

North American Streaming, Content Delivery & VR Technologies March 1<sup>st</sup>. 2018

#### INSIDE THIS ISSUE:

#### Introduction

- **Major Streaming Providers** 
  - Alphabet
  - Facebook
  - Netflix
  - Amazon
  - Disney
- Niche Streaming Services
- Live TV Streaming
- Content Management & Distribution
- P2P Content Delivery
- Virtual & Augmented Reality
- VIII. **Conclusions and Predictions**
- Select M&A and Private **Placement Activity**
- Select Public Market Data

## ENTERTAINMENT TECHNOLOGY

DRAKE STAR PARTNERS IS PUBLISHING A SERIES OF REPORTS ON ENTERTAINMENT TECHNOLOGY. THIS MARKS THE SECOND FOCUSING ON STREAMING, PUBLICATION, CONTENT DELIVERY AND VR TECHNOLOGIES IN NORTH AMERICAN MARKETS.



#### I. Introduction

The streaming and over-the-top ("OTT") distribution market has experienced substantial amounts of innovation, disruption and competition in the past few years, and it appears to be just getting started. 2017 saw record levels of investment in content from major online video players, with Netflix and Amazon leading the way. Additionally, we saw new entrants into the space, most notably with Facebook launching its Watch platform, as well as multiple television content creators launching their own streaming services. With increasing competition among the online streaming players, content is becoming even more essential to growing and maintaining customers. To that end, 2017 saw record content investment from Netflix, Amazon and others to boost their original programming. In this report, we will detail key trends in the Streaming Video On Demand ("SVOD") market, from investment in content to smaller, innovative players supporting the streaming capabilities of others.

#### II. Major Streaming Providers

Facebook, Amazon, Alphabet, and Netflix (collectively "FAAN") are dominating the streaming space, each attacking the market from different angles in order to play to their respective strengths. Facebook, a relatively newer entrant, recently launched Facebook Watch, where users can view short-form content from content creators ranging from Vice and Buzzfeed to user-generated videos. This will challenge YouTube (owned by Alphabet) for many of the same videos which can also be found on YouTube. However, Facebook will need to convince users to switch to their platform as opposed to using YouTube, which has seen impressive growth in recent years, with users watching over one hour per day on average. While Facebook and Alphabet begin to compete over short-form video and the resulting advertising revenue, Amazon and Netflix are continuing to compete on high-quality content in the form of television and movies. Both have invested huge amounts to increase their original programming, and do not appear to be slowing, with Netflix announcing plans to spend \$8 billion in original content in 2018. With more studios launching their own streaming offerings, it will become increasingly crucial to maintain ownership of a vast content library in order to mitigate the threat of partners pulling content from the sites, as we have seen with Disney's announcement to launch its own service and pull its content from Netflix.



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Note: Chart not to scale



## Alphabet Google

Headquarters: Mountain View, CA Founded: 2004 Ticker: NASDAQ: GOOGL Market Cap (B): \$792.4 Key Personnel:

- Larry Page, CEO
- Sergey Brin, President
- Sundar Pichai, CEO of Google
- Don Harrison, President Corporate Development at Google

Key Subsidiaries:

- DeepMind
- CapitalG
- Google

YouTube

- Google Fiber
- Google X
- Nest Labs

## a) Alphabet / Google

Alphabet, parent company of Google and its subsidiaries, has been an active participant in the SVOD market since its acquisition of YouTube in 2006 for the then-hefty price of over \$1.5 billion. While market pundits felt they may have overpaid at the time, YouTube has grown into the leading online video platform for user-generated content over the past decade, amassing a huge library of content and continuing consistently to grow user engagement on the site. Since being acquired by Google in 2006, YouTube has reached over 1.5 billion users who each average an hour a day on the platform. This massive success has grown the platform into a large revenue and growth opportunity for Alphabet, with engagement still growing rapidly and more content being generated faster than ever. Alphabet is looking to continue YouTube's strong growth trajectory with a number of new initiatives in the coming year, which include content growth and furthering its live streaming offerings.

YouTube has been making large strides in its efforts to boost user engagement and growth through platform upgrades and features. With a community of over 1.5 billion users, maintaining engagement in order to drive advertising revenues is necessary to support the lofty growth expectations put on the platform. YouTube has been attempting to further curate a community around its content, making videos easier to share between friends and family within the app, helping content creators post and interact with fans more easily, and further optimizing mining of search data for more curated ad placements that continue to drive engagement, user growth, and advertising revenues on the platform.

## You Tube Red



## YouTube Red and YouTube TV

Alphabet also continues to aggressively expand its subscription services around YouTube, which consist of YouTube Red, their original content streaming service, as well as YouTube TV, the company's offering for live TV streaming across devices. YouTube Red has been continually expanding since 2015, starting out as an ad-free way to stream music and music videos from YouTube. Since then, it has shifted to include ad-free viewing across nearly all YouTube channels and videos, excluding certain paid content such as movie rentals and TV channels. The service is available for streaming across nearly all devices and platforms, including Roku, Apple TV, Chromecast, iOS, Android, and Android TV, with functionality yet to come to support Amazon's Fire TV Stick after being pulled in December 2017. The streaming service currently costs \$10 per month, which is comparable to Netflix and Hulu, however Alphabet's ability to truly compete on premium paid content is still yet to be proven. While the company committed to investing hundreds of millions of dollars in original content for the platform, including 40 new shows, it has not purchased rights to any external content to show on the platform. For now, the largest benefit of YouTube Red's offering appears to be the ad-free experience across the platform, as its content library is still being built out.

YouTube's other major push is into live TV streaming in its offering of YouTube TV. This has been a relatively new endeavor for the company, though it has made major advances in getting the offering rolled out to most of the United States, including a popular commercial during Super Bowl LII proudly stating "Cable-free, Live TV is here". Plans are currently in place to deliver to 83 metropolitan areas in the U.S. As with YouTube Red, it works across almost all streaming devices, excluding Amazon's Fire TV. The entry level service offers 51 live TV channels, consisting of most major broadcasters, along with a free subscription to YouTube Red. Included is a DVR service, as well as On-Demand, and streaming is supported on up to three devices. The service is highly comparable to the live TV streaming options currently offered from Hulu, DirecTV, and PlayStation, however YouTube's major advantage is in user acquisition. With the huge number of users that currently engage with YouTube on a daily basis, it should not be a major step to convince them to use the platform for streaming live television as well. The success and reception of YouTube TV will be seen in the coming months, however it is well positioned with its user base to capitalize on this new opportunity. 2



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Headquarters: Menlo Park, CA Founded: 2004 Ticker: NASDAQ: FB Market Cap (B): \$526.8 Key Personnel:

- Mark Zuckerberg, CEO and Chairman
- David Wehner, CFO
- Sheryl Sandbert, COO
- Michael Schroepfer, CTO
- Amin Zoufonoun, Head of Corporate Development

Key Subsidiaries:

- InstagramMessenger
- WhatsApp

## b) Facebook

Facebook is very much the "new kid on the block" in the SVOD marketplace. Until this year, Facebook has not had a formal platform on which video content can be aggregated, searchable, and viewable in a manageable way. Instead, it has taken a more free-flowing form by appearing embedded in users' timelines and various threads. However, as of September 2017, Facebook has introduced the Facebook Watch platform, in an effort to boost user engagement and video advertising within its ecosystem.



## **Facebook Watch Platform**

The Watch platform from Facebook is intended as "a platform for all creators and publishers to find an audience, build a community of passionate fans, and earn money for their work", according to the company. In this sense, the platform appears to have a very similar feel and functionality to YouTube, where users can browse and watch videos from their favorite brands and content creators. For Facebook, this will prove a difficult obstacle to overcome, as YouTube has already amassed a large, consistent user base that is used to browsing a massive pre-existing content library. In this sense, convincing both users and content creators to utilize Facebook in tandem with YouTube will prove challenging. However, Facebook does understand the obstacles of getting the Watch platform running, and is taking steps to ensure adoption and user traction from the outset. The company is investing heavily in content, partnerships, and streaming rights, and has been focusing on optimizing integration with its social network to drive fan engagement.

Facebook is planning to hit the ground running with the Watch platform, investing heavily to get enough exclusive content onto the platform to generate user interaction. Through the end of 2018, the company is likely to spend near \$1 billion on original content, both produced in-house and through partners. The exact amount will vary depending on the success of the Watch platform, however the sizeable investment shows Facebook is willing to take on some risk to become a serious player in the streaming space. So far, much of the content that has been seen on the platform is much more short and medium-form content, differing from what viewers would be used to watching in a scripted series or full-length movie. This plays to Facebook's strength of community involvement and social engagement, where content that is easily digestible and shareable among friends and family will play a key role in the adoption of Watch.



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- InstagramMessenger
- Messenger
- WhatsApp

## Watch on Facebook

## **Content Acquisition**

While Facebook continues to develop its original content strategy, it is also continuing its push for rights to live stream events, notably sports. Facebook recently bid big for the rights to stream cricket matches in India, putting up a \$600 million offer and ultimately losing out to Star Sports for the rights. However, Facebook still holds partnerships to stream Major League Baseball, Major League Soccer, Union of European Football Associations Champions League, and World Surf League events, and appears to be looking to grow out its streaming offering around live sports. The company recently announced plans to stream 12 live World Wrestling Entertainment matches, further expanding its live sports offering. This plays to the company's strength in social engagement, allowing users to watch and interact with a community of fans in real-time.



North American Streaming, Content Delivery & VR Technologies

## c) Netflix

Netflix pioneered the video streaming service model, growing at a seemingly unstoppable rate since its inception in 1997. While clearly the leading platform in terms of premium content catalog, the company continues to push forward in grand leaps to add to and refine its massive content library. The company recently announced this has surpassed the 100 million subscriber mark. While the overall size of Netflix's content library has shrunk to around 5,000 titles since peaking at 11,000 in 2012, the quality and scope has become more finely tuned, utilizing the hordes of viewing data it has amassed to best serve its growing customer base. While Netflix continues to evolve in the progressively more competitive environment of online streaming, the key to its continued success revolves around its content offering.



## **Content Investment**

In the past few years, we have seen a shift within Netflix from licensing content to creating it inhouse, significantly increasing its investment in order to drive original content. Since 2013, Netflix has increased its content spending from \$2.4 billion to \$6 billion in 2017, with plans to spend another \$8 billion in 2018. The spending seems to have been fruitful so far. With users and viewership up around the globe, Netflix has seen its content drive customer acquisition past market expectations, time and time again. This can also be seen from the content's quality side, with Netflix receiving 91 Emmy nominations in 2017, up from 13 in 2013, of which the company won 20 Emmys this past year. And while it has proven successful in investing and creating hit original series for its platform, the race to shore up its content offerings will only increase, as more partners slowly transition to their own streaming services. This risk was clearly highlighted by Disney's announcement that it will be pulling all of its content from Netflix for its own proprietary service.

While the competition ramps up for premium content streaming online, Netflix has a solid strategy to continue growth in the coming years. Although content investment is necessary, it should be targeted into the right avenues to maintain growth. Netflix is working on seemingly all fronts to make sure it maximizes its content investment to gain the most from each dollar. Investment in continuing key series such as *Stranger Things* will prove to have long-tail benefits for the company, as well as rolling out a large number of new shows through 2018. The Company is also increasing its local offerings around the globe, in an effort to further expand its international reach. Netflix has seen astounding success in expanding internationally, with over 50% of its subscribers now outside of the United States. This international reach represents one of the largest opportunities for user growth as the U.S. market becomes more saturated. Investing in local content will be one of the major ways to further engage these audiences, and Netflix has a pipeline of new investments ready to capitalize on this opportunity.

Netflix's strategy has worked thus far, and can really only be seen as continuing to work moving forward. While the landscape of premium streaming content is rapidly changing, Netflix has a defensible position with its current library of originals, and continues to expand it swiftly.

## NETFLIX

Headquarters: Los Gatos, CA Founded: 1997 Ticker: NASDAQ: NFLX Market Cap (B): \$95.4 Key Personnel:

- Reed Hastings, President, CEO, and Chairman
- David Wells, CFO
- Ted Sarandos, CCO
- William Holmes, Chief Business Development Officer

Key Subsidiaries: Netflix Studios

Millarworld Limited



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## amazon

Headquarters: Mountain View, CA Founded: 1994 Ticker: NASDAQ: AMZN Market Cap (B): \$623.8 Key Personnel:

- Jeff Bezos, President, CEO, and Chairman
- Brian Olsavsky, SVP & CFO
- Jeffrev Blackburn, SVP of **Business Development &** Entertainment

Key Subsidiaries:

- Amazon.com
- Amazon Studios
- Amazon Web Services
- Audible
- Twitch Whole Foods
- Zappos

## d) Amazon

Given Amazon's extensive reach across e-commerce, web services and other sectors, it is sometimes hard to remember that Amazon is truly a major player in the video streaming space. Amongst its vast ecosystem that is its Amazon Prime membership, Amazon offers the most extensive library of content on any streaming platform, with over 18,000 movies and nearly 2,000 TV shows offered. This dwarfs Netflix's offerings of about 4,500 movies and 2,500 series, however much of the attention still goes to Netflix in the streaming world.

## amazonstudios

## **Content Investment**

In the vast world of online streaming offerings, Amazon is not the first to come to mind, as it looks to further the Amazon Prime ecosystem rather than push specific products such as streaming. This does not mean that Amazon is not a strong force to be reckoned with in the streaming world, nonetheless. Amazon invests more in content than most stand-alone studios, coming in second only to Netflix's massive content investment. It has been releasing huge hits in terms of series and movies, including the Academy Award winning Manchester by the Sea and the extremely popular Man in the High Castle. The company spent an estimated \$4.5 billion on content in 2017, more than tripled its investment in original productions and committing to increasing its content investment for 2018. Amazon has become a threat in its own right in online streaming, and with large, committed content investment, the company is showing how serious and formidable it is in going up against rivals such as Hulu and Netflix.

While Amazon continues to push forward in expanding its content library and growing its user base, it has a broader set of opportunities and variables to consider versus the other major pure-play streaming players. Other major streaming players, notably Netflix and Hulu, do not have a surrounding ecosystem with their services. The Amazon Prime ecosystem brings a different dimension into the Prime Video offering, as a minority of Amazon Video subscribers do so outside of a Prime membership. Driving Prime membership growth has long been a top priority for Amazon. Prime members are the main customer drivers for Amazon, on average spending more and paying hefty yearly fees for access to a variety of services. In terms of content creation, Amazon has more of a balancing act in offering Prime members what they need, helping drive new members to join, and rolling out new content to entice new users to the platform. As a result, Amazon has more room to experiment with content creation, seeing how groups of Video subscribers respond both in terms of views and usage, but also with regards to spending patterns on the site for Prime members. If Amazon can produce quality content that both drives user engagement with the platform while at the same time enticing new Prime members to join, and leading existing Prime members to spend more across Amazon's e-commerce platforms, Amazon's video streaming success versus other pure-play streaming sites becomes less important.

Much like Netflix, the future of Amazon's video offering is driven off of quality content, which takes the form of considerable investment. It has seen strong success over the past year in growing its base of originals, and has cited plans to continue expanding this offering. While reception of new shows and movies will be determined upon release, Amazon still maintains its position as one of the leading premium quality streaming offerings.



## e) Disney

The entertainment giant has, until recently, stayed at arms length from the streaming world, involving itself primarily by licensing content to third-party providers. Disney had also been reducing its content creation, focusing solely on large blockbuster hits with *Star Wars* and *Marvel* franchises and various family focused animated movies. It appeared that Disney was to function in its powerful niche with little focus on a digital strategy outside of its partial ownership of Hulu. However, all of this changed very rapidly in the latter half of 2017. First, Disney announced that it will be pulling its content from Netflix as contracts expire, marking a shift from the large deal it struck in 2013 to provide Netflix access to some of its highest-rated content. This came concurrently with an announcement that it would be launching its own streaming service in direct competition with Netflix starting in 2019, using its deep content library of movies and originally produced content from Pixar, Marvel, Lucasfilm, and Disney Animation. Three months after this development, Disney announced that it would be buying most of the assets of 21<sup>st</sup> Century Fox, notably the vast content library from Fox, FX, FXX, and franchises such as *Avatar* and *X-Men*. While there is still a chance that another suitor such as Comcast may attempt a run at 21<sup>st</sup> Century Fox, the Disney/Fox deal is currently expected to close sometime during 2019.







## **Content Combination**

These rapid developments have attracted a lot of attention in the streaming universe. Disney is now poised to take its newly enhanced content library in a few directions, and all of this could have a large impact on Netflix, Amazon and other players. The first possibility is for Disney to expand distribution through Hulu, making it into a larger player than it is today with between 12 and 16 million users. This is now possible due to the pending Fox acquisition, which would position Disney as a majority holder in Hulu with 60% ownership. The potentially difficult part would come from Comcast, the next largest owner of the service with a 30% stake. If Comcast (which owns NBC Universal, CNBC, DreamWorks, E!, and Universal Studios) goes along with Disney in increasing content on Hulu, it may prove the easiest way for Disney to transform into a streaming powerhouse. The other option is for Disney to build it from the ground up, curating the offering to a specific audience around many of Fox's more adult oriented programs that run on Fox, FX, and FXX. Taking some content from Hulu, Disney could put together a formidable streaming service to rival other major players in the space. Along with this, Disney still has plans to launch a more family-focused streaming service with its strong library of animated and kid-focused content.

The combination of Disney and Fox's studios also presents a huge opportunity for the future combined enterprise. Together, Disney and Fox would dwarf the level of content investment Netflix or Amazon have been putting forward, albeit with more of it focused on large-scale blockbusters. Disney would be able to expand production on Fox's owned franchises, boosting content volume. Concurrently, Disney could harm other large streaming players by removing Fox's large base of television shows and movies, reducing others value proposition to subscribers.



Headquarters: Burbank, CA Founded: 1923 <u>Ticker:</u> NYSE: DIS <u>Market Cap (B):</u> \$166.6 <u>Key Personnel:</u>

- Robert Iger, CEO
- Christine McCarthy, CFO
- Kevin Mayer, SEVP & Chief Strategy Officer
- Key Subsidiaries:
- Disney Media Networks
  - ABC
  - ESPN
- Disney Parks and Resorts
- Hulu

-

- Walt Disney Studios
  - Pixar
  - Walt Disney Studios
  - Marvel Studios
  - Lucasfilm



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  - ABC
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- Walt Disney Studios
  - Pixar
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  - Marvel Studios
  - Lucasfilm

## ESPN

## **Live Sports**

Also under the Disney family umbrella is ESPN, the sports network that has been the talk of much speculation and concern. ESPN has seen declining performance over the past few years, and is yet to really make a push into the digital world. Disney has announced that it will be rolling out a new streaming service focused around the network, however details are still vague. What is known is that it will consist mainly of excess programming for which the company does not have current airtime for – a different approach than many thought. This would mean that customers still need to subscribe to TV platforms in some form in order to gain access to all of the content ESPN has to offer, and could not cut the cord completely if they want to watch many of their favorite games and teams.

Much of Disney's strategy around streaming, Fox, and live sports is still to be disclosed, as the company seems to be planning what steps to take to best position itself in the digital age. Regardless of the routes it chooses, Disney's new and improved content library will make a significant impact on the streaming world, taking options away from rivals and driving users to choose between some of their favorite content being split across services. The main question for Disney moving forward will be if it can curate a platform well enough with its new content to convince users to subscribe and switch from more mature players in the industry.

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## **III. Niche Streaming Services**

While the major streaming players cover most of the demand for mainstream television and movies, there has been a surge of innovative, niche streaming services catering to a smaller, passionate audience base. The value proposition around these is to either provide highly curated content, or to secure large amounts of content that the larger players have not been focused on (before they can get to it). Both have proven to be effective in securing a smaller, dedicated following, and here we will look at some of the most successful services.

#### Mubi

Mubi is a unique offering for film lovers that provides a distinct selection of movies each month for users to watch. The service specializes in independent, cult classic, award winning movies from past and present to provide a wide array of films. While the selection of movies distinguishes Mubi from other streaming sites, it also separates itself from the competition in the way it presents content, uploading a new film up for viewers to watch while concurrently removing one movie. This way, the service constantly keeps 30 movies on its site, giving subscribers 30 days to watch each movie for \$8.99 per month. Each film is also hand selected by Mubi's team of experts, allowing for a diverse selection. Mubi also offers a community, a place for users to discuss the films showing and talk about their favorite films. This boosts engagement with the platform and encourages more consumption and discussion amongst Mubi's base. To date, Mubi has seen substantial interest from backers, raising over \$80 million to date from the likes of Huanxi Media, C4 Ventures, and MMC Ventures.

#### Fandor

Fandor is focused on the niche of film enthusiasts, hand selecting quality movies that movie buffs appreciate for a monthly fee of \$10. The service holds over 5,000 independent films that span across multiple genres and sub genres, going back to the early 20<sup>th</sup> century. Its vast library has content that cannot be found across other services, licensing from over 200 independent filmmakers along with distributors and aggregators. Fandor also operates an online magazine on its site, posting articles and short videos covering independent films. The company has raised over \$10 million to date from investors including Starz, Chris Kelly, and LionTree Capital.

#### TubiTV

TubiTV provides free streaming of movies and TV shows to its user base of over 20 million. The company has a substantial library of content with over 7,500 movies and shows across more than 40 genres, which they support with advertising revenue dispersed throughout streaming content. With no plans for original content or a premium, paid version of its platform, Tubi differentiates itself through the use of its Content Personalization Engine. Launched December 2017, the Content Personalization Engine is driven by artificial intelligence, allowing the company to recommend personalized content to each user. This drives engagement, and increased viewership by 20% in the first few days following its launch. The company recently raised \$8 million from TEGNA, Inc. on January 23<sup>rd</sup>, 2018. To date, Tubi has raised over \$35 million from investors including Cota Capital, Jump Capital, and TPG Capital, among others.

#### Crunchyroll

Crunchyroll is a niche content streaming platform focusing on Japanese anime, manga and other Asian content. Most of the content provided on Crunchyroll is in Japanese, however some shows have been dubbed in English, and almost all have subtitle options. The company offers three pricing plans: Free, Premium, and Premium+. Free users get access to limited content, which is supported by ads. Premium users pay \$6.95 per month for access to all of Crunchyroll's content without ads, while Premium+ users get extra perks including access to contests and first access to new features. The company was acquired by Providence Equity in 2013, and has since raised over \$50 million of growth capital to expand its offering.

# **MUBI**

<u>Website:</u> mubi.com <u>CEO:</u> Efe Cakarel <u>Founded:</u> 2007





Location: San Francisco, CA <u>Website:</u> www.tubiTV.com <u>CEO:</u> Farhad Massoudi <u>Founded:</u> 2009



Location: San Francisco, CA Website: www.crunchyroll.com CEO: Kun Gao Founded: 2006

## IV. Live TV Streaming

Streaming has seen an explosion of growth in more facets than solely scripted content. Beginning with sports and live events, streaming has slowly started to capture additional shares of the entertainment market. Offerings have now moved into full-service live television streaming across devices, with multiple companies competing to capture market share from a growing demographic of cord-cutters. A few large players, such as YouTube, Hulu, Sony PlayStation, DirecTV, and Dish having entered with their own offerings, the competition has started to increase significantly in recent years, and for good reason. With a growing number of people starting to shift away from traditional cable TV subscriptions, a large opportunity is emerging to offer an ability to view the same content across multiple devices from anywhere. With as much as 25% of the U.S. population now without a cable subscription, market share will begin to shift to more convenient consumption models.

In addition to the large entrants into the space, there are a few younger companies looking to make an impact with their innovative offerings. Smaller, more focused offerings coming from Fubo TV and Philo are looking to capture specific shares in this expansive market.

#### Fubo TV

Fubo TV is a relatively new entrant to the live TV streaming space, having been founded in 2015. Initially, the company offered a solution for soccer fans to stream live games, with a fairly limited set of channels catered almost exclusively towards the soccer market. From here, Fubo continued to offer more sporting channels, broadening its base and slowly transitioning to a full offering. Now, Fubo is expanding beyond sports, with news and entertainment channels being added to complement the sports-focused offering and compete with the other, larger live TV streaming offerings.

Currently, Fubo offers three different packages, with its primary offering, fubo Premier, containing over 80 channels and a heavy sports focus, and running subscribers \$44.99 per month. The company also offers fubo Latino and fubo Português, which are trimmed down, cheaper offerings for Spanish and Portuguese speaking viewers. In addition, Fubo also offers add-on packages for additional cost. There are seven different add-ons, which range from \$2.99 per month for an additional kids channel to \$8.99 per month for the "Sports Plus" package, which includes NFL Redzone and a plethora of college sports channels. Recently, Fubo also added the premium channel Showtime as an add-on package, which includes nine Showtime channels. The channels are available for viewing across nearly all devices, including Google Chromecast, Amazon FireTV, Roku, and Apple TV. Subscribers are allowed to stream across two separate devices at once, making it possible to watch two separate games on different devices or split a subscription. With this, subscribers can watch live events, on-demand offerings, and DVR events. Fubo also has a "lookback" feature, allowing the user to watch sporting events that aired in the past 72 hours without having to use DVR space. For their DVR offering, users receive 30 hours free with their subscription, and can upgrade to 500 hours for an additional \$9.99 per month.

Fubo continues to expand its channel lineup and additional offerings, and is well positioned to take advantage of the cord-cutting trend with a sports-focused demographic. It has a base of strong strategic investors to help grow the platform, with 21<sup>st</sup> Century Fox, Sky UK, and Scripps Networks all backing the company. And with a recent fundraise of \$55 million in June of 2017, the company has the capital to continue expansion. While the live TV streaming market continues to heat up, Fubo has a unique offering that will appeal broadly to sports viewers across the country.



RAKE STAR

Location: New York, NY Website: www.fubo.tv CEO: David Gandler Founded: 2015



philo

Location: San Francisco, CA <u>Website:</u> www.philo.com <u>CEO:</u> Andrew McCollum <u>Founded:</u> 2011

#### Philo

Philo has been in business since 2011, however is just recently launching its offering to the broader public. Having started out as a TV streaming service focused on the college market, the company built its user base by partnering with colleges to offer streaming TV to students. Since its founding, the company has expanded to over 50 universities, and has now established an offering for the general public to compete with other providers.

Philo's offering revolves around being cheaper than all others. Starting at just \$16 per month for their 37 channel lineup, Philo executes this perfectly, undercutting the previous cheap option of \$20 by SlingTV. The company also offers an additional 9 channels for an extra \$4 per month, bringing the package to \$20 per month for 46 channels. Both are extraordinarily cheap compared to competitors, where prices start at \$35 per month. However, the drawback is subscribers get no sports or local channels, with the lineup consisting of channels such as A&E, AMC, Comedy Central, Discovery, The Travel Channel, and Viceland. In other words, the offering is heavy on lifestyle, arts, and entertainment offerings, as opposed to sports and news. It has the ability to stream across iOS, Android, desktop, and Roku, however the company is working on rolling out more options, and will likely expand to other TV-connected devices. In addition to being able to stream live content, Philo also offers a 72-hour rewind for most content, similar to Fubo TV, as well as DVR and on-demand offerings. The DVR with Philo allows an unlimited number of shows to be saved, but only up to 30 days after the program aired. Philo also allows for pause and rewind of live TV, allowing users to take breaks without missing parts of their favorite shows.

Philo's offering is unique in the market based on price point and channel lineup, and has attracted significant investor attention. To date, it has raised over \$45 million from the likes of A&E, AMC, Rho Venture, Scripps, Viacom, and New Enterprise Associates. The team has done a great job growing the company through a network of universities, and has seen strong demand from exiting students to continue subscribing to Philo. With a continuous lead-generation service coming from universities, it is likely that Philo will continue to see success in the general market in years to come.

#### Didja

Didja is a provider of free TV streaming services, broadcasting live local television to multiple devices. The company currently operates in two markets, the San Francisco Bay Area, as well as Phoenix, Arizona, allowing users to access local programming at no cost. The offering helps local stations reach a wider audience and better serve communities, while providing local consumers access to a wide variety of programming at no extra cost.

Currently, San Francisco is served with over 30 local channels, while Phoenix has access to 25. The company is working towards adding more channels to their lineups as user growth continues within their markets. Additionally, the company is targeting 40 local areas to expand into by 2020, with Los Angeles expected to be the next addition to the local streaming service. While the offering is fairly basic, it allows for streaming over iOS and Android, as well as desktop, Google Chromecast, and Apple Airplay. It has pause, rewind, and fast-forward capabilities, along with optional DVR service which holds up to 300 hours for an additional \$4.95 per month.

Currently Didja only offers local channels, however the company has announced plans to launch a premium version of the service. The premium service will be a paid subscription, including major network channels and a more extensive channel lineup, though the timeline on this has not been announced. For now, it appears that the company is focused on geographic expansion due to the announced target of 40 markets nationally in the next two years. The company is backed by Vestech Partners, who have invested a total of \$22 million, most recently in a \$12 million round in December 2017 to support further geographic expansion.



Location: Los Altos, CA Website: www.didjatv.com CEO: Jim Long Founded: 2011



**PLUTO<sup>®</sup>** 

Location: Los Angeles, CA Website: free.pluto.tv CEO: Thomas Ryan Founded: 2013

#### Pluto TV

Founded in 2013, Pluto TV operates on a completely different model than most companies in the live streaming space. The first major difference is that the services is completely free to users, being supported solely by advertising revenues. Additionally, Pluto TV doesn't offer traditional live TV streaming, instead focusing on broadcasting TV shows, movies, and internet videos, in a linear form that is similar to how live TV content is broadcast. This puts together a unique offering unlike anything else in the market by partnering with a wide variety of content providers to create a new form of internet television.

Pluto offers over 75 channels in categories such as Movies, News, Sports, Life & Style, Entertainment, and others. The channel lineup consists of a combination of live TV, movies, and TV shows from various content providers. Through its partners, Pluto is able to offer live news from channels including NBC, MSNBC, Sky News, and Bloomberg, among others. TV content and movies are provided by partners, which include Lionsgate, MGM, and Warner Brothers for movies, and CNBC, AI Jazeera, and Hearst for TV content. The channels are available to stream across most streaming devices, including Roku, Apple TV, Amazon Fire TV, Android TV, Chromecast, and most smart televisions, in addition to desktop and mobile viewing. The company also offers international streaming, with some content being limited due to viewing rights. The streaming application is quite simple, with a TV like setup which shows what is on each channel for certain timeslots. The service allows you to watch full programs from the beginning if it is within their timeslot, as well as features a "Live" button which brings the program up to the current time. The overall experience of watching Pluto TV is simple yet effective, allowing for users to easily browse and watch content that is currently on. While there are no DVR or on-demand options currently, users are able to customize their channel lineup for ease of browsing and viewing.

Pluto's offering is extremely distinct, offering alternative content in a TV format across all devices for no cost. The company reportedly has over 6 million users as of October 2017, showing that there is a significant draw to the free offering and content provided by partners. Investors have shown significant interest, with a recent \$8.3 million fundraise led by Samsung Ventures, and previous investors including ProSiebenSat.1, Scripps Network, and Sky Ventures.

North American Streaming, Content Delivery & VR Technologies



## V. Content Management & Distribution

Finding the most effective way to manage and distribute content across multiple platforms is becoming more difficult for many companies, as the ecosystem becomes more complex daily. Content Management Systems and Online Video Management offerings are catering to these needs, helping companies and content producers navigate these complexities. Here we outline a few exciting companies in and around this space.

#### Zype

DRAKE STAR

Founded in New York in 2013, Zype assists publishers in managing, distributing, and monetizing their content across multiple devices. The company provides a platform that can be used to optimize distribution across multiple video players. When managing content, the company chooses the ideal video player for consumption by the end consumer, providing a better experience and wider distribution of clients' video content. Zype also builds website, apps, and mobile web, as well as monetization services including pay-per-video, advertising, and subscription. To date, the company has focused on enterprise clients, helping the likes of Crunch Fitness, Havoc, and Entrepreneur Magazine optimize their video distribution and monetization efforts. It has raised \$8.5 million to date from investors including Entrepreneurs Investment Fund, Revel Partners, and Alpine Meridian Investors, among others.

#### Penthera

Penthera, founded in 2005, is focused on optimizing the mobile video experience, developing and deploying software that allows for the best content delivery over wireless networks. The company provides their Cache&Carry software to customers, which allows for the downloading and storage of video content onto consumers devices in the background of Apps. This creates a high-quality video when end users choose to watch content, while enabling companies to better manage video content distribution to users. Penthera has a strong list of clients and partners, working with Starz, A&E, Showtime, Charter, and Crown Castle, among others. The company recently closed a financing round for \$6.4 million in October 2017, which was led by Liberty Global Ventures.

#### Sportsrocket

Sportsrocket is revolutionizing the way that sports teams and media companies interact and distribute games and events to fans. The company helps clients manage their content, distribute across platforms, monetize through advertising, and grow user engagement through social tools. Sportsrocket has also recently launched Turbine, which helps companies easily live stream events across multiple platforms such as Facebook, YouTube, Twitch, and others, broadening the reach that specific teams and events can have with ease. The company also has Sportsrocket Studios, which helps clients in production and programming. The company has seen solid success, working with clients including Big Ten Network, Major League Soccer, and the PGA Tour. It completed a \$3m series B funding from Richard Branson, and has previous investors including Lerer Hippeau, New Enterprise Associates, and RockBridge Growth Equity.

#### Reelgood

Reelgood, founded in 2015, is approaching content management from the consumer side. The company offers a simple and effective way to track and find shows across all streaming services, linking to users streaming accounts and allowing them to browse content across all their providers. The service links to 336 streaming sources, combining into over 120,468 TV and Movie listings into one aggregated platform. The target market for the service are those that are heavy streaming users, with multiple accounts across the likes of Netflix, Hulu, Amazon, and others, making it difficult to find what content is on what site. Once content is found on Reelgood, a user can click to get directed to the exact page where the show or movie plays in the content provider's site. This has attracted investment attention from August Capital, Correlation Ventures, and Harrison Metal Capital, among others, who participated in a \$3.5 million dollar round in July of 2017.

North American Streaming, Content Delivery & VR Technologies

## VI. P2P Content Delivery

Video content is being created at a more rapid pace than ever before, with the proliferation of technology making it increasingly simple to record and upload videos to the web. At the same time, advances in mobile are making streaming a more attractive option, with people consuming more video and media content through devices other than a television every year. Due to this, content delivery is becoming increasingly important to make sure that end users get a smooth streaming experience. While Content Delivery Networks ("CDN") have been around for many years, increased load on traditional CDNs due to increased consumption is making companies look to find more efficient ways to load content. This is where Peer-to-Peer CDNs are arriving, to help distribute content load and make streaming more efficient. Here, we highlight some of the most ground-breaking P2P CDN providers in the sector.

#### Streamroot

Founded in 2013, Streamroot is a provider of a peer-to-peer content delivery network (P2P CDN). The company's CDN allows for improved video quality due to download sourcing from peers, creating faster buffering and higher bitrates. This results in 10% longer viewing times with audiences, creating better engagement with users. Streamroot's solution is also easily scalable, leading to smooth video playback during peak demand. It offers the industry's first fixed price delivery model, allowing customers predictable and stable costs. Among the company's clients are Eurosport, Vivendi, and Dailymotion, showing that Streamroot is able to competently deal with large-scale clients. The company recently raised \$3.2 million from Partech Ventures and Verizon Media Tech Venture Studio in September 2017.

#### Peer5

Peer5 is a P2P CDN network that has been in business since 2012. The company operates a network architecture optimized for decentralized video consumption by users on both mobile and desktop, with video being loaded from both peers as well as edge servers. This creates a seamless video experience for those loading from Peer5's CDN. The company recently passed a milestone in handling over 1 million users on its network, and plans to continue its growth to support larger viewing loads at once. With online streaming continuing to progress, the company expects rapid adoption of P2P CDN technology, due to the efficient nature of distribution. With a recent fundraise of \$2.5 million from FundersClub, Drummond Road Capital, and others, the company is well positioned to continue its growth.

#### Hola CDN

Hola CDN, while not a P2P CDN, was specifically designed as a third generation CDN and distribution platform for video. The goal of the company is to provide both the platform and CDN infrastructure to bring Netflix and YouTube quality content streaming to businesses without the scale to develop them itself. With Hola, companies can manage video distribution within their sites, as well as monetization through advertising preferences, all through the same service as their CDN network. This creates ease of management for clients, and greater share of wallet for Hola. The company recently raised \$17 million in Series C funding from Draper Fisher Jurvetson, Iris Capital Management, and Horizon Ventures, among others.



DRAKE STAR

Location: New York, NY Website: www.streamroot.io CEO: Pierre-Louis Theron Founded: 2013



Location: Palo Alto, CA Website: www.peer5.com CEO: Hadar Weiss Founded: 2012



Location: Netenya, Israel Website: holacdn.com CEO: Ofer Vilenski Founded: 2008

North American Streaming, Content Delivery & VR Technologies



DRAKE STAR

Location: Los Angeles, CA <u>Website:</u> www.with.in <u>CEO:</u> Chris Milk <u>Founded:</u> 2014



Location: San Rafael, CA Website: www.blurtheline.com CEO: Douglas Griffin Founded: 2015

Wevr Location: Los Angeles, CA

<u>Website:</u> www.wevr.com <u>CEO:</u> Neville Spiteri <u>Founded:</u> 2009

## VII. Virtual & Augmented Reality

Over the past few years, speculation regarding the future of entertainment has grown immensely following the mainstream introduction of virtual reality platforms by Oculus, HTC, Samsung, and others. This has also led to augmented reality software going more mainstream to support these virtual reality platforms. The excitement around VR and AR is expected to continue as the cost of hardware declines and more people are able to adopt the technology, enabling companies to create cost efficient entertainment solutions for new consumers. With this "buzz" comes a lot of innovation. In this section we will outline some of the companies that have caught our eye within virtual and augmented reality.

#### WITHIN

WITHIN is a leading provider of virtual reality experiences, partnering with leading brands, artists, and companies to create immersive experiences using VR technology. Founded by award-winning filmmaker Chris Milk, the company has collaborated with companies including The New York Times, Vice, and the United Nations to create virtual reality experiences. The company's experiences are compatible with all major VR headsets, including Oculus, Samsung, HTC, Sony, and Google. Companies are continuing to seek out WITHIN, with a strategic alliance recently announced between Universal Music Group and WITHIN last October 2017. The company has attracted significant attention, having raised over \$50 million to date from investors including Andreesen Horowitz, 21<sup>st</sup> Century Fox, and Emerson Collective.

#### Nomadic

Nomadic produces what they call "tactile VR adventures for neighborhoods", which are spaces created by the company designed to be explored while wearing a virtual headset. These VR centers are yet to be opened to the general public, as they are still being built and developed. However, the company has recently completed a \$6 million round led by Horizons Ventures to support its future growth. Nomadic plans to install the centers in high-traffic areas, such as movie theatres and malls, where foot traffic could lead to curious consumers stopping in for a VR experience. The experience rooms are planned to be scalable, running from 20 feet by 30 feet up to 40 by 60 feet. The initial Nomadic VR experiences are expected to cost between \$10 and \$15 per experience.

#### Wevr

Wevr operates as a VR content creator, developing content through its studio for partners around the globe. It developed "theBlu", a VR experience that has been on display at the Dubai Aquarium & Underwater Zoo and the Natural History Museum of Los Angeles, with additional venues planned in the future. Wevr allows visitors to experience diving through the ocean, coming into contact with a blue whale, a pack of jellyfish, and other undersea creatures. Wevr has also developed a platform to allow other VR content producers to reach broader audiences, and they are creating a wide network of VR producers and consumers. The company is backed by strategic VR players including HTC and Samsung Ventures, who led a \$25 million Series B in early 2016.



North American Streaming, Content Delivery & VR Technologies

#### Rewind

Rewind is a production agency that develops immersive content and experiences for its partners with VR, AR, and 360 video. Most recently, Rewind worked with the BBC to create an immersive spacewalk experience called "Home", allowing users to feel as though they are exploring the outside of a space station. Designed to work with a special chair which is engineered to create the sensation of weightlessness, the "space walk" experience lasts about 15 minutes while users use controls to pull themselves through space. Rewind has created experiences for clients including Jaguar, Red Bull, HBO's Silicon Valley, and Siemens, to name a few. Founded by Solomon Rogers in 2011, the company is privately held.

#### LittIstar

Littlstar operates a platform that lets users discover and consume content from various VR producers across nearly all VR hardware, along with Apple TV, desktop, and mobile. The platform provides channels, featured videos, music, and more, as well as content divided into an abundance of categories, allowing for intuitive exploration of a lot of VR content. It has partnered with producers such as Discovery, SYFY Channel, National Geographic, and ABC, and is also working with partners to bring more exclusive content to its platform. The company, founded in 2013, graduated Disney's Accelerator program, and has since raised over \$9 million from several high quality investors.

## L | T T J S T 🛧 R

Location: Saint Albans, England

Website: www.rewind.co

CEO: Solomon Rogers

Founded: 2011

Location: New York, NY Website: www.littlstar.com CEO: John Mugavero Founded: 2013



North American Streaming, Content Delivery & VR Technologies











## VIII. Conclusions and Predictions

The streaming industry as a whole is currently undergoing substantial change. As the industry continues to develop and mature, sector trends and dynamics that we are currently seeing are likely to continue and may even accelerate. Below are some of the key trends and our predictions for the streaming and VR space in the years to come.

#### **Overly Fragmented Streaming Leading to Consolidation**

As streaming services continue to evolve and provide consumers with a plethora of offerings, we expect to see consolidation of smaller services to provide broader offerings for the large players.

#### Traditional Media Adopting Streaming and VR Capabilities

With a growing proportion of the population embracing alternative ways to consume content through streaming and VR, traditional media companies will have to adapt to survive in the new media landscape.

#### Large Studios Acquiring Mid-Sized Studios

Economies of scale and diversification of bets will lead to further M&A amongst the studios, furthering consolidation of content ownership.

#### **Rapidly Evolving Brand Loyalty**

Moving forward, future prominent "media" brands may, in part, shift away from Hollywood and into Silicon Valley, as large tech players continue to disrupt the traditional entertainment industry.

#### **Continued Capital Investment in Innovative Streaming and VR Companies**

New, groundbreaking companies will continue to disrupt the entertainment landscape fueled by private capital investment, helping to revolutionize the way entertainment is consumed and experienced.



North American Streaming, Content Delivery & VR Technologies

## IX. Select M&A and Private Placement Activity

Global	M&A Activity							
Date	Target	Buyer(s)	Business Description	Trans. Value (\$M)	Revenue (LTM \$M)			EV/ EBITDA
Feb-18	MTG Nordics A/S	TDC A/S	MTG Nordics A/S offers tv and radio broadcasting, streaming, and distribution services.	\$2,491.4	\$1,724.7	\$225.2	1.4x	11.1x
Jan-18	Vubiquity, Inc.	Amdocs Limited	Vubiquity, Inc. provides multiplatform video services.	\$224.0	n.a.	n.a.	n.a.	n.a.
Oct-17	AltspaceVR, Inc.	Microsoft Corporation	AtspaceVR, Inc., builds a platform that enables people to share experiences and interact in a natural and fulfilling way.	n.a.	n.a.	n.a.	n.a.	n.a.
Sep-17	Visions Connected Netherlands BV	Avedon Capital Partners	Visions Connected provides video software, managed video services, and video equipment to consumers and enterprises.	n.a.	n.a.	n.a.	n.a.	n.a.
Jun-17	Enterspace AB	Starbreeze AB (publ)	Enterspace AB owns and operates virtual reality (VR) experience centers for storytelling, technology, and social space.	\$2.3	n.a.	n.a.	n.a.	n.a.
Jan-17	Vodkaster, SAS	Télérama SA	Vodkaster, SAS operates a video streaming platform.	n.a.	n.a.	n.a.	n.a.	n.a.
Dec-16	Edgeware AB (publ)	Catella Fondforvaltning AB	Edgeware AB (publ) develops, markets, and sells streaming solutions for distributing TV and video content to viewers over IP networks.	n.a.	\$25.4	\$2.9	n.a.	n.a.
Jul-16	Arkena Nordics	IP-Only AB	Arkena Nordics provides media streaming solutions to media companies in the Nordic region and internationally.	n.a.	n.a.	n.a.	n.a.	n.a.
Jul-16	Anvato Inc.	Alphabet Inc.	Anvato Inc. owns and operates a video software platform that is used for video publishing and monetization.	n.a.	n.a.	n.a.	n.a.	n.a.
Jun-16	Saffron Digital Ltd.	NeuLion, Limited	Saffron Digital Ltd. develops a video platform that enables to launch a premium multi-platform entertainment service.	n.a.	n.a.	n.a.	n.a.	n.a.
May-16	Knetik Media, LLC	CIMA Group, Inc.	Knetik Media, LLC develops and operates Knetik platform that provides management of online media services.	n.a.	n.a.	n.a.	n.a.	n.a.
May-16	OVGuide Inc.	FOTV Media Networks Inc.	OVGuide Inc. operates a platform for the discovery, guidance, and consumption of online video.	n.a.	\$2.1	n.a.	n.a.	n.a.
May-16	StoryBox.tv	Cinedigm Corp.	StoryBoxtv provides a family-friendly streaming service.	n.a.	n.a.	n.a.	n.a.	n.a.
May-16	QuickPlay Media Inc.	AT&T Inc.	QuickPlay Media Inc. provides cloud-based managed service solutions for the distribution of media to IP-connected devices.	n.a.	n.a.	n.a.	n.a.	n.a.
Apr-16	Pointstreak Sports Technologies Inc.	Blue Star Sports	Pointstreak Sports Technologies Inc. provides sports management solutions for professional and amateur leagues.	n.a.	n.a.	n.a.	n.a.	n.a.
Feb-16	DramaFever Corp.	Warner Bros. Entertainment Inc.	DramaFever Corp. distributes online video and international televised content for customers worldwide.	n.a.	n.a.	n.a.	n.a.	n.a.
Jan-16	CinemaNow Corporation	FOTV Media Networks	CinemaNow Corporation provides over-the-top on-demand Internet streaming media services.	n.a.	n.a.	n.a.	n.a.	n.a.
Dec-15	iConcerts SA	Stingray Digital Group Inc.	iConcerts SA operates a digital entertainment channel that provides live	\$8.6	\$3.6	n.a.	2.4x	n.a.
Aug-15	iStreamPlanet Co., LLC	Turner Broadcasting System, Inc.	iStreamPlanet Co., LLC provides cloud and software-based live video streaming solutions.	n.a.	n.a.	n.a.	n.a.	n.a.
Jul-15	Inca Networks Inc.	WILHELM SIHN JR. GmbH & Co. KG	Inca Networks Inc. provides video delivery, streaming, and monitoring solutions.	n.a.	n.a.	n.a.	n.a.	n.a.
Jul-15	Gannaway Web Holdings, LLC	Frankly Inc.	Frankly Media provides an integrated content platform that enables media companies to streamline and simplify multi-media management.	\$45.0	\$26.5	\$6.5	1.7x	6.9x
Apr-15	Torque.TVLLC	TEN: The Enthusiast Network, LLC	Motorsports-focused streaming service.	n.a.	n.a.	n.a.	n.a.	n.a.
Feb-15	Vidmind Ltd	Private	Vidmind Ltd. operates a cloud platform that allows enterprises to introduce an OTT Pay TV or VOD service.	\$2.4	n.a.	n.a.	n.a.	n.a.
Dec-14	CinemaNow Corporation	Regent, L.P.	CinemaNow Corporation provides over-the-top on-demand Internet streaming media services.	n.a.	n.a.	n.a.	n.a.	n.a.
Nov-14	Fanhattan, Inc.	Rovi Corporation (nka:TiVo Corporation)	Fanhattan, Inc. provides cloud-based content aggregation and search	\$38.1	\$0.0	(\$12.1)	n.a.	n.a.
Oct-14	DramaFever Corp.	SB Group US, Inc.	DramaFever Corp. distributes online video and international televised content for customers worldwide.	n.a.	n.a.	n.a.	n.a.	n.a.
Sep-14	Manzanita Systems, LLC	DTS, Inc.	Manzanita Systems develops MPEG software solutions for digital television, video on demand, digital ad insertion, and OTT applications.	n.a.	n.a.	n.a.	n.a.	n.a.
Jul-14	Sky Italia S.r.l. (nka:Now TV)	British Sky Broadcasting Group plc (nka:Sky plc)	Now TV provides online streaming services to watch entertainment, movies, sports, and kid's shows.	\$4,161.2	\$3,866.3	\$423.9	1.1x	9.8x
Jun-14	SIDEARM Sports Inc.	Learfield Sports, LLC	SIDEARM Sports Inc. offers collegiate athletic Web-based content management solutions in North America.	n.a.	n.a.	n.a.	n.a.	n.a.
May-14	MediaSpan Group, Inc.	Newscycle Solutions, Inc.	MediaSpan Group, Inc. provides digital content management	n.a.	n.a.	n.a.	n.a.	n.a.
Mar-14	LAKANA LLC	Nexstar Broadcasting	LAKANA LLC delivers SaaS-ready content management platforms that integrate with a suite of products, partners, and services.	\$18.8	\$19.9	n.a.	0.9x	n.a.
Feb-14	Xstream A/S	Group, Inc. Capidea Management	Xstream A/S provides an online video management solution for OTT and	n.a.	n.a.	n.a.	n.a.	n.a.
		ApS	TV everywhere.					





North American Streaming, Content Delivery & VR Technologies

	Target	Investor(s)	Business Description	Trans. Value (\$M)	Revenue (LTM \$M)		EV/ Revenue	EV/ EBITDA
eb-18	Recall Studios Inc.	Private	Recall Studios Inc. operates as a virtual reality and new media production company.	n.a.	n.a.	n.a.	n.a.	n.a
lan-18	Fable Studio, Inc.	Akatsuki Inc.	Fable Studio, Inc. develops content using artificial intelligence characters on augmented and virtual reality.	n.a.	n.a.	n.a.	n.a.	n.a
an-18	TubiTV	TEGNA Inc.	adRise, Inc., doing business as TubiTV, operates an Internet connected TV content platform for content producers and advertisers.	n.a.	n.a.	n.a.	n.a.	n.a
lan-18	Liquid Media Group Ltd.	Private	Liquid Media Group Ltd. produces content for all platforms, including film, TV, gaming, and virtual reality.	\$4.0	n.a.	n.a.	n.a.	n.a
Dec-17	Cortopia AB	Init Invest AB	Cortopia AB develops, publishes, and produces virtual reality (VR) games.	\$2.5	n.a.	n.a.	n.a.	n.a
Dec-17	TimefireVR Inc.	Private	TimefireVR Inc. produces virtual reality content in the United States.	\$0.7	\$0.0	(\$3.0)	n.a.	n.a
Dec-17	Didja	Vestech Partners LLC	Didja operates a local cable distribution and monetization streaming platform	\$12.0	n.a.	n.a.	n.a.	n.a
Dec-17	Immotion Group Ltd.	Private	Immotion Group Ltd. develops virtual reality (VR) based immersive experience platforms.	\$1.8	n.a.	n.a.	n.a.	n.a
lov-17	Quantum Capture	Vive X, Vive X	Quantum Capture produces virtual reality content for digitizing humans.	n.a.	n.a.	n.a.	n.a.	n.a
lov-17	Reeltime Rentals, Inc.	Media Funding Group	Reeltime Rentals, Inc., a multimedia company, develops, produces, and distributes virtual reality contents and technologies in the United States.	\$2.0	n.a.	n.a.	n.a.	n.a
Oct-17	Little Star Media, Inc.	Private	Little Star Media, Inc. operates a virtual reality (VR) platform that allows users to discover, watch, and share the content on VR devices.	n.a.	n.a.	n.a.	n.a.	n.a
Dct-17	Pluto, Inc.	Samsung Venture Investment Corporation	Pluto, Inc. provides Pluto TV, an online service for watching live TV channels, TV shows, movies, news, sports, viral videos, and more.	\$8.3	n.a.	n.a.	n.a.	n.a
Sep-17	Blend Media Ltd	I2BF Global Ventures, Hambro Perks Ltd.	Blend Media Ltd develops a platform for brands, agencies, and publishers that enables them to find content and creators.	\$2.0	n.a.	n.a.	n.a.	n.a
Sep-17	TRIPP inc.	Mayfield Fund	TRIPP inc. develops and offers a virtual reality (VR) game, or experience that focuses on changing the way a person feels.	\$4.0	n.a.	n.a.	n.a.	n.a
Sep-17	Martell Broadcasting Systems, Inc.	Private	Martell Broadcasting Systems, Inc. develops a video streaming platform.	\$10.7	n.a.	n.a.	n.a.	n.a
Sep-17	Penthera Partners, Inc.	Liberty Global Ventures	Penthera Partners, Inc., a software company, provides portable video software solutions for television networks and content distributors.	\$6.2	n.a.	n.a.	n.a.	n.a
Sep-17	Recall Studios Inc.	Essex Global Investment Corp.	Recall Studios Inc. operates as a virtual reality and new media production company.	\$0.1	n.a.	n.a.	n.a.	n.a
Sep-17	Vidrovr Inc.	Verizon Ventures, R/GA Ventures, Samsung	Vidrovr Inc. provides a video processing platform to organize video content.	\$1.3	n.a.	n.a.	n.a.	n.a
Sep-17	Cappasity Inc.	Private	Cappasity Inc. develops and operates a cloud-based platform that enables online stores to create and deliver 3D VR & AR experiences.	\$0.8	n.a.	n.a.	n.a.	n.a
Sep-17	WEVR, Inc.	DG Daiwa Ventures, DG Lab No. 1 Fund	WEVR, Inc. operates a virtual reality (VR) community and VR media player for aspiring and professional creatives.	n.a.	n.a.	n.a.	n.a.	n.a
Aug-17	Unlimited Inc.	the set of	Unlimited Inc. designs, creates, and produces virtual reality content for interactive media, films, TV series, games, promotional events, and	\$0.9	n.a.	n.a.	n.a.	n.a
Aug-17	Recall Studios Inc.	Crown Bridge Partners, LLC	Recall Studios Inc. operates as a virtual reality and new media production company.	\$0.1	n.a.	n.a.	n.a.	n.a
Aug-17	TimefireVR Inc.	Private	TimefireVR Inc. produces virtual reality content in the United States.	\$0.1	\$0.0	(\$3.3)	n.a.	n.a
Aug-17	Inmobly, Inc.	Private	Inmobly, Inc. develops SaaS-based mobile video content delivery solutions.	n.a.	n.a.	n.a.	n.a.	n.a
Aug-17	Vidrovr Inc.	Verizon Media Tech Venture Studio	Vidrovr Inc. provides a video processing platform to organize video content.	\$0.1	n.a.	n.a.	n.a.	n.a
Aug-17	Streamroot, Inc.	Verizon Media Tech Venture Studio	Streamroot, Inc. develops peer-to-peer video streaming technology for content delivery networks.	\$0.1	n.a.	n.a.	n.a.	n.a
Aug-17	AppliedVR, Inc.	Presence Capital	AppliedVR, Inc. provides a virtual reality platform for enhanced patient experience in healthcare around pain and anxiety management in	n.a.	n.a.	n.a.	n.a.	n.a
lul-17	Peer5, Inc.	FundersClub, Oriza, Tank Hill		\$2.5	n.a.	n.a.	n.a.	n.a
lul-17	Within Unlimited, Inc.		Within Unlimited, Inc., a VR company, provides technology solutions for creating and distributing story-driven experiences in virtual reality.	\$40.0	n.a.	n.a.	n.a.	n.a
lul-17	SVRF, Inc.	Techstars Central LLC	SVRF, Inc. owns and operates a search and discovery engine for virtual reality content.	\$0.1	n.a.	n.a.	n.a.	n.a
lul-17	Streamroot, Inc.		Streamroot, Inc. develops peer-to-peer video streaming technology for content delivery networks.	\$3.2	n.a.	n.a.	n.a.	n.a
lul-17	Reelgood.	Ventures, R/GA Ventures August Capital, Harrison Metal Capital, Social	Reelgood operates a content aggregation and search engine across streaming services.	\$3.5	n.a.	n.a.	n.a.	n.a
lul-17	Force Field VR	Private	Force Field VR develops virtual reality and augmented reality games, TV	\$1.2	n.a.	n.a.	n.a.	n.a
lul-17	Here Be Dragons LLC	Discovery	and video content, interactive experiences, and applications. Here Be Dragons LLC produces video-based virtual reality (VR) content.	\$10.0	n.a.	n.a.	n.a.	
		Communications, Inc.						
ul-17	Virva VR Oy	Nordic VR Startups Oy	Virva VR Oy operates virtual reality based entertainment venues.	n.a.	n.a.	n.a.	n.a.	n.a





North American Streaming, Content Delivery & VR Technologies

	Private Financir		Dusiness Deservicitien	Trans.	Revenue	EBITDA	EV/	EV/
Date	Target	Investor(s)	Business Description The Roque Initiative operates a virtual reality and digital entertainment	Value (\$M)			Revenue	
May-17	The Rogue Initiative	CBT Capital Limited	studio.	n.a.	n.a	n.a.	n.a.	n.a
May-17	Filmhub	NFX Guild, NFX Fund 1 LP	Filmhub operates a platform that offers videos streaming services to find, license, track, and pay for film and television content.	\$0.1	n.a	n.a.	n.a.	n.a
May-17	EEVO, Inc.	Eagle Advisors, FundersClub Inc.,	EEVO, Inc. develops a content platform for publishers and content creators to manage and distribute linear and interactive virtual reality video content.	\$1.3	n.a	n.a.	n.a.	n.a
May-17	Philo, Inc.	Private	Philo, Inc. offers Internet television solutions for college campuses in the United States.	n.a.	n.a	n.a.	n.a.	n.a
Apr-17	Fastly Inc.	August Capital, IDG Ventures, Sapphire	Fastly Inc. provides content delivery network (CDN) that accelerates and scales Websites, mobile applications, and APIs.	\$50.0	n.a	n.a.	n.a.	n.a
Apr-17	TubiTV	Foundation Capital, Jump Capital, Danhua Capital,	adRise, Inc., doing business as TubiTV, operates an Internet connected TV content platform for content producers and advertisers.	n.a.	n.a	n.a.	n.a.	n.a
Mar-17	Penthera Partners, Inc.	Private	Penthera Partners, Inc., a software company, provides portable video software solutions for television networks and content distributors.	\$0.3	n.a	n.a.	n.a.	n.a
Mar-17	The Rogue Initiative	Private	The Rogue Initiative operates a virtual reality and digital entertainment studio.	n.a.	n.a	n.a.	n.a.	n.a
Mar-17	Imagination Park Entertainment Inc.	Private	Imagination Park Entertainment Inc. operates as a digital content production company in the media and entertainment industry in Canada.	\$4.5	\$0.1	n.a.	n.a.	n.a
Mar-17	VIAR Inc.	Private	VIAR Inc. designs and develops cloud based content management system.	n.a.	n.a	n.a.	n.a.	n.a
Mar-17	TimefireVR Inc.	Private	TimefireVR Inc. produces virtual reality content in the United States.	\$0.7	\$0.2	(\$1.4)	n.a.	n.a
Feb-17	Zype Inc.	eValue AG, Runa Capital, Point Nine Capital, Revel	Zype Inc. develops a cloud platform for video publishing and distribution.	\$4.9	n.a	n.a.	n.a.	n.a
eb-17	MobiTV, Inc.	Oak Investment Partners, Ally Corporate Finance	MobiTV, Inc. provides managed services to deliver live and on-demand television and related media content across devices.	\$21.0	n.a	n.a.	n.a.	n.a
eb-17	Bit Rate Group Ltd.	Kapelushnik - Consulting & Business Development	Bit Rate Group Ltd. develops networking equipment for Over The Top (OTT) and Internet Television Video (IPTV) streaming services.	\$0.3	n.a	n.a.	n.a.	n.a
eb-17	Blend Media Ltd	Private	Blend Media Ltd develops a platform for brands, agencies, and publishers that enables them to find content and creators.	n.a.	n.a	n.a.	n.a.	n.a
Jan-17	EEVO, Inc.	Techstars Central LLC	EEVO, Inc. develops a content platform for publishers and content creators to manage and distribute linear and interactive virtual reality video content.	\$0.1	n.a	n.a.	n.a.	n.a
Jan-17	Vidrovr Inc.	Techstars Central LLC	Vidrovr Inc. provides a video processing platform to organize video content.	\$0.1	n.a	n.a.	n.a.	n.a
Jan-17	Peer5, Inc.	Y Combinator Management LLC	Peer5, Inc. operates a peer-to-peer content delivery network worldwide.	\$0.1	n.a	n.a.	n.a.	n.a
Jan-17	MainStreaming SpA	United Ventures	MainStreaming SpA, a video delivery network, develops and operates a cloud platform for video hosting and streaming.	\$4.3	n.a	n.a.	n.a.	n.a
Jan-17	Overcast HQ Limited	Enterprise Ireland, Investment Arm	Overcast HQ Limited builds and operates a video platform for video content management to business teams and video content owners.	\$0.5	n.a	n.a.	n.a.	n.a
Jan-17	Rivit TV, Inc.	Private	Rivit TV, Inc. offers live streaming video services.	\$5.0	n.a	n.a.	n.a.	n.a
Jan-17	Sportsrocket, Inc.	Private	Sportsrocket, Inc. provides a platform for managing video content.	n.a.	n.a	n.a.	n.a.	n.a
Jan-17	Philo, Inc.	Private	Philo, Inc. offers Internet television solutions for college campuses in the United States.	n.a.	n.a	n.a.	n.a.	n.a
Dec-16	Visbit Inc.	Ever Sunny Limited, ZhenFund, Amino	Visbit Inc. develops a cloud streaming service platform that helps VR content creators and publishers to deliver their VR videos to their users.	\$3.2	n.a	n.a.	n.a.	n.a
Oct-16	Pluto, Inc.	U.S. Venture Partners, Sky plc, ProSiebenSat.1	Pluto, Inc. provides Pluto TV, an online service for watching live TV channels, TV shows, movies, news, sports, viral videos, and more.	\$25.0	n.a	n.a.	n.a.	n.a
Oct-16	YuppTV Inc.	Emerald Media	YuppTV Inc. provides subscription based online over-the-top entertainment solutions.	\$49.9	n.a	n.a.	n.a.	n.a
Oct-16	EasyBroadcast	Go Capital SAS, Go Capital Amorçage, FPCI	EasyBroadcast develops hybrid solutions by combining standard unicast delivery model with peer-to-peer adaptive streaming mode.	n.a.	n.a	n.a.	n.a.	n.a
Oct-16	TVPlayer Limited	Beringea LLC, A&E	TVPlayer Limited provides an online live TV streaming service that allows	\$6.4	n.a	n.a.	n.a.	n.a
Sep-16	Vertebrae, Inc.	Private	users watch shows online on the Web, mobile, and tablet. Vertebrae, Inc. provides an advertising platform to create virtual and	\$10.0	n.a	n.a.	n.a.	n.a
Aug-16	Wurl, Inc.	Private	augmented reality advertising formats. Wurl, Inc. operates a streaming video platform that links online video producers with pay TV systems worldwide.	\$4.4			n.a.	n.a
Aug-16	CLEVR FOREVR INC.	Vive X	CLEVR FOREVR INC. owns and operates a social network platform that unites all virtual reality devices and allows users to discover new content.	n.a.	n.a	n.a.	n.a.	n.a
Jul-16	Penthera Partners, Inc.	Private	Penthera Partners, Inc., a software company, provides portable video	\$0.7	n.a	n.a.	n.a.	n.a
Jul-16	Metanaut Limited	Vive X, Vive X	software solutions for television networks and content distributors. Metanaut Limited operates a virtual reality studio that designs virtual reality				n.a.	n.a
Jul-16	MovingIMAGE24 GmbH	Digitalplus GmbH	experiences for the HTC Vive and Oculus Rift. MovingIMAGE24 GmbH develops a SaaS or on-premise enterprise video	\$8.9				n.a
Jun-16	Jaunt Inc.	Disney Accelerator	platform for integrated enterprise video content management. Jaunt Inc. develops hardware, software, tools, and applications to enable	\$0.0				n.a
		Twenty-First Century Fox,	cinematic virtual reality (VR). Within Unlimited, Inc., a VR company, provides technology solutions for					
Jun-16	Within Unlimited, Inc.	Inc., Live Nation	creating and distributing story-driven experiences in virtual reality. Pulsar Concept SL develops games and digital experiences through	\$12.6				n.a
Jun-16	Pulsar Concept SL	Emprendiza, Vibacar SL Inveready Asset	mobile phone devices, touch screens, and virtual reality systems. SMARTYCONTENT, S.L. develops and operates multimedia aggregation,	\$0.6				n.a
Jun-16	SMARTYCONTENT, S.L.		streaming, publishing, and advertising platform.	n.a.	n.a	n.a.	n.a.	n.a

Source: Capital IQ Indicated target is featured in text





North American Streaming, Content Delivery & VR Technologies

Date	I Private Financi Target	Investor(s)	Business Description	Trans.	Revenue		EV/	EV/
	The Virtual Reality	Hengxin Mobile Business		Value (\$M)			Revenue	
Jun-16	Company	Co., Ltd. (nka:Hengxin	for film and entertainment.	\$23.0	n.a.	. n.a.	n.a.	n.a
May-16	Zeality Inc.	Rothenberg Ventures (nka:Frontier Tech	Zeality Inc. provides a social engagement and network delivery platform for virtual reality and 360° video content.	n.a.	n.a.	. n.a.	n.a.	n.a
May-16	Little Star Media, Inc.	Private	Little Star Media, Inc. operates a virtual reality (VR) platform that allows users to discover, watch, and share the content on VR devices.	\$5.2	n.a.	. n.a.	n.a.	n.a
Apr-16	SpaceVR	Shanda Group Pte Ltd., Skywood Capital	SpaceVR operates a virtual reality platform that allows users to experience space from their mobile, desktop, and virtual reality devices.	\$1.3	n.a.	. n.a.	n.a.	n.a
Apr-16	Recall Studios Inc.	Private	Recall Studios Inc. operates as a virtual reality and new media production company.	\$0.5	n.a.	. n.a.	n.a.	n.a
Apr-16	Marxent Labs LLC	Stage 1 Ventures, LLC, Detroit Venture Partners,	Marxent Labs LLC develops augmented reality and virtual reality applications.	\$10.0	n.a.	. n.a.	n.a.	n.a
Mar-16	aioTV Inc.	UTStarcom Holdings Corp., Innovacorp	aioTV Inc. provides aioTV, a cloud based video platform for licensed and unlicensed content.	\$1.0	n.a.	. n.a.	n.a.	n.a
Mar-16	fuboTV	Twenty-First Century Fox, Inc., DCM, Sky plc,	S.C. Networks, Inc., doing business as fuboTV, develops a live streaming platform that bundles live sport and entertainment channels.	\$15.0	n.a.	. n.a.	n.a.	n.a
Feb-16	The Rogue Initiative	Presence Capital, The Venture Reality Fund,	The Rogue Initiative operates a virtual reality and digital entertainment studio.	n.a.	n.a.	. n.a.	n.a.	n.a
Jan-16	InstaVR Inc.	Tokyo XR Startups Inc.	InstaVR Inc. provides tools that allow virtual reality (VR) creators to create VR applications and publish to VR platforms.	n.a.	n.a.	. n.a.	n.a.	n.a
Jan-16	VidAngel, Inc.	Private	VidAngel, Inc. provides movies and TV shows streaming services.	\$0.5	n.a.	. n.a.	n.a.	n.a
Dec-15	Burst.lt, Inc.	Horizon Media, Inc., Sinclair Digital Ventures	Burst.lt, Inc. develops a mobile video platform that enables users to directly integrate the content into broadcast TV and other platforms.	\$5.3	n.a.	. n.a.	n.a.	n.a
Dec-15	Innovid, Inc.	Deutsche Telekom Strategic Investments	Innovid, Inc. provides a video platform for brands and agencies.	\$27.5	n.a.	. n.a.	n.a.	n.a
Dec-15	Cappasity Inc.	Private	Cappasity Inc. develops and operates a cloud-based platform that enables online stores to create and deliver 3D VR & AR experiences.	\$0.7	n.a.	. n.a.	n.a.	n.a
Dec-15	Little Star Media, Inc.	Steamboat Ventures, LLC	Little Star Media, Inc. operates a virtual reality (VR) platform that allows users to discover, watch, and share the content on VR devices.	\$0.8	n.a.	. n.a.	n.a.	n.a
Nov-15	Streamroot, Inc.	Partech Ventures, Walnut Venture Associates,	Stream root, Inc. develops peer-to-peer video streaming technology for content delivery networks.	\$2.5	n.a.	. n.a.	n.a.	n.a
Nov-15	VRstudios, Inc.	Private	VRstudios, Inc. designs and develops virtual reality solutions for entertainment and commercial enterprise industries.	n.a.	n.a.	. n.a.	n.a.	n.a
Nov-15	NextVR, Inc.	Comcast Ventures, dick clark productions, inc.,	NextVR, Inc. develops and delivers video capture technology for live and recorded experiences.	\$30.5	n.a.	. n.a.	n.a.	n.a
Nov-15	Our Film Festival, Inc.	Starz, DNS Capital, LLC,	Our Film Festival, Inc., doing business as Fandor, provides an online streaming service to watch independent and thought-provoking films.	\$7.0	n.a.	. n.a.	n.a.	n.a
Oct-15	Penthera Partners, Inc.	Private	Penthera Partners, Inc., a software company, provides portable video software solutions for television networks and content distributors.	\$0.9	n.a.	. n.a.	n.a.	n.a
Oct-15	Zype Inc.	eValue AG, Berlin Ventures BG GmbH,	Zype Inc. develops a cloud platform for video publishing and distribution.	\$3.6	n.a.	. n.a.	n.a.	n.a
Oct-15	Inmobly, Inc.	Private	Inmobly, Inc. develops SaaS-based mobile video content delivery solutions.	\$0.5	n.a.	. n.a.	n.a.	n.a
Oct-15	Little Star Media, Inc.	Disney Accelerator	Little Star Media, Inc. operates a virtual reality (VR) platform that allows users to discover, watch, and share the content on VR devices.	\$0.1	n.a.	. n.a.	n.a.	n.a
Oct-15	Afrostream Inc	ACE & Company SA, Orange Capital SA,	Afrostream Inc develops a video-on-demand solution that features African and African-American content.	n.a.	n.a.	. n.a.	n.a.	n.a
Sep-15	Reeltime Rentals, Inc.	Media Funding Group	Reeltime Rentals, Inc., a multimedia company, develops, produces, and distributes virtual reality contents and technologies in the United States.	\$2.0	n.a.	. n.a.	n.a.	n.a
Sep-15	WayGate, Inc.	Rothenberg Ventures (nka:Frontier Tech	WayGate, Inc. designs and develops virtual reality platform for creating, sharing, and viewing virtual reality content online.	n.a.	n.a.	. n.a.	n.a.	n.a
Sep-15	Hola Networks Limited	Draper Fisher Jurvetson, Iris Capital, Horizons	Hola Networks Limited provides a a VPN and advanced CDN service.	\$17.0	n.a.	. n.a.	n.a.	n.a
Sep-15	YuppTV Inc.	The Poarch Band of Creek Indians,	YuppTV Inc. provides subscription based online over-the-top entertainment solutions.	\$15.0	n.a.	. n.a.	n.a.	n.a
Sep-15	Jaunt Inc.	Highland Capital Partners, Redpoint	Jaunt Inc. develops hardware, software, tools, and applications to enable cinematic virtual reality (VR).	\$66.7	n.a.	. n.a.	n.a.	n.a
Sep-15	Adaptive Medias, Inc.	Anson Group, Anson	Adaptive Medias, Inc., provides digital video and mobile solutions for Websites, apps, and video publishers for optimize content advertising.	\$1.3	\$5.5	(\$11.4)	n.a.	n.a
Aug-15	KlowdTV, LLC	Private	KlowdTV, LLC provides live streaming services.	\$0.6	n.a.	. n.a.	n.a.	n.a
Aug-15	Crunchyroll, Inc.	Otter Media Holdings, LLC	Crunchyroll, Inc. provides a video service for Japanese anime and Asian content.	\$22.0	n.a.	. n.a.	n.a.	n.a
Aug-15	TubiTV		adRise, Inc., doing business as TubiTV, operates an Internet connected TV content platform for content producers and advertisers.	\$6.0	n.a.	. n.a.	n.a.	n.a
Aug-15	MediaPlatform, Inc.	TVC Capital, LLC, Barshop Ventures	MediaPlatform, Inc. owns and operates an enterprise webcasting platform that enables on-demand video and live webcasting.	\$12.0	n.a.	. n.a.	n.a.	n.a
Jul-15	WEVR, Inc.	Samsung Venture Investment Corporation,	WEVR, Inc. operates a virtual reality (VR) community and VR media player for aspiring and professional creatives.	\$25.0	n.a.	. n.a.	n.a.	n.a
Jul-15	AltspaceVR, Inc.	Western Technology Investment, Comcast	AtspaceVR, Inc., a social VR software company, builds a communication platform that enables people in various countries to share experiences.	\$10.3	n.a.	. n.a.	n.a.	n.a
Jul-15	WEVR, Inc.	H.T.C. (B.V.I.) Corporation	WEVR, Inc. operates a virtual reality (VR) community and VR media player	\$10.0	n.a.	. n.a.	n.a.	n.a
Jul-15	Fastly Inc.	August Capital, Battery	Fastly Inc. provides content delivery network (CDN) that accelerates and	\$75.0			n.a.	n.a
		Ventures, IDG Ventures,	scales Websites, mobile applications, and APIs.	φr 5.0	11.d.	n.d.	n.d.	- 10

Source: Capital IQ Indicated target is featured in text



North American Streaming, Content Delivery & VR Technologies

Date	Target	Investor(s)	Business Description	Trans. Value (\$M)	Revenue (LTM \$M)		EV/ I Revenue I	EV/ EBITDA
ul-15	Mavshack AB	Global Emerging Markets, GEM Global	Mavshack AB, together with its subsidiaries, provides Internet television (TV) services primarily for the Filipino and Indian customers.	\$35.6			n.a.	n.:
Jul-15	Little Star Media, Inc.	Disney Accelerator	Little Star Media, Inc. operates a virtual reality (VR) platform that allows users to discover, watch, and share the content on VR devices.	\$0.0	n.a.	n.a.	n.a.	n.
Jul-15	Sportsrocket, Inc.	Private	Sportsrocket, Inc. provides a platform for managing video content.	\$9.6	n.a.	n.a.	n.a.	n.
Jul-15	fuboTV	DCM, I2BF Digital, Luminari Capital,	S.C. Networks, Inc., doing business as fuboTV, develops a live streaming platform that bundles live sport and entertainment channels.	\$4.0	n.a.	n.a.	n.a.	n.
lun-15	Afrostream Inc	Y Combinator Management LLC	Afrostream Inc develops a video-on-demand solution that features African and African-American content.	\$0.1	n.a.	n.a.	n.a.	n
un-15	Elation Media, Inc.	Private	Elation Media, Inc. owns and operates streaming channels for consumers in the United States and internationally.	\$3.0	n.a.	n.a.	n.a.	n
un-15	Katapy Inc.	Private	Katapy Inc. operates a customizable video management and broadcasting platform for customers worldwide.	n.a.	. n.a.	n.a.	n.a.	n
/lay-15	NextVR, Inc.	Toba Capital	NextVR, Inc. develops and delivers video capture technology for live and recorded experiences.	\$3.0	n.a.	n.a.	n.a.	n
<i>l</i> lay-15	Philo, Inc.	New Enterprise Associates, Rho Capital	Philo, Inc. offers Internet television solutions for college campuses in the United States.	\$10.1	n.a.	n.a.	n.a.	n
Apr-15	Adaptive Medias, Inc.	Private	Adaptive Medias, Inc., provides digital video and mobile solutions for Websites, apps, and video publishers for optimize content advertising.	\$2.0	\$5.5	(\$14.0)	n.a.	n
Apr-15	EEVO, Inc.	Private	EEVO, Inc. develops a content platform for publishers and content creators to manage and distribute linear and interactive virtual reality video content.	\$1.0	n.a.	n.a.	n.a.	n
Mar-15	Innovid, Inc.	Deutsche Telekom Strategic Investments	Innovid, Inc. provides a video platform for brands and agencies.	\$10.0	n.a.	n.a.	n.a.	n
/ar-15	xtendx AG	SVC - AG für KMU Risikokapital	xtendx AG develops and provides software and services for the publication	n.a.	. n.a.	n.a.	n.a.	n
<i>l</i> lar-15	QuickPlay Media Inc.	Madison Dearborn	of rich media content on the Internet, Intranet, and mobile devices. QuickPlay Media Inc. provides cloud-based managed service solutions for	\$45.7	n.a.	n.a.	n.a.	n
<i>l</i> ar-15	Ubiquity, Inc.	Partners, LLC, Difference R-Squared Partners LLC	the distribution of media to IP-connected devices. Ubiquity, Inc., a multimedia company, focuses on the intersection of cloud-	\$0.1			n.a.	r
/ar-15	Knetik Media, LLC	Intersouth Partners	based cross platform applications. Knetik Media, LLC develops and operates Knetik platform that provides	n.a.			n.a.	r
eb-15	VRstudios, Inc.	Private	management of online media services. VRstudios, Inc. designs and develops virtual reality solutions for	\$1.4			n.a.	
eb-15	Simplestream Limited	Beringea LLC, Yolo	entertainment and commercial enterprise industries. Simplestream Limited provides live streaming and live-to-VOD solutions to	\$3.1			n.a.	
		Leisure and Technology Foundry Group, Hillsven	media and entertainment companies, telecos, and content providers.					r
an-15	Peer5, Inc.	LLC, Tapinator, Inc., Prior MMC Ventures Ltd,	Peer5, Inc. operates a peer-to-peer content delivery network worldwide.	n.a.			n.a.	r
lan-15	MUBI, Inc.	Floreat Merchant Banking	MUBI, Inc. provides subscription video on demand services. Crunchyroll, Inc. provides a video service for Japanese anime and Asian	\$15.0			n.a.	r
Dec-14	Crunchyroll, Inc. The Virtual Reality	Private Rothenberg Ventures	content. The Virtual Reality Company creates virtual reality content and experiences	\$28.8		n.a.	n.a.	r
Dec-14	Company	(nka:Frontier Tech	for film and entertainment. S.C. Networks, Inc., doing business as fuboTV, develops a live streaming	\$2.3	n.a.	n.a.	n.a.	r
Dec-14	fuboTV	Private U.S. Venture Partners,	Platform that bundles live sport and entertainment channels. Pluto, Inc. provides Pluto TV, an online service for watching live TV	\$1.6	n.a.	n.a.	n.a.	r
Nov-14	Pluto, Inc.	British Sky Broadcasting	channels, TV shows, movies, news, sports, viral videos, and more.	\$13.0	n.a.	n.a.	n.a.	n
Nov-14	Didja	Vestech Partners LLC	Didja operates a local cable distribution and monetization streaming platform	\$10.0	n.a.	n.a.	n.a.	n
Nov-14	Watch4 AG	Tempest Digital Media	Watch4 AG provides video-on-demand services.	n.a.	. n.a.	n.a.	n.a.	n
Dct-14	Philo, Inc.	Private	Philo, Inc. offers Internet television solutions for college campuses in the United States.	\$2.5	n.a.	n.a.	n.a.	r
Dct-14	Ubiquity, Inc.	Private	Ubiquity, Inc., a multimedia company, focuses on the intersection of cloud- based cross platform applications.	\$11.1	\$0.5	(\$56.5)	n.a.	n
Dct-14	Pluto, Inc.	British Sky Broadcasting Group plc (nka:Sky plc)	Pluto, Inc. provides Pluto TV, an online service for watching live TV channels, TV shows, movies, news, sports, viral videos, and more.	\$0.5	n.a.	n.a.	n.a.	r
Oct-14	Simplestream Limited	Beringea LLC	Simplestream Limited provides live streaming and live-to-VOD solutions to media and entertainment companies, telecos, and content providers.	n.a.	. n.a.	n.a.	n.a.	r
Oct-14	VRCHIVE CO.	Blue Startups LLC	VRCHIVE CO. owns and operates a content distribution platform for hosting 360-degree images.	\$0.0	n.a.	n.a.	n.a.	r
Sep-14	Pluto, Inc.	Pritzker Group Venture Capital	Pluto, Inc. provides Pluto TV, an online service for watching live TV channels, TV shows, movies, news, sports, viral videos, and more.	n.a.	. n.a.	n.a.	n.a.	r
Sep-14	NextVR, Inc.	Private	NextVR, Inc. develops and delivers video capture technology for live and recorded experiences.	\$5.0	n.a.	n.a.	n.a.	r
Nug-14	Jaunt Inc.	Highland Capital Partners, Redpoint	Jaunt Inc. develops hardware, software, tools, and applications to enable cinematic virtual reality (VR).	\$27.8	n.a.	n.a.	n.a.	r
Aug-14	Our Film Festival, Inc.	Private	Our Film Festival, Inc., doing business as Fandor, provides an online streaming service to watch independent and thought-provoking films.	\$2.0	n.a.	n.a.	n.a.	r
Aug-14	Streamroot, Inc.	Techstars Central LLC	Streamroot, Inc. develops peer-to-peer video streaming technology for content delivery networks.	\$0.0	n.a.	n.a.	n.a.	r
Aug-14	Vidmind Ltd	Trellas Enterprises Limited	Vidmind Ltd. operates a cloud-based TV platform that allows operators to introduce an OTT Pay TV or VOD service.	\$30.0	n.a.	n.a.	n.a.	r
			MUBI, Inc. provides subscription video on demand services.	\$9.3				



North American Streaming, Content Delivery & VR Technologies

Date	Target	Investor(s)	Business Description	Trans. Value (\$M)	Revenue	EBITDA (LTM \$M)	EV/ Revenue	EV/ FRITDA
Jul-14	WEVR, Inc.	Private	WEVR, Inc. operates a virtual reality (VR) community and VR media player for aspiring and professional creatives.	\$6.7	n.a.			
Jun-14	WEVR, Inc.	Plus Capital	WEVR, Inc. operates a virtual reality (VR) community and VR media player for aspiring and professional creatives.	n.a.	n.a.	. n.a.	n.a.	n.a
Jun-14	GRAVIDI, Inc.	Private	GRAVIDI, Inc. provides an interactive video content management platform that enables users to create and connect video to anything on the Web.	\$0.1	n.a.	. n.a.	n.a.	n.a
May-14	Fastly Inc.	August Capital, Battery Ventures, IDG Ventures,	Fastly Inc. provides content delivery network (CDN) that accelerates and scales Websites, mobile applications, and APIs.	\$41.5	n.a.	. n.a.	n.a.	n.a
Apr-14	Jaunt Inc.	Redpoint Ventures, British Sky Broadcasting	Jaunt Inc. develops hardware, software, tools, and applications to enable cinematic virtual reality (VR).	\$6.8	n.a.	. n.a.	n.a.	n.a
Mar-14	Fanhattan, Inc.	Private	Fanhattan, Inc. provides cloud-based Fan TV products in the United States.	\$8.4	n.a.	. n.a.	n.a.	n.a
Mar-14	Booxmedia Oy	Alma Media Oyj, DNA Oyj	Booxmedia Oyprovides cloud- television (TV) technology solutions.	\$0.6	n.a.	. n.a.	n.a.	n.a
Mar-14	XOS Digital, Inc.	Private	XOS Digital, Inc. provides content management solutions and digital coaching technology for professional and collegiate athletics.	\$5.0	n.a.	. n.a.	n.a.	n.a
Feb-14	YuppTV Inc.	SRI Capital	YuppTV Inc. provides subscription based online over-the-top entertainment solutions.	\$2.5	\$11.0	n.a.	n.a.	n.a
Jan-14	VidAngel, Inc.	Private	VidAngel, Inc. provides movies and TV shows streaming services.	\$0.6	n.a.	. n.a.	n.a.	n.a







## X. Select Public Market Data





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