Let you target specific consumers with targeted information** – Digital signage is ultimately pointless if those viewing it cannot take immediate action
 - For example, a real-time twitter feed can be displayed in store and offer customers an exclusive 20 percent off if they tweet the company using a certain hashtag and send an image of them wearing an item they want to purchase
3. **Enable you to integrate new devices with ease** – Having a CMS platform that is scalable to any business is key for retailers looking to create, manage and deploy content across a variety of end points including screens, kiosks and mobile
 - For example, if you are keen to integrate a series of interactive screens around a large store but the information on those screens cannot be coordinated or managed on the same system, then it’s not only inefficient but counterproductive

The Power of CMS Platforms

- CMS platforms should be considered the unsung hero of interactive in-store experience and ultimately power any digital signage network
- There are many CMS platforms available to retailers, but you need to make sure that you invest in one that has the infinite flexibility to deliver all there is to offer when it comes to analyzing consumer data and managing and deploying content across all consumer touch points

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This Burgeoning Vending Machine Startup is Trying to Redefine DOOH Ads

- If you've walked onto a college campus recently – perhaps New York University or Harvard – you may have come upon a digital ad kiosk that offered you free samples from **Kiehl's**
 - Kiehl's has been orchestrating such samples-based prospecting via **Vengo Labs'** network of vending machines that serve digital ads on 1,400 screens, most of which are on university grounds or in gyms like **Planet Fitness**
 - Vengo is really growing – during the first quarter of 2017, the two-year-old company doubled its screens to 700 and they're now in 38 out of 50 states
 - That growing presence is what drew **Pivot Media** to ink an exclusive partnership with the company and sell its growing inventory, specifically targeting consumer packaged goods (CPGs)
- In addition to the digital ads and sampling, marketers can buy physical wraps around the interactive machines
 - The cost for its ads run at a CPM rate of around \$8
 - Vengo came up with a format that harvests wait times by utilizing constantly updated humor to draw you back to the screen and keep you engaged every time you return to the location

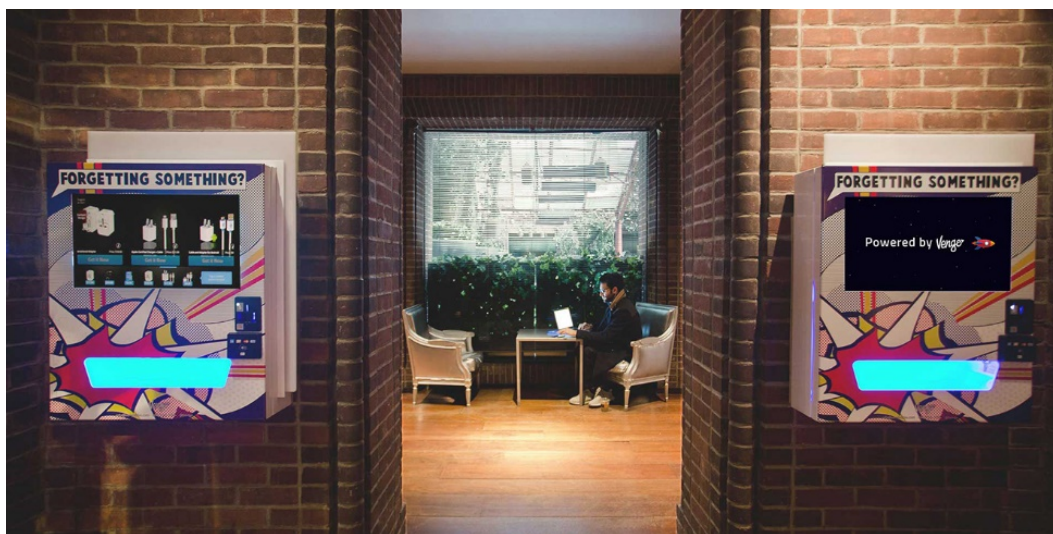


Photo: VengoLabs.com

- Vengo's targeting can be interesting:
 - “You can imagine gym ads in locker rooms that are gender specific and brands that they need,” said Brian Shimmerlik, CEO of Vengo Labs, which per **CB Insights**, a tech market intelligence platform, competes with **U-Vend** and **VendScreen**
- Meanwhile, Vengo Labs' biggest claim to fame may be getting a \$2 million investment on ABC's Shark Tank from investors Kevin O'Leary and Lori Greiner

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E-Commerce Performance: What Works, What Doesn't

- According to a new study by **RSR (Retail Systems Research)**, entitled e-commerce Performance, sponsored by **Yottaa**, as e-commerce sites strive to meet consumer expectations, retailers find they must add more features and content to deliver rich and engaging online experiences
- While rich images and real-time responsiveness are critical, says the report, they significantly degrade web page load times, resulting in inconsistent shopper experience and increased bounce rates
- Consumer demand for digital experiences, especially on mobile devices, is increasing, says the report, and shopper demands for a streamlined, fast and convenient experience also continue to grow
 - Digital is growing faster than stores and will continue to outpace store growth for the foreseeable future
 - Within digital, mobile has become critical, as a growing number of retailers report that mobile traffic has eclipsed desktop

What Worked

Retailers are Building Rich Online Experiences for Both Desktop and Mobile

- The retailers evaluated in this research averaged 70 third parties on their sites, with few appreciable differences between desktop and mobile
- The mobile experience overall scored 1.9 out of 3 points for parity to desktop, where only 1-2 high-value capabilities (like chat or social embeds) were missing
- On average, 55% of site content is images, suggesting that retailers don't understand that they are actually sacrificing shopper experience due to the impact slow loading images have on performance

Mobile Websites are Increasingly Usable for Actual Shopping

- Not long ago, most mobile websites were slow-loading and difficult to navigate, which resulted in consumers searching for the nearest store to visit in-person instead of using websites for shopping
- Mobile is still behind desktop as a channel in terms of conversion rate but more and more retailers report that a majority of their traffic comes from mobile

The Apparel and Accessories Category is Leaps and Bounds Ahead

- Today, shoppers should expect a visually striking user experience from fashion retailers but the analysts were surprised to see just how much better today's apparel and accessories retailers are than their peers at delivering on this expectation

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E-Commerce Performance: What Works, What Doesn't (Cont.)

What Didn't Work

Site Performance is Disturbingly Slow

- The rule of thumb for site performance is if it takes more than 3 seconds to load, retailers risk customers bouncing off their sites due to slow site performance
- Response times for both desktop and mobile were too slow in the study: even mobile averages almost 9.5 seconds to complete the page and desktop time to complete is even worse at 16.6 seconds

Third Parties Have a Big Impact on Retailers' Overall Performance

- With an average score of 0.8 out of a possible 3, most retailers are hitting 50-75 percent of load time coming from third parties
- Retailers with more than 70 third parties overall averaged worse performance than those with less than 70 third parties

Pages with More Than 50 Percent Image Content Experienced the Slowest Performance

- While there are a few exceptions to this rule, the fact remains there is still a strong correlation between graphic content and page times
- For example, no retailer scored as high as possible (3 out of 3) for time to first byte on either mobile or desktop

Popups are Too Often a Problem

- While it is clearly advantageous for a retailer to collect as many customer email addresses as possible, too many currently take a tack that negatively impacts performance: the page paints, then the pop up is displayed, while also annoying customers

What's Next?

A Grade of "D+" Leaves A Lot of Opportunity on the Table

- Retailers are still leaving a lot on the table when it comes to site performance, features and shopability

Don't Neglect Desktop While Optimizing Mobile

- Through this research it became abundantly clear that many retailers offer a modern and fresh-feeling mobile site while their desktop offerings have clearly been left behind

The Opportunity Ahead

- Concluding, the report says that much of the internal debate over rich experience vs. fast performance has focused on either cramming more and more capabilities into sites, no matter what impact that has on performance, or stripping out functions and features in order to make sure the site loads fast
 - There is room to improve performance and, by doing so, open up new opportunities to make digital channels truly differentiating and engaging at the same time

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Westfield Malls Deploy Over 220 Esprit Digital Advertising Pods

Project Summary

- In what is being seen as a game-changer for the DOOH sector in the U.S., **Westfield** is in the process of replacing its traditional paper-based advertising furniture with a network of super-slim freestanding 75” LCD pods in its 17 flagship malls



Photos: EspritDigital.com

Technical Innovation

- These stunning new pods have been deployed in a variety of formats for both indoor and full outdoor use
 - They incorporate the latest cortex thermal and remote management technology, virtually eliminating physical maintenance visits and allowing almost any issue to be resolved from Esprit’s Network Operating Centers around the world
 - As well as full audience measurement, the pods have built-in iBeacons and ClearSpace™ – Esprit Digital’s proprietary sensor system that alerts management to any obstructions in front of their screens
- Bright white LED side strips are just one of the finishing touches alongside gold front plates featuring the Westfield logo
 - Each unit houses 75” **LG** 4K LCDs positioned at eye-level, which also have the ability to track consumers on their journey through each mall
 - This allows advertisers to tailor their content to specifically target the right people, with the right message, at the right time
- The Westfield Network provides the opportunity for limitless creativity and brand engagement on the front-end, while offering real-time consumer data insights like demographics, dwell/attention time, mood and more on the back-end

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Organic LCD Technology – A Flexible Display is a Reality Now



Photos: FlexEnable.com

- Imagine the things you can achieve with a shatterproof display that folds away in your pocket and can be wrapped around anything – the possibilities for such a technology are simply endless
- **FlexEnable**, the company behind the technology, has unveiled the prototype of OLCD and, before you know it, the technology will be employed in mainstream consumer products
 - These displays are made with glass, therefore, they are not easy to transport, can shatter if handled incorrectly and are restricted to their definite form
 - However, if this glass in an LCD is replaced with plastic and suitable liquid crystal materials are used, a flexible display can be achieved
- The technology is called the Organic Liquid Crystal Display (OLCD), which will be the same as the LCDs we use in terms of quality, color and output but so flexible it can be put up anywhere in any way
 - Since OLCDs can be manufactured using the same equipment as LCDs and makes use of much of the materials used in the production of LCDs, the cost of manufacturing is not going to be skyrocketing
- A flexible display can be used for numerous applications, including inside automobiles, in factories or airports for displaying information, employed for digital signage and as a replacement for the TVs currently in homes
 - Imagine your kitchen table displaying your favorite cooking show as you enjoy making a meal for the family or your favorite game being displayed on your patio wall while you enjoy an evening with friends
 - Because these screens are made of plastic, are unbreakable and shatterproof, they can be put up anywhere without bothering about damage
- With the passage of time, more creative ideas making use of this technology will surface, realizing the full potential of this innovation

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AR Experts Believe the New iPhone Will Usher in Two Billion Users

- The latest iPhones, which were released in September, could be the biggest shift-change in how people interact with technology in a decade, according to the augmented reality (AR) experts at **Draw & Code**
 - Having worked extensively with AR, the U.K. software studio sees the technology that overlays digital content onto the real world as the future of the iPhone and the wider digital industry
- Producing immersive experiences for clients such as **Red Bull** and **Hyundai**, Draw & Code have already seen AR grow into a medium that attracts hundreds of millions of users daily – now, with the announcement of the new iPhone, they are preparing for further popularization of the technology as **Apple** throws its full weight behind it
 - “Within the next decade, two billion people will use AR-enabled apps daily,” says Draw & Code co-founder John Keefe, “It’s something Apple recognized when they started snapping up AR tech companies and now we’re about to see the fruits of that investment”
- It is widely predicted that the next generation of iPhones will be designed with AR in mind, especially as similar technology is also featured on rival **Android** devices including **Sony’s** new Xperia handset
- “I remember the revealing of the original iPhone and using it even before the App Store had come online,” says John Keefe, Draw & Code co-founder, “It was clear that this would change the game for phones, computing and society as a whole – now AR is poised to shake up the way we live our lives all over again”
- “With **Snapchat** and **Pokemon Go** bringing AR to a wider audience the timing is perfect for Apple to commit to this medium” says John Keefe, “We regularly work out in Silicon Valley and the thinking there is that Apple’s ARKit and **Google’s** ARCore, along with existing AR platforms such as **Vuforia**, will give ambitious designers and developers the tools to change the way we interact with the world – this is big”
- A handy new smartphone feature is one thing but revolutionizing the world is quite another... So why does John think that AR will succeed where other much-vaunted products and technology has failed?
 - “AR is already accessible to billions of smartphone users world-wide and has the potential to turn any surface or space into an interactive, animated object – what’s not to like?”

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Carbon Sciences to Become Digital Locations

- **Carbon Sciences** (CABN) announced that it will change its corporate name to **Digital Locations** to better describe its new focus on providing next generation location-based advertising solutions that enable brands to connect with people and places
- The company also announced recently that it entered into an agreement in principle with **Glanz** to acquire the business assets of **Corner Media**, a location-based advertising company in the DOOH sector
 - Corner Media has partnered with some of the largest real estate investment trusts (REITs) in the U.S. to assemble a smart digital signage network in approximately 500 highly visited entertainment districts, lifestyle centers and destination venues in the top 15 designated market areas most coveted by advertisers
 - These pedestrian venues are visited millions of times per day, allowing Corner Media to deliver custom audience segments for advertisers
- As previously announced in June, Gerard F. “Jerry” Hug joined the company as its new CEO to execute a growth-by-acquisition strategy
 - The acquisition of Corner Media will represent Mr. Hug’s first effort to lead the company in the direction of providing location-based advertising solutions
 - Mr. Hug previously served as the Chief Executive Officer of **SITO Mobile** from November 2014 to February 2017, where he architected and executed the successful transformation of the company from an SMS aggregator to an industry leader in location-based mobile advertising
- The acquisition of Corner Media is subject to the execution of an agreement between the parties
 - The purchase price will be paid in the form of 50,000 shares of Carbon Sciences non-voting preferred stock that may be converted into 125,000,000 shares of Carbon Sciences common stock, plus the assumption of certain liabilities in the amount of \$500,000
- Through an ecosystem of interactive digital signage, smart sensors and AR in highly visited locations, such as airports, entertainment districts, shopping malls and sports venues, Digital Locations intends to allow brands to advertise and interact with consumers in the context of where they are, who they are and where they're going
 - Digital Locations plans to develop a cloud-based platform for property owners to use in delivering high value custom audience segments to advertisers, backed by powerful data analytics and reporting
 - Its mission is to transform DOOH advertising from simple messaging to immersive experiences by bridging the physical and digital worlds, allowing for a truly connected multi-channel experience

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New Zealand's 1,200-Site Giggle Network Seems Anything But Laughable

- Many of the business models for DOOH ad networks have been laughable but a New Zealand-based network is finding success with a business model built around laughs
- **The Giggle Entertainment Network** has screens in 1,200 locations across New Zealand – running a one-hour repeating programming channel that’s built around jokes, funny tweets, video clips and images
 - “We understood that the model of adverts on screens was a very shaky one,” says founder Del Shaw, “For the main reason being: ‘Why do you expect me to watch a screen of scrolling adverts? The screen gives me nothing back.’ At Giggle, we do endorphins!”
 - “We came up with a format,” adds Shaw, “That harvests wait times, by utilizing constantly updated humor to draw you back to the screen and keep you engaged every time you return to the location”
- The company puts the screens in free of charge in cafes, gyms, bars and waiting rooms – recovering the costs through ad sales
 - Unlike most DOOH networks that install in third-party sites, Giggle does not do a revenue share of ad proceeds, which can often be 10-30 percent of the net and the reason so many of these kinds of networks have failed, historically
 - The venues can get insert in the ad list, says Shaw, but most are just happy to have customers entertained
- Giggle has “saturated” the markets so far installed – aiming to get a screen in for every 1,000-1,500 people in the market



Photo: Giggle Entertainment Network NZ (Facebook)



Photo: Sixteen-Nine.net

- In another interesting wrinkle, Giggle is franchising the model to local markets – who develop new sites and sell local ads, while head office sells to national advertising clients
 - The company uses built-in-house control software and most sites get either 43 or 55 inch screens, though some sites have 10-inch countertop displays
 - The content is all produced in-house, “Keeping it all G-rated,” says Shaw, “So not to offend viewers”
- The company has been around for nine years, and having penetrated much of the Kiwi market, Shaw says he is now “Looking for international partners that may be interested in our system for other countries – after all who doesn’t enjoy a good laugh!”

Source: Sixteen:Nine.

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Sector News

Broadcasting / Telecommunications

- 10/6: **Zee Entertainment Enterprises**, the India-based broadcasting company, agreed to acquire **9X Media**, the India-based operator of music television channels, for ~\$25 million
- 10/3: **CountryWide Broadband**, the U.S.-based operator of broadband services, and **Seaport Capital**, the U.S.-based private equity firm, agreed to acquire **Full Channel**, the U.S.-based provider of broadband video entertainment, for undisclosed consideration
- 10/3: **GTT Communications**, the U.S.-based operator of global interconnected ethernet service platforms, agreed to acquire **Transbeam**, the U.S.-based provider of broadband services, for a consideration of \$28 million
- 9/29: **Happigo Home Shopping**, a China-based TV shopping platform, agreed to acquire **Mango TV**, an online video platform of **Hunan Satellite TV**, for ~\$1.4 billion
- 9/26: **Vimeo**, the U.S.-based operator of a video sharing site and subsidiary of **IAC/InterActiveCorp**, agreed to acquire **Livestream**, the U.S.-based live video streaming company, for undisclosed consideration
- 9/25: **Raycom Media**, the owner / operator of 65 television and two radio stations, and **Community Newspaper Holdings**, the U.S.-based owner of more than 110 newspapers, websites and publications, agreed to merge into a new privately owned media group for undisclosed consideration
- 9/25: **Boat Rocker Media**, the Canada-based entertainment company, acquired **Proper Television**, the Canada-based full-service production and distribution company, for ~\$10 million
- 9/22: **Keyne Holdings**, a Cayman Islands-based company, announced a takeover offer of **Nine Express**, a Hong Kong-based distributor and licensor of films, worth ~\$90 million
- 9/20: **Imagina Media Audiovisual**, the Spain-based technical services supplier to the audiovisual sector, agreed to acquire **Tres60 Grupo**, the Spain-based company engaged in providing production and equipment for broadcasting live events, from **H.I.G. Capital**, for undisclosed consideration
- 9/20: **Google**, the global technology company, agreed to acquire the engineering and design teams for the Pixel smartphone of **HTC**, the Taiwanese-based consumer electronics company, for \$1.1 billion
- 9/18: **Leading Brands**, the Canada-based beverage company, agreed to acquire **Liquid Media Group**, the Canada-based content producer for all platforms, for undisclosed consideration
- 8/30: **VENO** and **Global Telecom Holding**, the Egypt-based telecommunication operator, announced that their subsidiary in Pakistan, **Jazz**, agreed to sell its tower business to **Tanzanite Tower** for ~\$940 million
- 8/30: **Regional News Network**, the U.S.-based operator of an independent television network, agreed to acquire **WWDP 46**, the U.S.-based television station, from **EVINE Live**, the U.S.-based retailer, for \$10 million
- 8/30: **RTL Group**, the Luxembourg-based media group engaged in TV and radio broadcasting, agreed to acquire the remaining 36.4% stake in **SpotX** from **H.I.G. Growth Partners** for ~\$150 million
- 8/27: **CBS Corporation**, the U.S.-based mass media and advertising company, agreed to acquire **Ten Network Holdings Limited**, the Australia-based broadcasting company, for ~\$160 million

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Sector News

OOH Media

- 10/12: **Branded Cities**, an OOH media company in North America, and **Cadillac Fairview**, the Canada-based commercial real estate firm, announced the launch of the largest DOOH display in Canada, which will reach over 50 million annual mall visitors



Photo: BrandedCities.com

- 10/4: **JCDecaux**, the France-based OOH advertising company, and **America Movil**, a provider of integrated telecommunication services in Latin America, created a JV for OOH advertising in Mexico
- 10/2: **Bain Capital**, the U.S.-based private equity firm, made an offer to acquire **Asatsu-DK**, the third largest advertising agency in Japan, for ~\$1.4 billion
- 9/27: **OUTFRONT Media**, the U.S.-based OOH advertising company, announced it was awarded a 10-year advertising contract for the **New York Metropolitan Transportation Authority**
- 9/27: **JCDecaux**, the France-based OOH advertising company, announced that it entered the Bahrain market with a 10-year advertising contract for the **Bahrain International Airport**
- 9/12: **Clear Channel Airports**, a brand division of **Clear Channel Outdoor Americas** and a subsidiary of **iHeartMedia**, announced it renewed a five-year partnership with the **Bill and Hillary Clinton National Airport (LIT)** to provide advertising
- 8/23: **WPP**, the advertising and public relations company, agreed to acquire **Design Bridge**, a brand design agency with studios in London, Amsterdam, Singapore and New York, for undisclosed consideration

Radio / Music

- 10/11: Pursuant to their merger process, **Entercom Communications Corporation**, the U.S.-based company engaged in radio broadcasting, and **CBS Radio**, the U.S.-based operator of radio stations, agreed to divest 16 stations for ~\$210 million
- 10/2: **Microsoft** announced that it will shutter its online music store, **Groove Music**, and move users to **Spotify**, the Sweden-based streaming music company
- 9/26: **Entercom Communications Corporation**, the U.S.-based company engaged in radio broadcasting, announced the divestiture of **KSWD-FM 100.3 The Sound** in Los Angeles, **KSOQ-FM 92.1** in San Diego and **WGGI-FM 95.9** in Wilkes-Barre to the **Educational Media Foundation** for ~\$60 million
- 9/23: **Carlin America**, an independent publisher and owner of the rights to Elvis Presley and AC/DC, agreed to sell to **Round Hill Music**, the owner of more than 100,000 songs, for an estimated \$250 million
- 9/19: **LiveXLive Media**, the U.S.-based live music streaming company, agreed to acquire **Slacker Radio**, the U.S.-based provider of personalized radio subscription services, for \$50 million, contingent upon LiveXLive completing a public stock offering, which is expected to generate proceeds of at least \$100 million
- 9/13: **Alpha Media**, a U.S.-based radio broadcasting company, agreed to sell 18 stations and two translators to **Dick Harlow's Dick Broadcasting**, a U.S.-based radio broadcasting company, for \$19.5 million
- 9/7: **Warner Music Group**, the U.S.-based music group engaged in music publishing and in the recorded music business, acquired **Spinnin' Records**, the Netherlands-based music company, for an estimated consideration of \$100 million
- 9/6: **WPP**, the advertising and public relations company, announced a \$5 million investment for a minority stake in **Gimlet Media**, a U.S.-based global podcasting company

Source: Company press releases and Wall Street research.

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Sector News

Other Key Digital Media and Tech Headlines

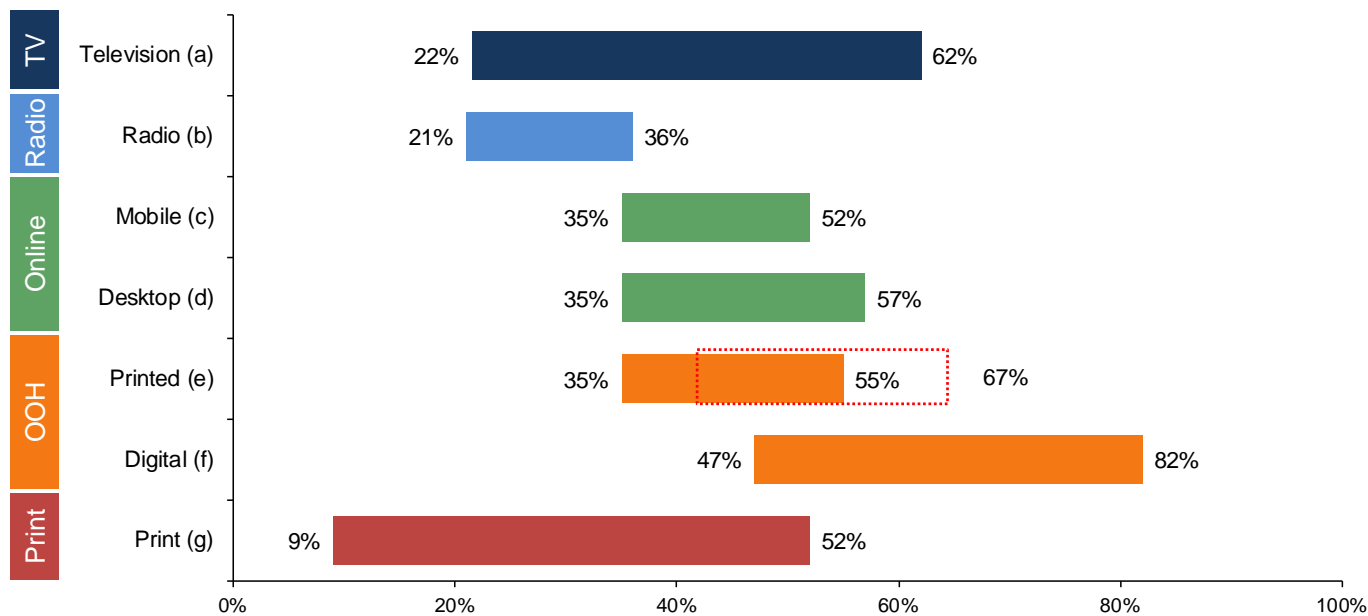
- 10/18: **Synchronoss Technologies**, the U.S.-based software firm, announced the sale of **Intralinks**, the U.S.-based cloud software company, to funds affiliated with **Siris Capital Group**, a private equity firm, for \$1 billion
- 10/13: **Fandango**, the U.S.-based online movie ticketing service owned by **Comcast**, agreed to acquire **Movietickets.com**, for undisclosed consideration
- 10/9: **bpost SA**, the Belgium-based company engaged in delivery services, agreed to acquire **Radial**, the U.S.-based provider of e-commerce solutions, for \$820 million from **Sterling Partners** and **Longview Asset Management**
- 10/5: **Learfield**, a provider of integrated marketing solutions in college sports, and **IMG**, a sports and talent management company, announced an agreement between Learfield and IMG College to merge, for undisclosed consideration
- 10/4: **Digital Media Solutions**, a full-service marketing firm, agreed to acquire **Mocade Media**, an email marketing firm, for undisclosed consideration
- 10/3: **Office Depot**, a U.S.-based company engaged in supplying office products and services, agreed to acquire **CompuCom Systems**, the U.S.-based company engaged in IT consulting, from **Thomas H. Lee Partners** for ~\$1 billion
- 10/3: **Iron Mountain**, a U.S.-based storage and information management services company, announced the acquisition of **Bonded Services** group of companies, providers of media asset management services for global entertainment, for ~\$80 million
- 10/2: **Village Roadshow Limited** agreed to sell its 50% stake in Singapore-based cinema chain **Golden Village** to **Orange Sky Golden Harvest**
- 9/29: **Roku**, the streaming software and device manufacturer, priced its IPO at \$14 a share, which raised \$219 million in funding at a valuation of \$1.3 billion
- 9/26: **IHS Markit**, the U.K.-based provider of information, analytics and solutions, acquired a 78% stake in **automotiveMastermind**, the U.S.-based provider of predictive analytics and marketing software, for a purchase price of ~\$390 million
- 9/24: **Deliveroo**, the U.K.-based company using technology to deliver food, raised \$385 million in a Series F funding round
- 9/20: **Scientific Games Corp.**, a U.S.-based supplier of technology to the lottery industry, agreed to acquire **NYX Gaming Group**, a U.S.-based company engaged in digital gaming software solutions, for ~\$630 million
- 9/18: **Kinopolis Group**, a Belgium-based cinema chain, reached an agreement with **Landmark Cinemas** to acquire the Canada-based movie theatre group, for ~\$100 million
- 9/18: **Itron**, a U.S.-based supplier of wireless data and communication products for utilities, agreed to acquire **Silver Spring Networks**, the U.S.-based provider of smart grid products, for ~\$830 million
- 9/11: **Ansira Partners**, a U.S.-based customer engagement agency, acquired **Local Biz Now**, the U.S.-based company that provides online advertising solutions
- 9/6: **Pitney Bowes**, a U.S.-based provider of integrated mail and document management systems, agreed to acquire **Newgistics**, a U.S.-based provider of delivery and digital commerce solutions, for ~\$475 million
- 9/5: Houston billionaire **Tilman Fertitta** agreed to purchase the **Houston Rockets** for \$2.2 billion
- 9/4: **RhythmOne**, a U.S.-based online advertising company that connects digital audiences with brands, agreed to acquire **YuMe**, a U.S.-based company that provides digital video advertising solutions and software solutions, for \$100 million
- 9/4: A consortium led by **Daimler**, the Germany-based vehicle manufacturer, acquired an estimated \$250 million stake in **Via Transportation**, the U.S.-based on-demand transit company

Source: Company press releases and Wall Street research.

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Advertising Effectiveness – PJSC Study and Recall Comparison Analysis

- Based on PJSC 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: Peter J. Solomon Company 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.

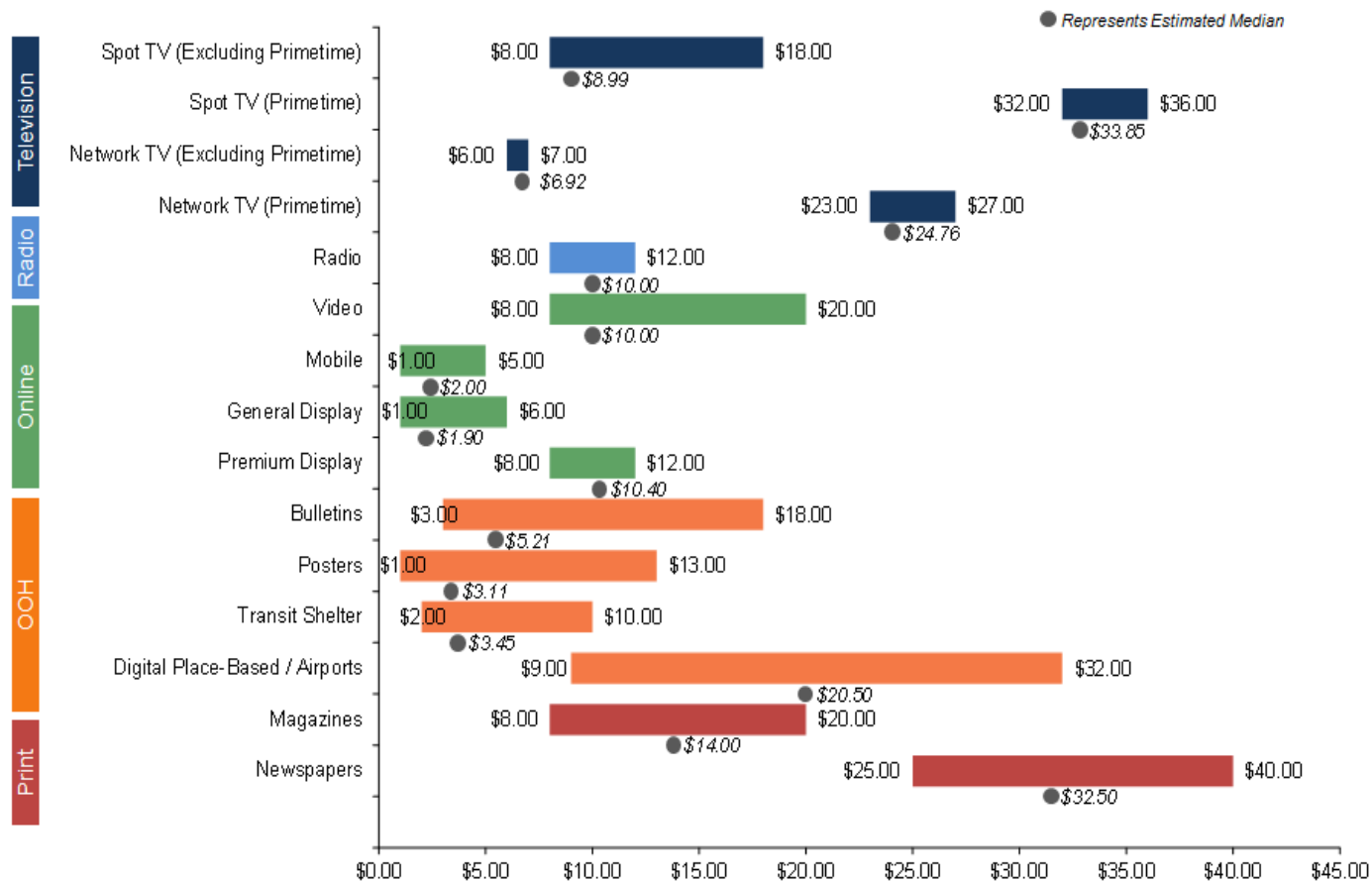
(e) Includes all forms of outdoor advertising, including billboards, posters, wallscapes, rotary programs, transit, airport advertising and in retail venues. Dotted box indicates revenue-weighted composite of printed and DOOH channels.

(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.

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PJSC U.S. 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: Peter J. Solomon Company estimates as of July 2016 based on SEC filings, news, research and other industry sources.

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Market Indicators

	10/17/17	Performance		
		% off 52	1-Month	YTD
		Week	%	%
		High	Change	Change
Nasdaq Composite	6,624	(0.0%)	2.7%	23.0%
Dow Jones Industrial	22,997	--	3.3%	16.4%
S&P 500	2,559	--	2.4%	14.3%

	Bloomberg Economic Forecast				
	4Q17E	1Q18E	2Q18E	3Q18E	4Q18E
Real GDP	2.30 %	2.60 %	2.40 %	2.40 %	2.20 %
Core CPI	1.90	1.70	2.20	2.20	2.20
Fed Funds	1.50	1.60	1.80	1.95	2.10
3 Mo. LIBOR	1.53	1.69	1.89	2.06	2.20
10 Yr Treasury	2.43	2.54	2.66	2.78	2.87
Unemployment	4.30	4.20	4.10	4.10	4.10

Share Price Performance

	Stock Price	1 - Month %	YTD %
	10/17/17	Change	Change
Out of Home Media			
AirMedia Group	2.46	(8%)	0%
APG SGA	\$401.47	(2%)	(9%)
Clear Channel Outdoor	4.50	13%	(11%)
JCDecaux	38.28	7%	30%
Lamar	68.69	7%	2%
National CineMedia	6.87	--	(53%)
OUTFRONT Media	24.20	12%	(3%)
RMG Networks	1.98	(11%)	(31%)
Ströer	68.40	4%	56%

Out of Home Median	4%	(3%)
Out of Home Mean	2%	(2%)

Broadcasting	Stock Price	1 - Month %	YTD %
	10/17/17	Change	Change
Entrevision	\$5.35	(6%)	(24%)
Gray Television	15.05	9%	39%
Nexstar Broadcasting	59.25	3%	(6%)
Sinclair Broadcast Group	30.05	8%	(10%)
TEGNA	12.58	3%	(41%)

Broadcasting Median	3%	(10%)
Broadcasting Mean	3%	(8%)

Diversified Media	Stock Price	1 - Month %	YTD %
	10/17/17	Change	Change
CBS	\$56.66	(3%)	(11%)
Discovery	19.16	(13%)	(30%)
Disney	98.36	(0%)	(6%)
Hemisphere Media Group	12.30	(3%)	10%
News Corp.	13.62	4%	19%
Scripps Networks	83.24	(3%)	17%
Time Warner	101.46	(0%)	5%
Viacom	26.57	(4%)	(24%)

Diversified Media Median	(3%)	(0%)
Diversified Media Mean	(3%)	(3%)

Advertising Technology	Stock Price	1 - Month %	YTD %
	10/17/17	Change	Change
Criteo	\$46.09	7%	12%
HubSpot	83.20	14%	77%
Telaria	4.88	36%	96%
The Rubicon Project	3.47	(14%)	(53%)
The Trade Desk	63.89	7%	131%
YuMe	4.46	(4%)	25%

Advertising Technology Median	7%	51%
Advertising Technology Mean	7%	48%

	Stock Price	1-Week %	1 - Month %	YTD %
	10/17/17	Change	Change	Change
Radio				
Beasley Broadcast Group	\$12.20	(2%)	6%	98%
Cumulus Media	0.31	(8%)	(11%)	(70%)
Emmis Communications	3.56	1%	19%	5%
Entercom Communications	11.55	(5%)	10%	(25%)
iHeartMedia	1.36	(9%)	(5%)	23%
Saga Communications	45.95	(0%)	3%	(9%)
Salem Communications	6.45	(4%)	1%	3%
Sirius XM Radio	5.71	1%	4%	28%

Radio Median	(3%)	3%	4%
Radio Mean	(3%)	3%	7%

Advertising/Marketing	Stock Price	1 - Month %	YTD %
	10/17/17	Change	Change
Dentsu	\$45.23	2%	7%
Havas	10.85	1%	(2%)
Interpublic	21.04	0%	5%
Omnicom	75.59	2%	3%
Publicis	72.51	2%	6%
WPP	18.46	(0%)	(0%)

Advertising/Marketing Median	1%	4%	(7%)
Advertising/Marketing Mean	1%	3%	(2%)

New Media	Stock Price	1 - Month %	YTD %
	10/17/17	Change	Change
Alphabet	1,011.00	2%	8%
Amazon	1,009.13	2%	35%
eBay	\$37.49	(3%)	(2%)
Facebook	176.11	3%	53%
Netflix	199.48	2%	9%
PayPal	66.67	1%	7%
Snap	16.09	12%	(34%)
Twitter	18.28	5%	12%

New Media Median	2%	4%	31%
New Media Mean	3%	4%	31%

Advertising Research	Stock Price	1 - Month %	YTD %
	10/17/17	Change	Change
comScore	28.05	(2%)	(4%)
GfK	55.46	(0%)	(1%)
Ipsos	35.09	1%	7%
Nielsen	\$40.00	(0%)	0%

Advertising Research Median	(0%)	(0%)	3%
Advertising Research Mean	(0%)	0%	4%

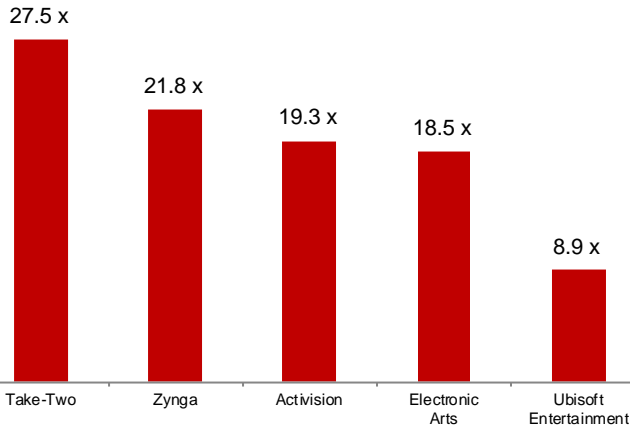
Source: Capital IQ, Bloomberg and Wall Street research.

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EV / 2017E EBITDA

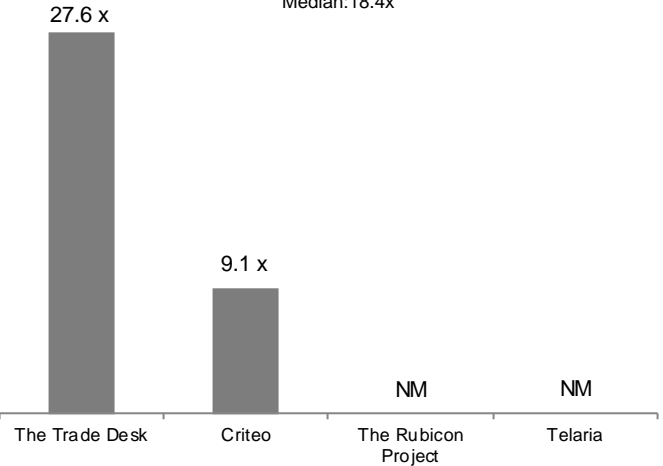
Video Games

Median: 19.3x



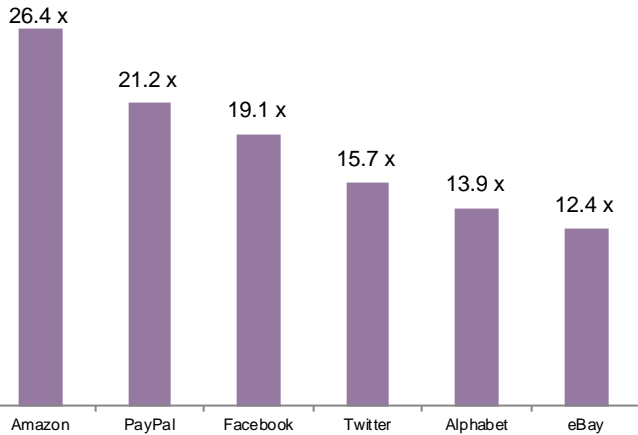
Advertising Tech

Median: 18.4x



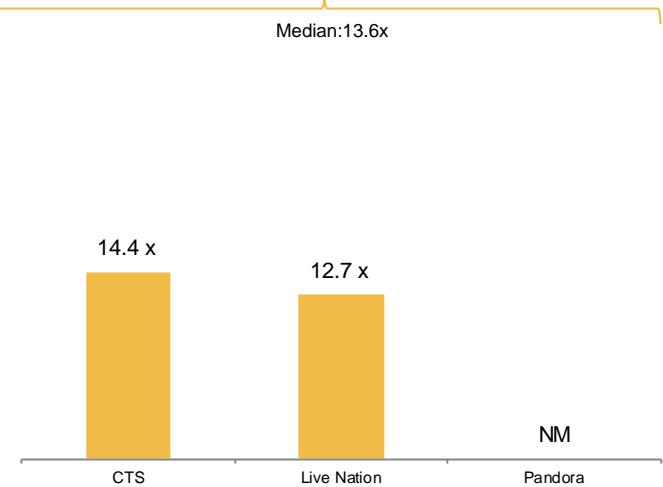
New Media

Median: 17.4x



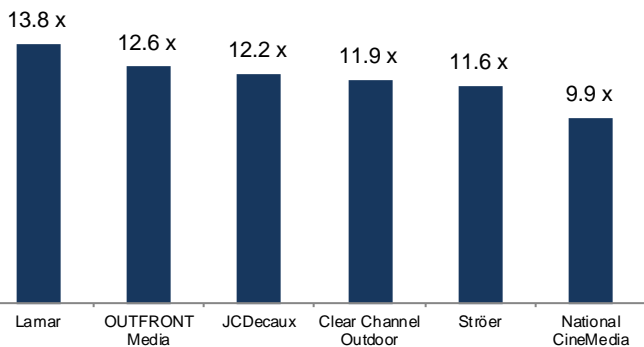
Music / Events

Median: 13.6x



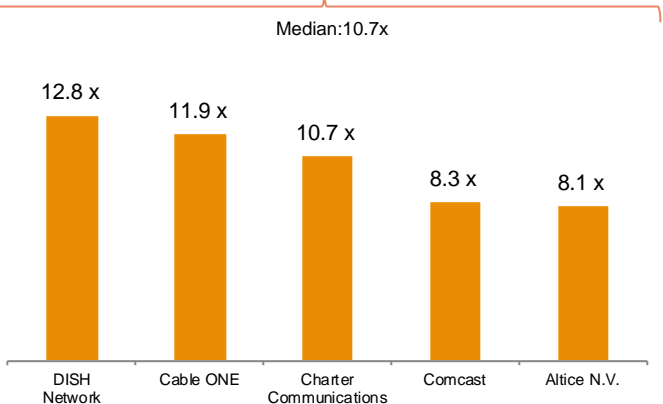
Out-of-Home Advertising

Median: 12.0x



Cable

Median: 10.7x



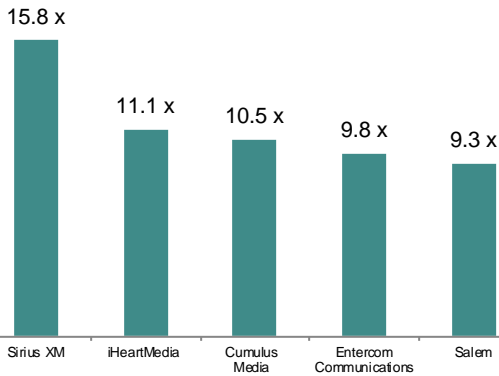
Source: Capital IQ as of October 17, 2017 and Wall Street research.

The Media Monthly

EV / 2017E EBITDA

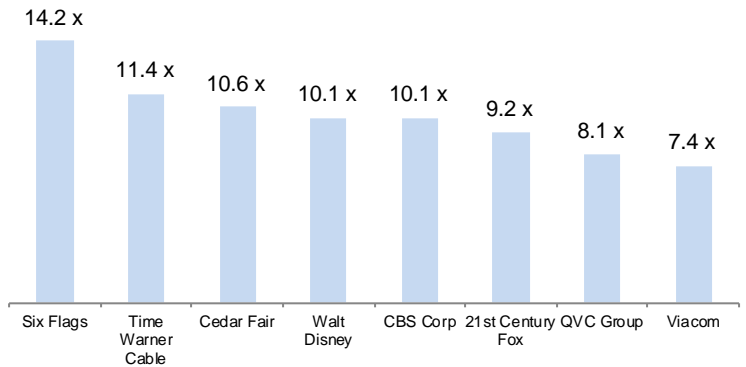
Radio

Median:10.5x



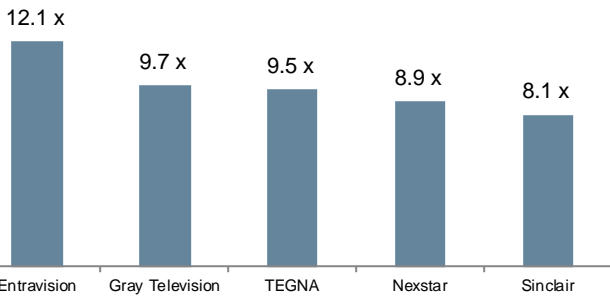
Cable / Content

Median:10.1x



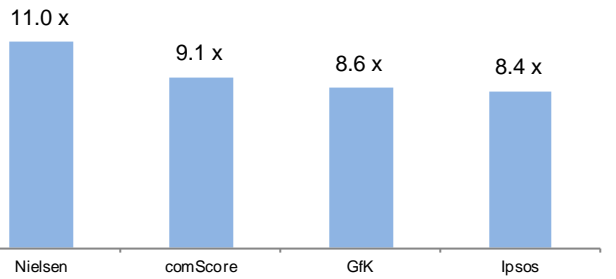
Broadcasting

Median:9.5x



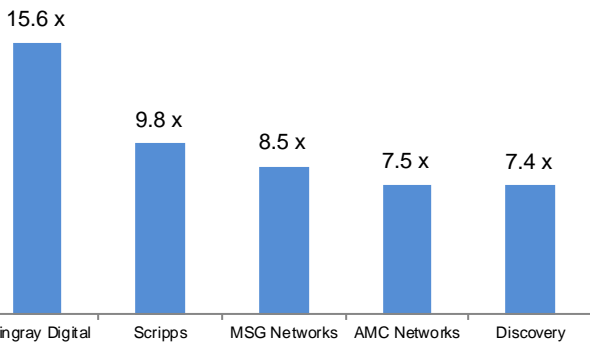
Advertising Research

Median:8.9x



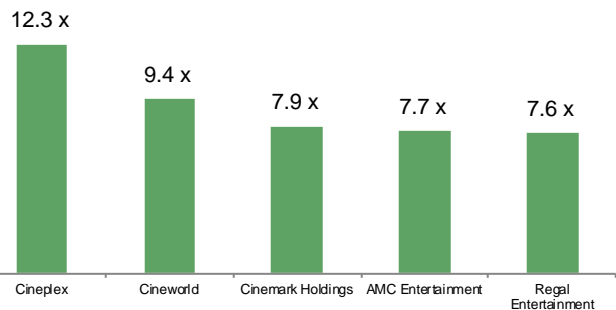
Cable Content

Median:8.5x



Theaters

Median:7.9x



Source: Capital IQ as of October 17, 2017 and Wall Street research.

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Valuation Metrics

	Stock Price 10/17/17	52-Week Low	52-Week High	Equity Value	Enterprise Value	Valuation Multiples		Growth	
						EV / Revenue 2017E	EV / EBITDA 2017E	'15A - '17E CAGR Revenue	EBITDA
Out of Home Media									
Lamar	\$68.69	\$59.30	\$79.05	\$6,734	\$9,083	5.9 x	13.8 x	6%	8%
JCDecaux	38.28	25.59	38.48	8,137	8,816	2.1 x	12.2 x	16%	12%
Clear Channel Outdoor	4.50	3.55	6.25	1,627	6,734	2.6 x	11.9 x	(4%)	(8%)
OUTFRONT Media	24.20	20.88	27.65	3,355	5,605	3.7 x	12.6 x	0%	6%
National CineMedia	6.87	5.15	15.97	1,058	1,945	4.5 x	9.9 x	(2%)	(3%)
RMG Networks	1.98	1.90	3.96	22	20	0.5 x	NM	(1%)	NM
Global / U.S. Median						3.1 x	12.2 x	(0%)	6%
Global / U.S. Mean						3.2 x	12.1 x	3%	3%
Ströer									
Ströer	\$68.40	\$37.15	\$68.41	\$3,781	\$4,409	2.9 x	11.6 x	30%	43%
APG SGA	401.47	397.35	517.73	1,204	1,164	3.7 x	14.6 x	(0%)	2%
Europe Median									
Europe Median						3.3 x	13.1 x	15%	22%
Europe Mean						3.3 x	13.1 x	15%	22%
Clear Media									
Clear Media	\$1.18	\$0.93	\$1.21	\$640	\$568	NA	NA	NA	NM
AirMedia Group	2.46	1.40	3.18	155	35	NA	NA	NA	NM
China Median									
China Median						NA	NA	NA	NA
China Mean						NA	NA	NA	NA
Total Out of Home Advertising Median									
Total Out of Home Advertising Median						3.3 x	12.2 x	0%	6%
Total Out of Home Advertising Mean						3.2 x	12.4 x	6%	8%
Radio									
Sirius XM Holdings	\$5.71	\$4.10	\$5.86	\$26,340	\$32,756	6.1 x	15.8 x	9%	14%
iHeartMedia	1.36	1.07	3.84	123	20,359	3.3 x	11.1 x	(1%)	2%
Cumulus Media	0.31	0.23	1.94	9	2,257	2.0 x	10.5 x	(2%)	(2%)
Entercom Communications	11.55	9.50	16.15	471	951	2.0 x	9.8 x	7%	(0%)
Beasley Broadcast Group	12.20	4.75	16.55	351	547	NA	NA	NA	NA
Salem Media Group	6.45	5.15	8.15	168	428	1.6 x	9.3 x	1%	(2%)
Emmis Communications	3.56	2.23	3.79	45	214	NA	NA	NA	NA
Radio Median						2.0 x	10.5 x	1%	(0%)
Radio Mean						3.0 x	11.3 x	3%	2%
Broadcasting									
Nexstar Broadcasting Group	\$59.25	\$47.20	\$73.15	\$2,738	\$7,101	2.9 x	8.9 x	65%	63%
Sinclair Broadcast Group	30.05	24.80	42.90	3,086	6,325	2.3 x	8.1 x	10%	6%
TEGNA	12.58	12.05	26.41	2,706	6,264	3.2 x	9.5 x	(20%)	(21%)
Gray Television	15.05	7.35	16.35	1,067	2,863	3.3 x	9.7 x	21%	21%
Entravision Communications	5.35	5.10	7.11	484	715	2.6 x	12.1 x	4%	(9%)
Broadcasting Median						2.9 x	9.5 x	10%	6%
Broadcasting Mean						2.9 x	9.7 x	16%	12%
Advertising/Marketing									
WPP	\$18.46	\$18.08	\$23.77	\$23,360	\$30,090	1.5 x	8.8 x	6%	4%
Omnicom Group	75.59	71.73	88.47	17,426	21,279	1.4 x	9.1 x	1%	3%
Publicis	72.51	63.38	77.83	16,388	18,861	1.6 x	9.3 x	5%	3%
Dentsu	45.23	41.10	57.92	12,750	15,016	1.8 x	9.5 x	3%	(2%)
The Interpublic Group	21.04	19.58	25.57	8,274	9,709	1.2 x	8.4 x	2%	6%
Havas	10.85	7.54	11.09	4,589	4,685	1.7 x	11.2 x	7%	5%
Advertising/Marketing Median						1.6 x	9.2 x	4%	4%
Advertising/Marketing Mean						1.5 x	9.4 x	4%	3%
Advertising Technology / New Media									
Alphabet	\$1,011.00	\$753.22	\$1,011.00	\$693,957	\$603,199	5.5 x	13.9 x	21%	33%
Amazon	1,009.13	719.07	1,052.80	484,765	486,933	2.8 x	26.4 x	28%	53%
Facebook	176.11	115.05	176.11	511,458	476,006	12.2 x	19.1 x	48%	75%
Netflix	199.48	113.38	202.68	86,125	89,268	7.6 x	NM	31%	72%
PayPal	66.67	38.34	68.86	80,164	70,999	5.5 x	21.2 x	18%	31%
Twitter	18.28	14.29	20.53	13,425	11,091	4.6 x	15.7 x	4%	NM
HubSpot	83.20	45.90	85.80	3,081	2,878	7.8 x	NM	42%	NM
Criteo	46.09	34.65	55.39	3,010	2,724	2.9 x	9.1 x	(15%)	61%
The Trade Desk	63.89	22.80	66.51	2,606	2,517	8.3 x	27.6 x	64%	54%
Telaria	4.88	1.60	5.00	246	211	4.9 x	NM	(50%)	NM
The Rubicon Project	3.47	3.47	8.93	170	(22)	NM	NM	(16%)	(8%)
Advertising Technology / New Media Median						5.5 x	19.1 x	21%	53%
Advertising Technology / New Media Mean						6.2 x	19.0 x	16%	46%
Advertising Research									
Nielsen	\$40.00	\$37.14	\$54.93	\$14,263	\$22,480	3.4 x	11.0 x	3%	17%
GfK	55.46	29.13	56.54	2,024	2,422	1.4 x	8.6 x	2%	10%
Ipsos	35.09	28.72	39.46	1,462	2,067	1.0 x	8.4 x	4%	6%
comScore	28.05	21.14	34.50	1,607	1,493	2.4 x	9.1 x	29%	110%
Advertising Research Median						1.9 x	8.9 x	4%	14%
Advertising Research Mean						2.1 x	9.3 x	10%	36%

Source: Capital IQ as of October 17, 2017 and Wall Street research.

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Upcoming Events

Dates	Name	Location	Description
October 16, 2017	VR 20/20 Summit	New York, NY	<ul style="list-style-type: none"> VR/AR media executives, technology pioneers, investors and creative minds will converge to share inner secrets of the industry
October 16-19, 2017	NYC Television & Video Week	New York, NY	<ul style="list-style-type: none"> Will bring the industry's leaders together to discuss the full breadth of trends and topics that are vital to today's television businesses Will draw more than 2,400 television industry executives and feature 200 industry leaders as keynotes and presenters PJSC's Mark Boidman Will Attend
October 18, 2017	Next TV Summit	New York, NY	<ul style="list-style-type: none"> Next TV Summit is a high-level, future-focused conference providing insights into the impact of new video devices, technologies, viewing experiences, business models and consumer expectations in the OTT and On Demand era.
October 24-26, 2017	SMX East 2017	New York, NY	<ul style="list-style-type: none"> Conference addresses strategies and tactics from some of the savviest brands and digital marketing agencies managing earned, owned and paid social media marketing campaigns across multiple platforms
October 30- November 3, 2017	New York Digital Signage Week	New York, NY	<ul style="list-style-type: none"> Will include events for retail, employee communications, digital OOH and digital signage PJSC's Mark Boidman to present and Ben Zinder to attend
October 31, 2017	The DailyDOOH Investor Conference	New York, NY	<ul style="list-style-type: none"> Networking event for senior executives in the Digital Signage and DOOH industry The conference will update investors on the latest trends and the future direction of digital signage and DOOH directly from the CEOs of major companies that participate in the market PJSC's Mark Boidman Will Present
November 1, 2017	DPAA Video Everywhere Summit	New York, NY	<ul style="list-style-type: none"> Summit will bring together 700+ delegates representing brands, agencies, digital place based networks, ad tech, research firms and others for a full day of presentations, panels, case studies, networking events and experiential exhibits PJSC's Mark Boidman Will Attend
November 13-14, 2017	M&A Advisor Summit	New York, NY	<ul style="list-style-type: none"> Gathering of professionals engaged in M&A, restructuring and financing and industry leaders from the U.S. and around the world who will participate in over 20 interactive thought-leadership sessions and social functions PJSC's Mark Boidman Will Attend
November 29, 2017	Advertising Club of New York 10 th Anniversary OOH Conference	New York, NY	<ul style="list-style-type: none"> Industry thought leaders will explore location data's critical role in bridging "People, Places and the Paths" they take at this must-attend annual event PJSC's Mark Boidman and Ben Zinder to attend

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Upcoming Events

Dates	Name	Location	Description
January 9-12, 2018	International Consumer Electronics Show	Las Vegas, NV	<ul style="list-style-type: none"> Event that showcases more than 4,000 exhibitors, including manufacturers, developers and suppliers of consumer technology hardware, content, technology delivery systems and more The conference has 300 sessions with more than 180,000 attendees from 158 countries PJSC's Mark Boidman Will Present PJSC's Juan Mejia and Ben Zinder Will Attend
February 12-13, 2018	Code Media	Huntington Beach, CA	<ul style="list-style-type: none"> Conference bringing together 350 of the most influential minds in media and technology for two days of intimate gatherings and game-changing discussions.



PJSC is pleased to announce that Associate Director Ben Zinder has been selected as a recipient of the 2017 Emerging Leaders Award by The M&A Advisor.

The Annual Emerging Leaders Awards recognizes young M&A, financing and turnaround professionals, who through their notable achievements and success, are well on their way to making an indelible mark on their industries and business communities.

Ben was selected from a pool of outstanding nominees from around the world for his M&A advisory work within the media sector.

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THE MEDIA Monthly

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.

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