



2021 Full Year Market Report

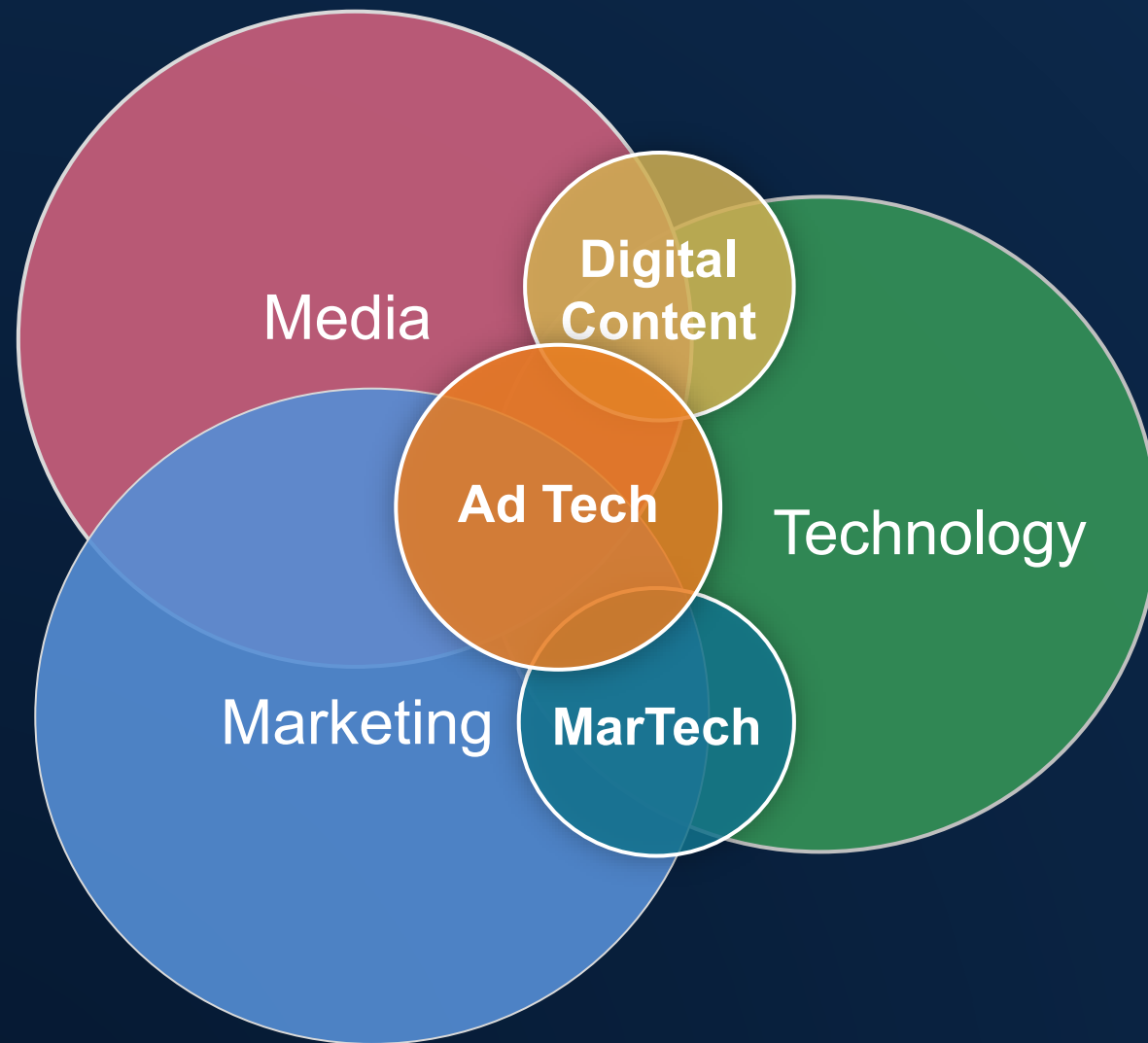
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LUMA's Focus on Digital Media & Marketing



- LUMA's expertise is at the intersection of Media, Marketing and Technology.
- At this intersection exists:
 - Ad Tech
 - MarTech
 - Digital Content
- These companies employ a variety of business models including services, media, data, commerce and software.

LUMA's Recent Deals



December 2021

Secondary Offering
\$622,000,000

LUMA Securities, a wholly-owned broker-dealer of the undersigned, acted as underwriting co-manager to AppLovin Corporation.

October 2021

has agreed to acquire

a wholly owned subsidiary of

The undersigned acted as exclusive financial advisor to AppLovin Corporation.

September 2021

has been acquired by

The undersigned acted as a financial advisor to Reflektion, Inc.

August 2021

has been acquired by

The undersigned acted as the exclusive financial advisor to Publica LLC.

July 2021

has been acquired by

The undersigned acted as the exclusive financial advisor to JetFuel, Inc.

July 2021

Initial Public Offering
\$160,000,000

LUMA Securities, a wholly-owned broker-dealer of the undersigned, acted as underwriting co-manager to Outbrain, Inc.

June 2021

has agreed to sell an equity interest to

The undersigned acted as financial advisor to Simplifi Holdings, Inc.

May 2021

has agreed to be acquired by

The undersigned acted as financial advisor to Chartboost, Inc.

April 2021

Initial Public Offering
\$2,000,000,000

LUMA Securities, a wholly-owned broker-dealer of the undersigned, acted as underwriting co-manager to AppLovin Corporation.

March 2021

majority investment in

The undersigned acted as exclusive financial advisor to Blackstone.

March 2021

has acquired

The undersigned acted as exclusive financial advisor to Vungle, Inc.

February 2021

A Wholly-Owned Business Unit of

has been acquired by

The undersigned acted as exclusive financial advisor to AdColony.

February 2021

has been acquired by

a division of

The undersigned acted as exclusive financial advisor to Parse.ly, Inc.

February 2021

has acquired

The undersigned acted as financial advisor to Magnite, Inc.

January 2021

has received a majority investment by

The undersigned acted as exclusive financial advisor to Alphonso Inc.

January 2021

has been acquired by

The undersigned acted as exclusive financial advisor to Beeswax Co, Inc.

Executive Summary

Overview

- Coming off of an unprecedented year in 2020 – during which activity took a nosedive during COVID, then roared back in the second half – this year largely represented a continuation of the momentum spurred by the recovery that began last year.
- The continued resurgence in confidence within the ecosystem has resulted in elevated M&A deal flow, capital markets issuances, and private financing activity.

M&A Activity⁽¹⁾

- M&A activity in 2021 reached new highs as it bounced back from the stifled numbers in 2020 that resulted from the weariness of investors relating to the COVID-19 pandemic. Buyer confidence and pent-up acquisition demand led to a **+82%** YoY growth in 2021. The momentum has sustained throughout the year with all quarters posting YoY increases.
- M&A was strong across all ecosystem subcategories as they were each up in 2021. **Ad Tech** had the largest resurgence from its 2020 numbers where deal count was up **+200%** YoY in 2021. **MarTech** similarly had a strong comeback from its pandemic lows with **+95%** YoY growth. **Digital Content** which managed to maintain a relatively strong deal count during the peak of the pandemic nonetheless achieved a **+38%** YoY increase. We rather loudly predicted this robust activity in [this Adexchanger post](#).
- We expect elevated M&A activity to continue in 2022 as strategic and financial buyers look to capitalize on the evolving ecosystem by acquiring capabilities catering to permanent changes in consumer behavior that are downstream from the pandemic (e.g., streaming and gaming gains, increased eCommerce sales, and general software adoption).

Public Markets Activity

- With 18 completed issuances (IPOs + De-SPACs) and two more pending within Ad Tech and MarTech, 2021 was the most active year on record for new public entrants in the Media and Marketing Technology ecosystem. The IPO pipeline for 2022 and beyond is likewise robust, as 10 additional companies are rumored to be preparing for IPO.
- Due to this ongoing influx of new issuers in Ad Tech and MarTech, LUMA launched a formal tracking initiative known as **The LUMA Indices** which tracks the public Ad Tech and MarTech cohorts' market performance in a like-for-like manner with notable market indices such as the Nasdaq 100, S&P 500, etc.
- The valuation backdrop for technology issuers has remained positive, though 2021 market performance lagged 2020 across most technology indices. Nevertheless, with approximately flat performance from both the Ad Tech Index (**+2%**) and MarTech Index (**-8%**) in 2021, both sub-sectors have kept most of their gains from the post-COVID rally of 2020.

Private Financing Activity

- Private capital markets have remained a healthy source of capital for growth-stage companies in Ad Tech, MarTech, and Digital Content; investment firms have shown an increasing degree of comfort with large check sizes (>\$100mm) and multi-billion-dollar valuations, including many companies on the path to near-term IPO issuance.
- A variety of investment firm types have become active in these late-stage private financings – it is no longer strictly seen as a “high beta” investment strategy reserved for risk-seeking venture investors. Frequent investors in the space can be categorized as follows: **Traditional Venture** (e.g., a16z, Sequoia), **Private Equity** (e.g., Bain Capital, Thoma Bravo), **Public Asset Management** (e.g. Franklin Templeton, Fidelity), **Public/Private Hybrid** (e.g., Tiger Global, Coatue), **Corporate Venture** (e.g., Intel Capital, Salesforce Ventures), and **Sovereign Wealth Funds** (e.g., Qatar Investment Authority, GIC).
- With record levels of dry powder held by private investment firms, we expect Private Financing markets to remain robust in 2022.

Source: LUMA, FactSet (market data as of 12/31/2021).

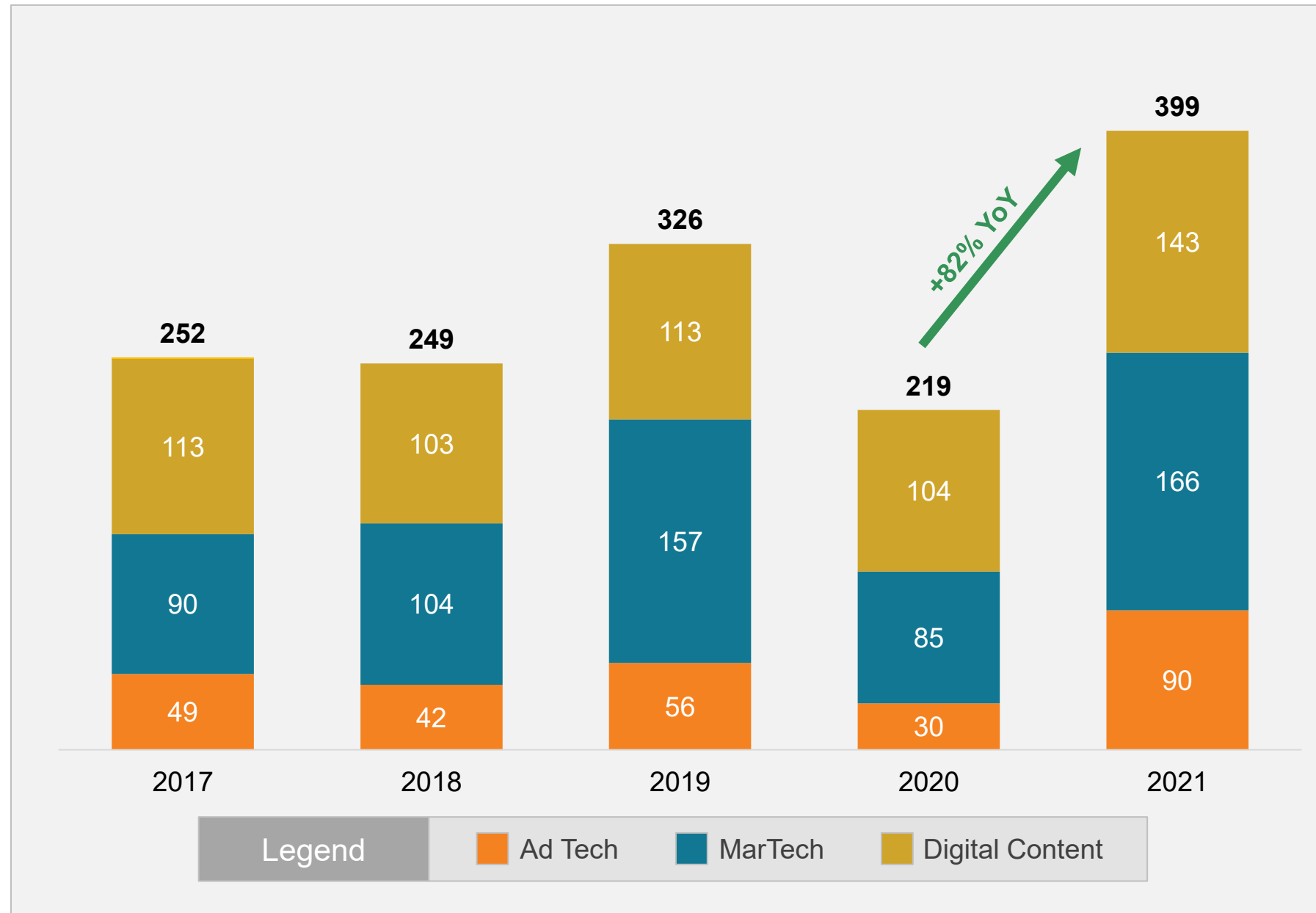
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Media & MarTech M&A Activity by Sector – Annual View

Ad Tech
MarTech
Digital Content

Number of Transactions – Annual (2017-2021)



Commentary

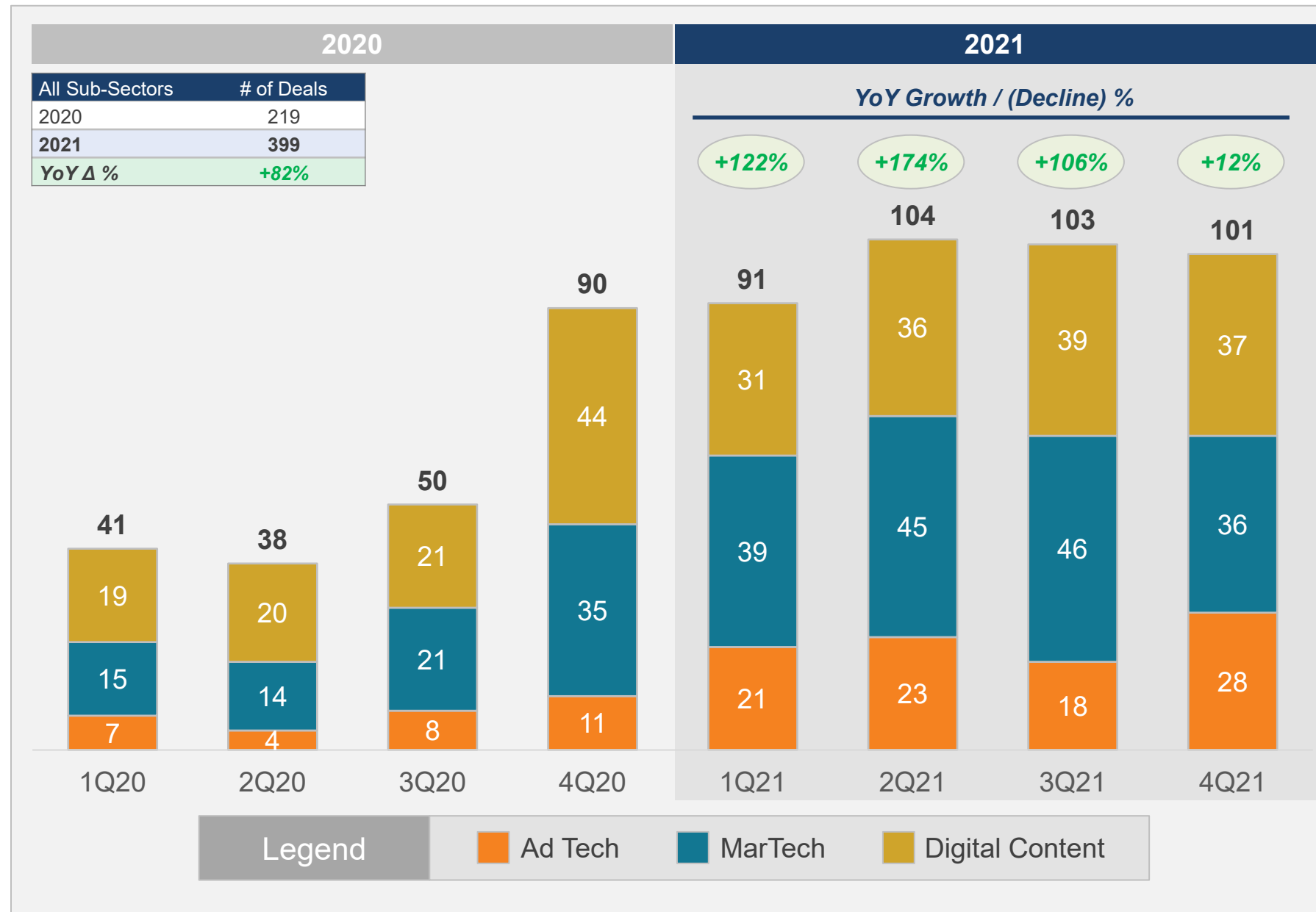
- 2021 was an emphatic rebound year from the 2020 pandemic-induced lows for M&A in the Media and Marketing Technology sectors, with total deal-making up **+82%** year-over-year.
- The performance of 2021 was seemingly a continuation of the momentum that started in late 2020, when deal activity reaccelerated out of the trough of the pandemic.
- Key drivers of healthy M&A activity include robust public equity valuations, guarded optimism about economic recovery and expansion, and continued growth of digital sub-sectors such as CTV and eCommerce.
- Along with the massive increases in overall deal activity, scaled deal activity likewise underwent a significant uptick this year in comparison to 2020. There were 122 scaled transactions in 2021—compared to just 62 in 2020—representing a **+97%** YoY increase.
- Themes for strategic M&A in 2021 were very similar to those seen in 2020, as companies continue to make investments in streaming (CTV and audio), the mobile app ecosystem, identity resolution, and eCommerce-related capabilities.

Source: LUMA, PitchBook, Company announcements.

Media & MarTech M&A Activity by Sector – Quarterly View

Ad Tech
MarTech
Digital Content

Number of Transactions – Quarterly (1Q20-4Q21)



Commentary

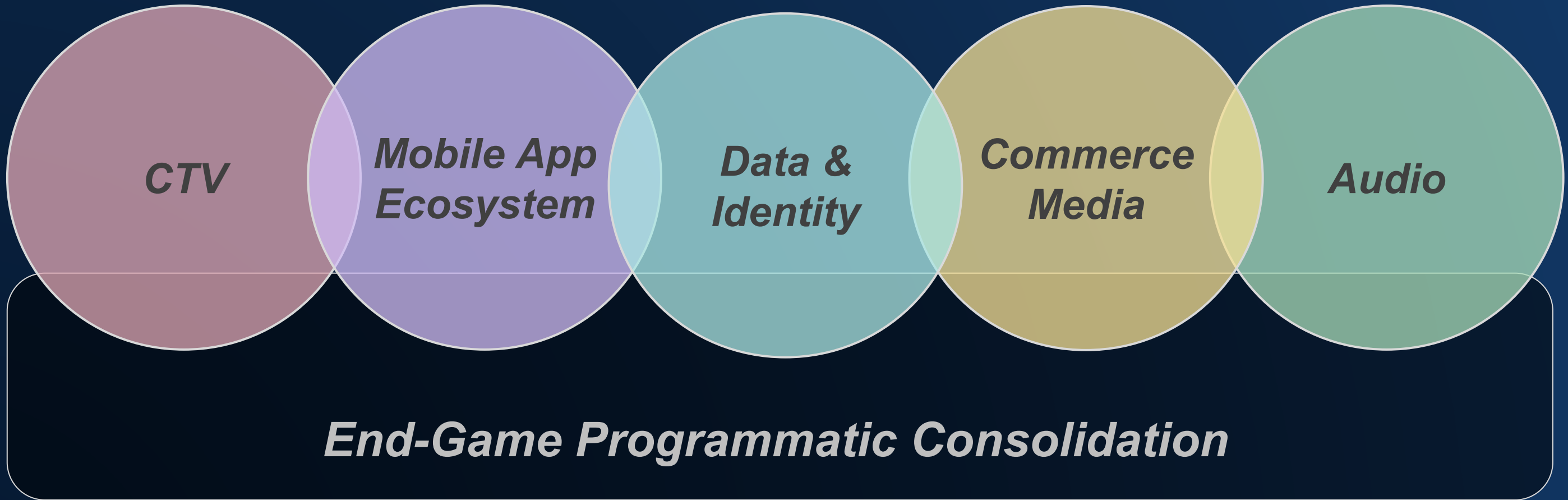
- The aforementioned **+82%** increase in full year 2021 deal activity was driven by very robust growth in the first three quarters of the year. Q4 is up by the smallest factor this year, in large part due to having the toughest comparison period.
- Following the extraordinary fiscal and monetary interventions by the U.S. Federal Government and Federal Reserve last year, deal activity ramped up to current elevated levels of ≥ 90 deals per quarter, a level which has held constant now for five consecutive quarters.
- Scaled ($\geq \$100$ mm) deal activity was strong throughout the year – in each quarter this year, there were ~ 30 scaled deals announced, versus the 2020 average of only ~ 15 .
- Furthermore, there were 41 deals across Ad Tech, MarTech, and Digital Content with transaction value greater than \$1bn in 2021. In 2020, there were only 17 transactions of this scale.
- While deal activity remains elevated, it will be notable to observe if there are any forthcoming headwinds that could impact investment activity, as the world grapples with the Omicron COVID variant, supply chain disruptions, and rising inflation.

Source: LUMA, PitchBook, Company announcements.

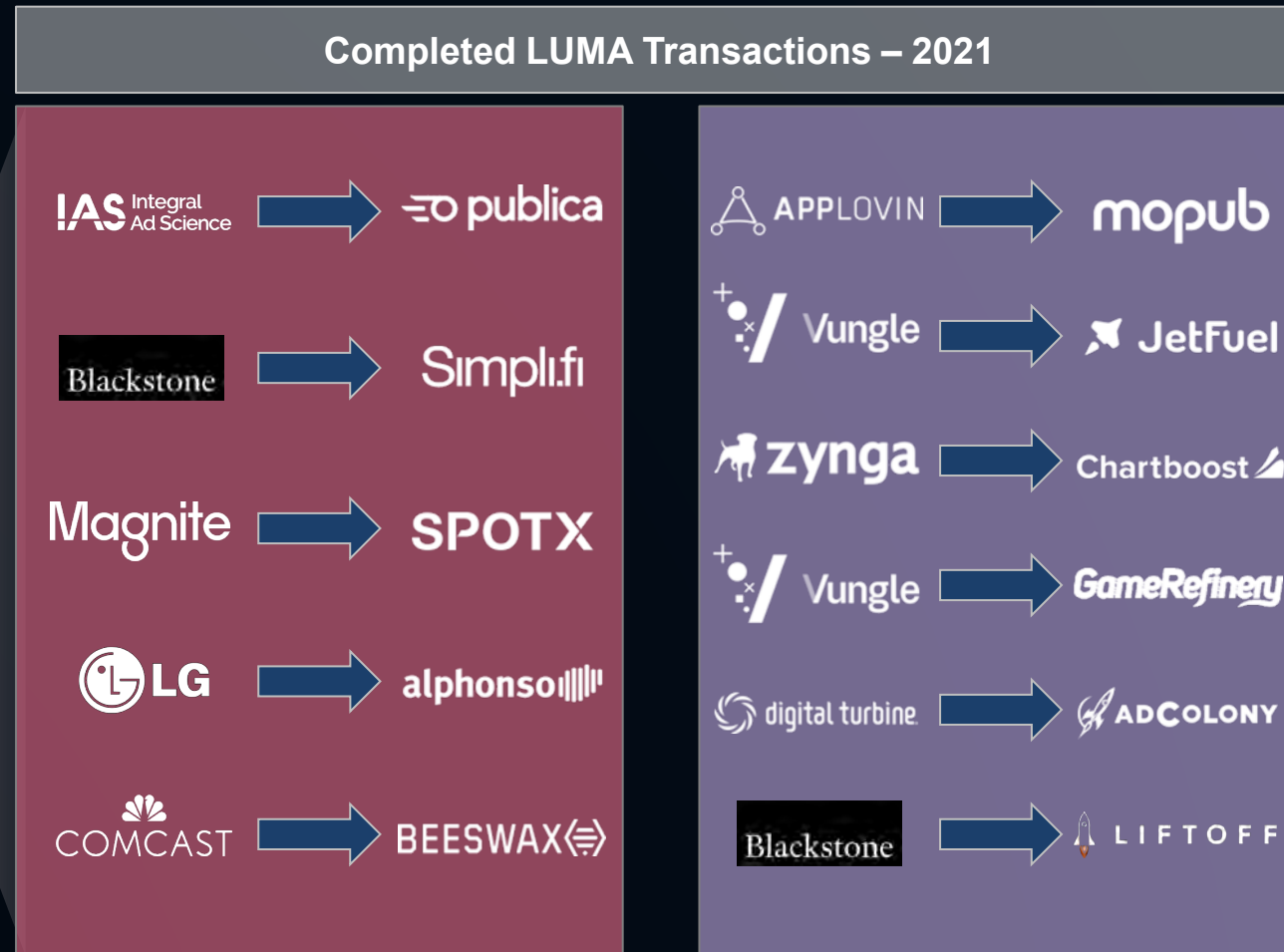
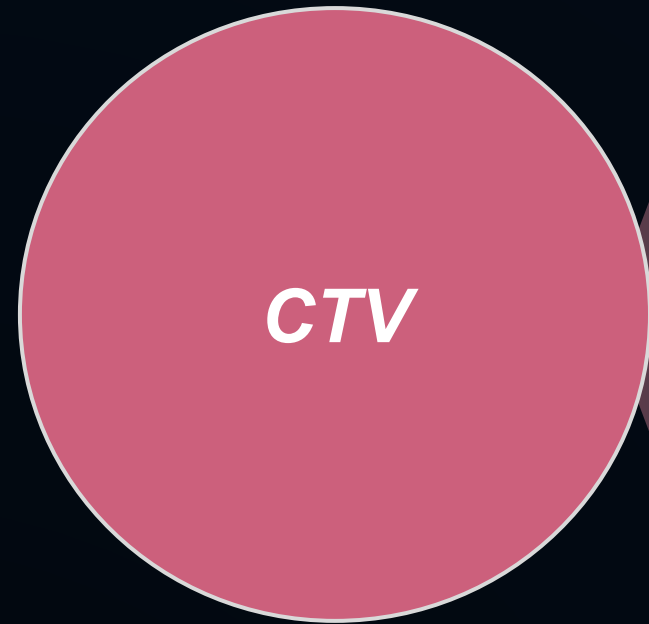
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LUMA's M&A Themes





The Most Active Themes in 2021: CTV & Mobile



Notable CTV Transactions

Acquirer Category	Acquirer	Target	Target EV (\$mm)	Target Category
Traditional Media	 Discovery	 WarnerMedia	\$43,000	Traditional Media
Digital Giants	 amazon	 MGM	\$8,450	Traditional Media
Financial Sponsor	 Blackstone	 Simplifi	\$1,500	Ad Tech
Financial Sponsor	 VISTA	 triplelift	\$1,400	Ad Tech
Other (SPAC)	 ION Acquisition Corp II	 INNOVLD	\$1,300	Ad Tech
Ad Tech	 Magnite	 SPOTX	\$1,170	Ad Tech
Ad Tech	 mediaocean	 flashtalking	\$500	Ad Tech
Ad Tech	 IAS Integral Ad Science	 publica	\$220	Ad Tech
Other (Electronics OEM)	 LG	 alphonso	\$125	Ad Tech
Financial Sponsor	 CVC	 mediaocean	ND	Ad Tech
Ad Tech	 Roku	 Nielsen Ad Tech Assets	ND	Ad Tech
Digital Giants	 Microsoft	 xandr	ND	Ad Tech

Source: LUMA, PitchBook, eMarketer.

Note:  Denotes transactions on which LUMA served as financial advisor. Transactions are ordered by Enterprise Value when available, and then alphabetical order based on Target's name thereafter. All figures in USD millions unless noted otherwise. Deals shown reflect those announced during calendar year 2021.  Denotes transaction consistent with "End-Game Programmatic Consolidation" M&A theme thesis. Transactions are ordered by Enterprise Value when available, and then alphabetical order based on Target's name thereafter. All figures in USD millions unless noted otherwise.

Observations

2021 represented an important year for CTV as the COVID induced shifts in consumer streaming showed staying power and the ecosystem lined up around technology in anticipation of the future opportunity

- While 2020 provided the initial spark for CTV inflection, 2021 highlighted the strength of the sector. Consumers continued to stream at elevated levels despite lightened COVID restrictions and began adopting ad-supported streaming options at an accelerated pace.
- With consumer adoption maintaining, investors (public & private) began to focus on the inevitability of Convergent TV and the massive growth opportunities it presents. This made CTV a core narrative for nearly all public companies touching Ad Tech.
- As expected, CTV M&A accelerated in 2021, with particular focus on bolstering Ad Tech capabilities and scale. These acquisitions came from both existing ad tech platforms (Magnite / SpotX and MediaOcean / Flashtalking), as well as broader strategics moving more aggressively into the space (LG / Alphonso and Microsoft / Xandr).
- In addition to strategic buyers, private equity buyers also began focusing heavily on the CTV opportunity in 2021, with Blackstone, Vista, CVC, and TA Associates all making sizable investments in Ad Tech.
- LOOKING AHEAD:** Expect M&A to continue as the CTV measurement ecosystem continues to shake up and more parties look to take advantage of this fast growing sector.

LUMA M&A Themes: Mobile App Ecosystem

Notable Mobile App Ecosystem Transactions

Acquirer Category	Acquirer	Target(s)	Target EV (\$mm)	Target Category
Other (SPAC)	ArchimedesTech SPAC Partners	← Merger → ironSource	\$11,100	Ad Tech
Gaming	netmarble	SpinX Games	\$2,200	Gaming
Gaming	EA	glu	\$2,100	Gaming
Gaming	EA	Playdemic	\$1,400	Gaming
Ad Tech	APPLOVIN	mopub	\$1,050	Ad Tech
Gaming	SCOPELY	GSN games	\$1,000	Gaming
Ad Tech	digital turbine	ADCOLONY APPRECIATE [®] Fyber	~\$1,000 ⁽¹⁾	Ad Tech
Ad Tech	APPLOVIN	adjust	\$990	MarTech
Ad Tech	ironSource	bidalgo luna Tapjoy SOOMLA	\$550+	Ad Tech / MarTech
Gaming	zynga	STARLARK	\$525	Gaming
Gaming	zynga	Chartboost	\$250	Ad Tech
Gaming	skillz	AARKI	\$157	Ad Tech
Ad Tech	LIFTOFF	← Merger → Vungle	ND	Ad Tech
Financial Sponsor	Blackstone	LIFTOFF	ND	Ad Tech
Ad Tech	Vungle	JetFuel GameRefinery TRE SENSEA	ND ⁽²⁾	Ad Tech / MarTech

Observations

- The mobile app ecosystem had a banner year from an M&A perspective, with >\$116Bn of transactions.
- 2021 was the most active deal-making year on record for mobile ad tech:
 - AppLovin started and ended the year with \$1bn deals, augmenting its marketing software platform with the acquisition of Adjust on the measurement side, and MoPub, the original mobile app mediation leader, to close out the year.
 - Blackstone followed up on its 2019 acquisition of Vungle by acquiring a majority stake in Liftoff and subsequently merging the two companies, while also supporting Vungle's strategic acquisitions of AlgoLift, GameRefinery, JetFuel, and TreSensa.
 - Digital Turbine made a number of moves to broaden its offering and move into the iOS world, with deals for AdColony, Appreciate & Fyber.
 - ironSource added a number of capabilities through its buys of Bidalgo, Luna Labs and Soomla, as well as scale, with its \$400mm Tapjoy deal.
- The game sector continued its consolidation with a number of scaled moves:
 - EA made a significant commitment to mobile, spending \$3.5bn on Glu and Playdemic, in its first major mobile deals in 10 years.
 - Scopely followed its successful purchase of FoxNext last year with its \$1bn deal for GSN Games.
 - Zynga continued its developer acquisition strategy, acquiring StarLark for \$525mm + also made a move into ad tech with its \$250mm purchase of Chartboost, another of the industry's original leaders.

Source: LUMA, PitchBook, eMarketer.

Note: Denotes transactions on which LUMA served as financial advisor. (1) LUMA served as financial advisor to AdColony on its \$400mm sale to Digital Turbine. (2) LUMA served as financial advisor to JetFuel on their sale to Vungle, and Vungle on its acquisition of GameRefinery. Deals shown reflect those announced during calendar year 2021. ▶ Denotes transaction consistent with "End-Game Programmatic Consolidation" M&A theme thesis. Transactions are ordered by Enterprise Value when available. All figures in USD millions unless noted otherwise.

LUMA M&A Themes: Data & Identity

Notable Data & Identity Transactions

Acquirer Category	Acquirer	Target	Target EV (\$mm)	Target Category
Other (Data & Ratings)	TransUnion	neustar	\$3,100	MarTech
Digital Content ex-Gaming	IDG	KickFire	\$1,300	MarTech
MarTech	qualtrics	CLARABRIDGE	\$1,125	MarTech
MarTech	Cint	LUCID	\$1,070	MarTech
Ad Tech	APPLOVIN	adjust	\$990	MarTech
Ad Tech	cardlytics	Bridg	\$579	MarTech
MarTech	dun & bradstreet	eyeota	\$165	MarTech
Ad Tech	DV DoubleVerify	OpenSlate	\$150	Ad Tech
MarTech	Optimizely	ZAIUS	\$100	MarTech
MarTech	LiveRamp	DATA FLEETS	\$67	MarTech

Source: LUMA, PitchBook, eMarketer.

Note: Denotes transactions on which LUMA served as financial advisor. Transactions are ordered by Enterprise Value when available, and then alphabetical order based on Target's name thereafter. All figures in USD millions unless noted otherwise. Deals shown reflect those announced during calendar year 2021. Denotes transaction consistent with "End-Game Programmatic Consolidation" M&A theme thesis. Transactions are ordered by Enterprise Value when available, and then alphabetical order based on Target's name thereafter. All figures in USD millions unless noted otherwise.

Observations

- Throughout 2021, Data & Identity continued to be one of the most widely discussed topics in digital media and marketing, as regulators and platforms continued to balance a vibrant digital ecosystem with ongoing protections for consumer privacy.
- This attention has created significant change and opportunity in the Data & Identity ecosystem, leading to substantial deal volume in 2021. M&A subthemes of note within the Data & Identity ecosystem include:
 - First-party data:** with regulators focused on 3rd party data and consumers increasingly using digital channels, marketers and publishers have turned their attention to shoring up their first-party data capabilities in order to better understand their consumers and deliver better experiences. Many of the year's most important deals included first party data and consumer experience at the core, including the year's largest Data & Identity transactions, TransUnion's acquisition of Neustar, IDG's acquisition of KickFire, and Qualtrics acquisition of Clarabridge.
 - Contextual:** as data tied to consumers continues to be scrutinized, alternative methods of personalization, such as contextual data, have resurfaced as strategic imperatives. One such transaction was DoubleVerify's acquisition of OpenSlate.
- LOOKING AHEAD:** As the importance of first-party data continues to grow, expect to see additional focus on making that data useful and interoperable (e.g., clean rooms), as well as further focus on the compliance & consent-management tied to the collection of more first-party data.

LUMA M&A Themes: Commerce Media

Notable Commerce / Commerce Media Transactions

Acquirer Category	Acquirer	Target	Target EV (\$mm)	Target Category
MarTech	KANTAR	Numerator	~\$1,500 (rumored)	MarTech
Ad Tech	Taboola	connexity	\$800	MarTech
Ad Tech	CRITEO	IPONWEB	\$380	Ad Tech
Ad Tech	cardlytics	Bridg	\$350	MarTech
Other (FinTech)	Bolt	tipser	~\$200 (rumored)	MarTech
MarTech	assembly	PACVUE	>\$100	Ad Tech
Financial Sponsor	THL	bazaarvoice	\$52	MarTech
Agency	Publicis WORLDWIDE	CitrusAd	ND	Ad Tech
Other (B2B Media)	ASCENTIAL	perpetua	ND	Ad Tech
MarTech	coveo™	Qubit.	ND	MarTech
Ad Tech	Quartile	SIDECAR	ND	Ad Tech

Source: LUMA, PitchBook, eMarketer.

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Observations

2021 saw a significant increase in M&A focused on Commerce Media and Marketing, as brands, retailers, publishers, and platforms all sought to catch up to the significant increase in eCommerce

- As predicted last year, the shift in consumer usage towards eCommerce has persisted, even as the world opened up from pandemic lockdowns. This has created significant downstream impacts as brands and retailers must re-think the influence digital channels have on commerce decisions and commerce enablement.
- In 2021, there was significant focus on bolstering advertising and marketing capabilities within retailers' online touchpoints. These retailers have crucial first party data and with enough scale, are set up to follow Amazon's lead in creating massive advertising networks.
- As a result, we saw a range of activity, including important ad tech hires at major retailers and significant M&A. From an M&A perspective, there were significant deals for parties that bring the tech to retailers (e.g. Criteo / IPONWEB and Publicis / CitrusAd), as well as those that support brands managing an increasingly more complex set of platforms (Assembly / Pacvue, Quartile / Sidecar, and Ascential / Perpetua)
- LOOKING AHEAD:** Expect to see an increased focus on bringing commerce decisioning and enablement outside these hedged gardens. This will manifest in further lean in from the broader media ecosystem, as well as the fintech ecosystem, as easier check outs and improved UX seeps into marketing.

LUMA M&A Themes: Audio

Notable Audio Transactions

Acquirer Category	Acquirer	Target	Target EV (\$mm)	Target Category
Other (SPAC)	Thoma Bravo Advantage	← Merger → SoundHound Inc.	\$2,100	Digital Content ex-Gaming
Other (FinTech)	Square	TIDAL	\$275	Digital Content ex-Gaming
Traditional Media	iHeart MEDIA	TRITON	\$228	Ad Tech
Digital Content ex-Gaming	Spotify	PODZ	\$55	Other
Traditional Media	SiriusXM	INVISIBLE	ND	Digital Content ex-Gaming
Digital Giants	amazon	ART19	ND	Ad Tech
Digital Content ex-Gaming	Spotify	Betty Labs.	ND	Digital Content ex-Gaming
Digital Content ex-Gaming	global	Captivate	ND	Ad Tech
Digital Content ex-Gaming	Spotify	FINDAWAY	ND	Digital Content ex-Gaming
Digital Content ex-Gaming	Medium	KNOWABLE	ND	Digital Content ex-Gaming
Digital Content ex-Gaming	Audacy	WIDEORBIT Streaming Assets	ND	Ad Tech

Source: LUMA, PitchBook, eMarketer.

Note: Denotes transactions on which LUMA served as financial advisor. Transactions are ordered by Enterprise Value when available, and then alphabetical order based on Target's name thereafter. All figures in USD millions unless noted otherwise. Deals shown reflect those announced during calendar year 2021. ▶ Denotes transaction consistent with "End-Game Programmatic Consolidation" M&A theme thesis. Transactions are ordered by Enterprise Value when available, and then alphabetical order based on Target's name thereafter. All figures in USD millions unless noted otherwise.

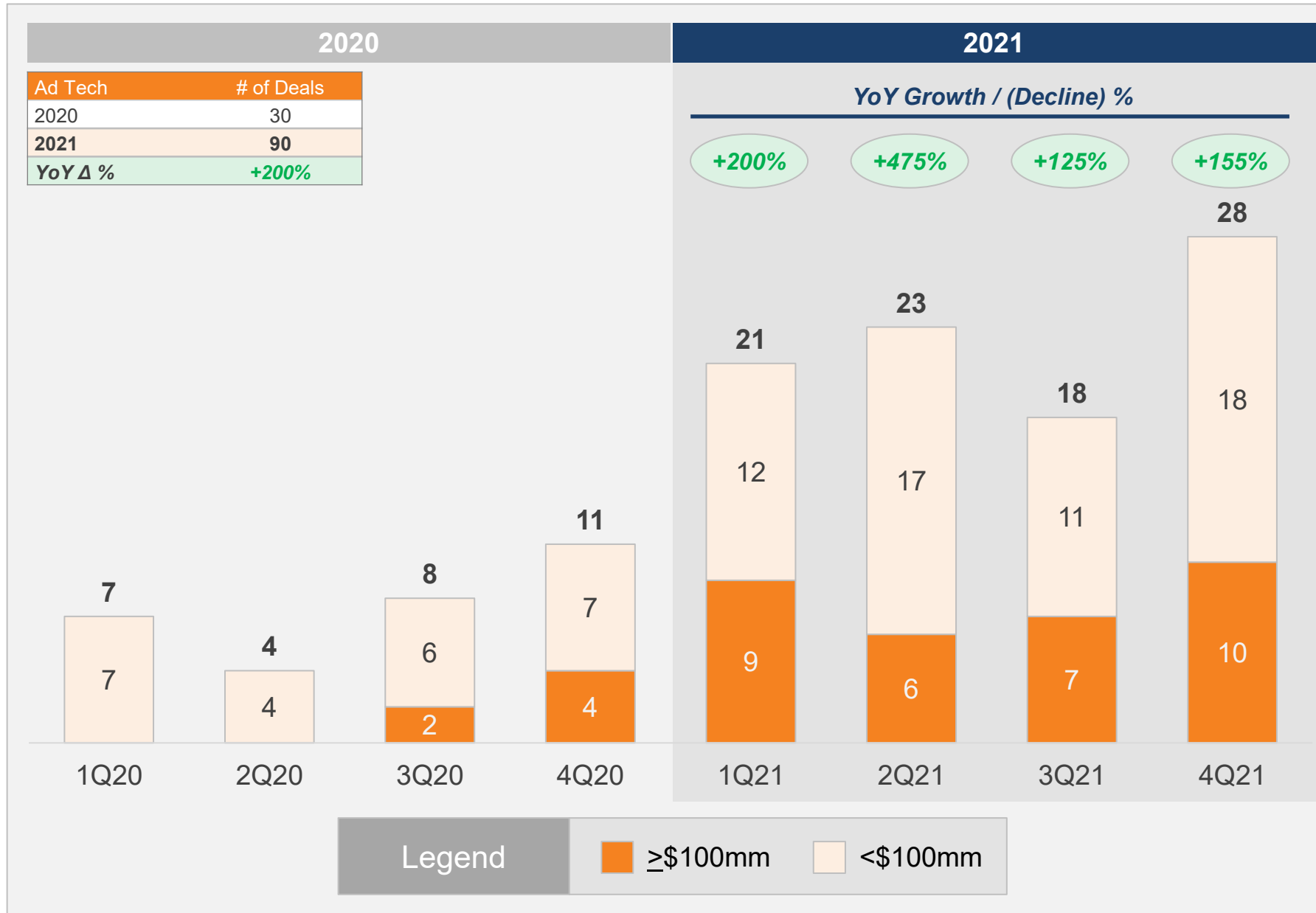
Observations

- Digital Audio continued to garner significant attention in 2021 with streaming and podcasting usage soaring, as well a new form of audio engagement, social audio, beginning to emerge.
- A staggering 40% of the US population now listens to podcasts on a monthly basis and major platforms, such as Spotify, have attributed podcasts as a key driver to their continued user growth.
- Unlike 2020, when most of the focus was on acquiring content, much of 2021 was focused on platforms acquiring podcast tech and advertising capabilities. Of particular focus were acquisitions of hosting / streaming companies that provide audio platforms with core infrastructure to attract podcast creators and offer more tracking and advertising. Deals included iHeart's acquisition of Triton Digital, Amazon's acquisition of Art19, and Audacy's acquisition of WideOrbit's streaming business. These followed significant deals by Spotify, SiriusXM, and Apple in 2020.
- 2021 also saw the emergence of Social Audio as a new form of consumer engagement with Audio. This engagement was led by startup Clubhouse and Twitter's launch of Spaces, and it led to a few acquisitions, such as Spotify's acquisition of Betty Labs.
- **LOOKING AHEAD:** Expect to see an increased focus driving ad spend through owned hosting platforms, with particular emphasis on the long-tail, as all major platforms seek to crack the opportunity and create a step-change in the size of podcast advertising, which still sits below \$2 billion.

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Number of Transactions



Source: LUMA, PitchBook, Company announcements.

Observations

























- Ad Tech had the strongest rebound of the sub-sectors with healthy increases across all quarters.
- The Mobile and CTV ecosystems remain active – in Mobile, AppLovin’s \$1.1bn acquisition of MoPub, ironSource’s acquisition of Tapjoy, and Digital Turbine’s acquisitions of AdColony and Fyber; in CTV, Magnite’s \$1.2bn acquisition of SpotX, and Microsoft’s recently announced acquisition of Xandr.
- 2021 was perhaps the most active Private Equity has been with respect to Ad Tech M&A activity, Blackstone’s investment in Simpli.fi, the merger of Blackstone portfolio companies Liftoff and Vungle, TA and CVC’s acquisition of Mediaocean, and Vista’s majority acquisition of TripleLift.

Looking Ahead

- Mobile and CTV Ad Tech remain hot investment themes for strategic buyers and Private Equity alike; we expect a continuation of the trend of scaled, notable transactions in these spaces.
- We expect increased strategic interest in commerce media capabilities due to the dramatic shift in retail spend toward eCommerce over the last two years, creating a massive immediate greenfield opportunity.

Ad Tech – 2021 Notable Deals (1 / 5)

Ad Tech
MarTech
Digital Content

























	Announcement Date	Target	Acquirer	Cumulative Capital Raised	Enterprise Value	Commentary
Q4	12/21/2021	 xandr	 Microsoft	ND	ND	<ul style="list-style-type: none"> Microsoft has agreed to acquire Xandr, an end-to-end digital advertising platform, from AT&T. The deal ends AT&T's bet on Ad Tech after acquiring the nucleus of the division (AppNexus) in 2018 for \$1.6bn.
	12/17/2021	 PLAYGROUND ^{XYZ}	 gumgum	ND	ND	<ul style="list-style-type: none"> GumGum, a contextual intelligence company, has acquired PlaygroundXYZ, an attention intelligence platform. The combined platform is said to be able to measure attention of contextually-driven campaigns sans cookies.
	12/13/2021	 SIDECAR	 Quartile	\$33	ND	<ul style="list-style-type: none"> Quartile, an ad optimization platform, has acquired Sidecar, an AI-powered consumer intelligence platform. Quartile expects the acquisition to double its annual ad spend under management to \$2 billion in 2021.
	12/9/2021	 IPONWEB	 CRITEO	ND	\$380	<ul style="list-style-type: none"> Criteo has entered into an agreement to acquire IPONWEB, a ML-powered programmatic technology provider. The acquisition is intended to bolster Criteo's market position in the post-third-party cookie / identifier world.
	12/8/2021	 helixa	 telmar	ND	ND	<ul style="list-style-type: none"> Telmar, a provider of targeting and planning tools has acquired Helixa, an audience intelligence platform. The deal will expand Telmar's media planning and audience analysis capabilities via Helixa's platform.
	12/8/2021	 PASSWORKS	 fobi	\$1	ND	<ul style="list-style-type: none"> Fobi, an AI-powered data analytics provider, will acquire Passworks, a mobile wallet marketing platform. This is Fobi's 3rd Wallet Pass acquisition in 2021 and will help scale their European and Global footprints.
	12/8/2021	 ZEDO	 Discovery	\$17	ND	<ul style="list-style-type: none"> Discovery is set to acquire the assets, technology, and IP of ZEDO a US / Indian Supply Side Platform (SSP). The acquisition will enhance Discovery's D2C platform with ZEDO's SSP and RTB capabilities.
	12/1/2021	 Rival IQ	 NETBASE QUID	ND	ND	<ul style="list-style-type: none"> Netbase Quid, an AI-driven consumer intelligence provider, acquired Rival IQ, a social media analytics provider. This will expand their suite to include consumer feedback capabilities with competitive benchmarking.
	11/22/2021	 vi video intelligence	 outbrain	\$4	\$55	<ul style="list-style-type: none"> Outbrain intends a \$55mm purchase of Video Intelligence, a platform that matches video with text-based content. This is Outbrain's first acquisition following their July IPO as it seeks to expand and differentiate its CTV offering.
	11/11/2021	 taptap	 bd-capital	\$5	\$116	<ul style="list-style-type: none"> European PE firm BD-Capital has made a majority investment in TAPTAP, an audience engagement platform. TAPTAP's platform connects multiple data ecosystems, enabling privacy-compliant targeting.
	11/9/2021	 Celtra	 STG SYMPHONY TECHNOLOGY GROUP	\$25	\$190	<ul style="list-style-type: none"> PE firm STG will acquire a majority stake in Celtra, a creative automation platform for media & marketing. Celtra announced expectations of achieving \$50mm of revenue in 2021, representing a 25% growth rate.
	11/9/2021	 OpenSlate	 DV DoubleVerify	ND	\$150	<ul style="list-style-type: none"> DoubleVerify will acquire OpenSlate, a pre-campaign contextual targeting platform, for \$150mm in cash & stock. The combination is expected to build a more comprehensive contextual platform for social video and CTV.

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AdWeek, Bloomberg, BusinessInsider, BusinessWire, Cision, CNBC, CrunchBase, Destination CRM, Digiday, Financial Express, Forbes, GlobalNewsWire, NewMediaWire, PrivateEquityWire, PRNewsWire, TechCrunch, TheDrum, TheVerge, Variety, VentureBeat, VideoWeek, WSJ. | Note: All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

Ad Tech – 2021 Notable Deals (2 / 5)

Highlight denotes LUMA Transactions

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Digital Content

	Announcement Date	Target	Acquirer	Cumulative Capital Raised	Enterprise Value	Commentary
Q4	11/4/2021	 PODGO	 Libsyn	ND	ND	<ul style="list-style-type: none"> Podcast hosting platform Libsyn has acquired certain assets of PODGO, a podcast advertising platform. The transaction will grow Libsyn-owned AdvertiseCast's scale by migrating users from the PODGO platform.
	11/4/2021	 VideoBridge	 VideoByte	ND	ND	<ul style="list-style-type: none"> VideoByte & VideoBridge, digital Ad Tech providers that integrate linear and CTV, have announced a merger. The combined VideoByte company will merge operations by EOY to provide a more comprehensive CTV suite.
	11/3/2021	 Adapex	 Datrrix AI solutions	ND	ND	<ul style="list-style-type: none"> Datrrix, an AI/ML data solutions provider, has acquired Adapex, a digital audience monetization platform. The transaction will enable Adapex's publishing partners to leverage Datrrix's AI platform.
	10/26/2021	 Pacvue	 Assembly	ND	ND	<ul style="list-style-type: none"> eCommerce software & data platform Assembly has acquired Pacvue, an eCommerce advertising platform. The acquisition comes just one month after Assembly raised funds from Advent International at >\$1bn.
	10/25/2021	 Bidalgo	 IronSource	ND	ND	<ul style="list-style-type: none"> IronSource will acquire Bidalgo to help app marketers manage paid marketing across channels. It will also help IronSource diversify beyond games, with Bidalgo's social, dating, & eCommerce app customers.
	10/20/2021	 PubGalaxy	 Azerion	ND	ND	<ul style="list-style-type: none"> Azerion has acquired PubGalaxy, a publisher-centric monetization platform, and Inskin, a digital ad agency. In 2021, Azerion raised €200mm, acquired 9 companies and announced its intent to go public via a SPAC deal.
	10/20/2021	 Interactive Offers	 The Grove Inc.	ND	ND	<ul style="list-style-type: none"> CBD consumer goods company Grove will acquire Interactive Offers, programmatic advertising SaaS platform. The acquisition aims to improve product sales while providing an in-house standalone ad service platform.
	10/18/2021	 StitcherAds	 Kargo	\$6	\$64	<ul style="list-style-type: none"> Kargo, a mobile ad marketplace for brands, acquired StitcherAds, a commerce-driven paid social ad platform. The acquisition expands Kargo's omnichannel product suite and ad spend under management to \$550mm.
	10/14/2021	 Tapjoy	 IronSource	\$138	\$400	<ul style="list-style-type: none"> IronSource is acquiring Tapjoy to diversify its ad demand + add scale to its revenue and SDK footprint. Tapjoy is expected to add \$81mm in net revenue for CY 2021 and is profitable.
	10/12/2021	 DSPolitical	 Optimad	ND	ND	<ul style="list-style-type: none"> Optimad acquired DSPolitical, provider of politically-focused data-driven targeting and advertising solutions. The purchase will not alter DSPolitical's focus on support and electing Democratic candidates in the US.
	10/7/2021	 Newor Media	 LTV SaaS Growth Fund	ND	ND	<ul style="list-style-type: none"> LTV SaaS Growth Fund has acquired Newor, a programmatic header bidding platform for content websites. Newor Media's growth trajectory & defensible market position were central to LTV's investment thesis.
	10/6/2021	 MoPub	 AppLovin	\$19	\$1,050	<ul style="list-style-type: none"> AppLovin announced it will acquire Twitter's MoPub business in a \$1.05 billion all-cash transaction. MoPub manages monetization for 45k mobile apps and will enhance AppLovin's publisher monetization tools.

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AdWeek, Bloomberg, BusinessInsider, BusinessWire, Cision, CNBC, CrunchBase, Destination CRM, Digiday, Financial Express, Forbes, GlobalNewsWire, NewMediaWire, PrivateEquityWire, PRNewsWire, TechCrunch, TheDrum, TheVerge, Variety, VentureBeat, VideoWeek, WSJ. | Note: All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

Ad Tech – 2021 Notable Deals (3 / 5)

Highlight denotes LUMA Transactions

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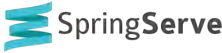












	Announcement Date	Target	Acquirer	Cumulative Capital Raised	Enterprise Value	Commentary
Q4	10/6/2021	Hivency Octoly	SKEEPERS	\$10	ND	<ul style="list-style-type: none"> Skeepers, a SaaS CRM platform, has acquired influencer marketing platforms Octoly and Hivency. The acquisitions represent a strategic shift as Skeepers looks for new ways to strengthen their CRM offering.
	9/30/2021	aki	INMAR intelligence	\$4	ND	<ul style="list-style-type: none"> Inmar has agreed to acquire Aki, a provider of retail-focused personalized advertising and digital circulars. Aki adds the ability to deliver personalization at scale to Inmar Intelligence's existing retail media offerings.
	8/31/2021	mediaocean	CVC TA ASSOCIATES	\$286	ND	<ul style="list-style-type: none"> CVC and TA have partnered to acquire Vista Equity's stake in omnichannel advertising platform Mediaocean. CVC indicated that Mediaocean's acquisitions of 4C Insights & Flashtalking were key to their investment thesis.
	8/24/2021	Vungle	LIFTOFF	ND	ND	<ul style="list-style-type: none"> Liftoff and Vungle, two Blackstone companies, merged, creating a leading independent mobile growth platform across user acquisition, creative, engagement, influencer marketing, monetization, and analytics.
	8/10/2021	publica	IAS Integral Ad Science	ND	\$220	<ul style="list-style-type: none"> Integral Ad Science has acquired Publica, a CTV advertising platform, in a \$220mm transaction. Publica accelerates IAS's CTV strategy to help publishers monetize inventory across CTV devices.
	8/10/2021	JustPremium	gumgum	ND	ND	<ul style="list-style-type: none"> GumGum, a contextual intelligence company, acquired JustPremium, a media and video ad marketplace. The deal will help GumGum double its U.K. presence and expand sales into other international geographies.
Q3	8/4/2021	X-MODE	digital envoy	\$20	ND	<ul style="list-style-type: none"> Digital Envoy, an IP-based customer data company, has acquired X-Mode, a location-data broker. X-Mode will be rebranded as Outlogic and will enhance Fraud Prevention, VPN/IP Proxy, and DRM solutions.
	7/27/2021	ADTHEORENT	MCAP Acquisition Corporation	\$315	\$775	<ul style="list-style-type: none"> AdTheorent completed a SPAC merger with MCAP Acquisition Corporation, shares trade at ~\$6, down from \$10. The company plans to use the funds to pay-down debt and expand its core markets in the U.S. and Canada.
	7/19/2021	vertebrae	Snap Inc.	\$10	ND	<ul style="list-style-type: none"> Snap acquired Vertebrae, a platform that renders 3D versions of product inventory, in a bet on AR shopping. Vertebrae's functionality will allow increased AR capability for shopping features within the Snapchat app.
	7/15/2021	CitrusAd	Publicis WORLDWIDE	\$8	ND	<ul style="list-style-type: none"> Publicis has acquired CitrusAd, an auction-based advertising platform designed for eCommerce retailers. CitrusAd, coupled with Epsilon's CORE ID, will boost Publicis's market share and product offering for CPG firms.
	7/14/2021	captify	SFW CAPITAL PARTNERS	\$14	ND	<ul style="list-style-type: none"> SFW Capital Partners has completed a majority investment in Captify, a search retargeting platform. The investment thesis centers around Captify's "cookie-less" search intelligence in an evolving ID landscape.
	7/12/2021	flashtalking	mediaocean	\$5	\$500	<ul style="list-style-type: none"> Mediaocean acquired Flashtalking, an independent global ad server with over \$100mm in annual revenue. The combined company is positioning itself as a neutral tech platform with over \$200bn in media spend.

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AdWeek, Bloomberg, BusinessInsider, BusinessWire, Cision, CNBC, CrunchBase, Destination CRM, Digiday, Financial Express, Forbes, GlobalNewsWire, NewMediaWire, PrivateEquityWire, PRNewsWire, TechCrunch, TheDrum, TheVerge, Variety, VentureBeat, VideoWeek, WSJ. | Note: All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

Ad Tech – 2021 Notable Deals (4 / 5)

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	Announcement Date	Target	Acquirer	Cumulative Capital Raised	Enterprise Value	Commentary
Q3	7/1/2021	 SpringServe	Magnite	ND	\$31	<ul style="list-style-type: none"> Magnite has acquired SpringServe, a CTV ad server and developer of a customer engagement platform. SpringServe will complement SpotX as it encompasses direct-sold and programmatic CTV inventory.
	6/28/2021	Simplifi	Blackstone	NA	\$1,500	<ul style="list-style-type: none"> Blackstone acquired equity in Simplifi, provider of programmatic advertising and agency management software. Blackstone, along with existing investor GTCR, will be Simplifi's majority shareholders.
	6/24/2021	ART19	amazon	NA	ND	<ul style="list-style-type: none"> Amazon announced its acquisition of podcast hosting and monetization platform Art19. Amazon Music started offering podcasts in September and has since acquired Podcast network Wondery.
	6/24/2021	  Merger	ION Acquisition Corp. 2	\$95	\$1,300	<ul style="list-style-type: none"> Innovid has gone public via merger with ION Acquisition Corp. 2, shares trade at ~\$6.70, down from \$10 The new funds will be used for global growth as well as investing in engineering and product development.
	6/21/2021	 smaato	 Media and Games Invest Group	NA	ND	<ul style="list-style-type: none"> MGI announced its acquisition of Smaato, a mobile-first digital advertising platform. The acquisition will further build out MGI's omnichannel exchange and expand their development team.
	6/15/2021	 JetFuel	 Vungle	NA	ND	<ul style="list-style-type: none"> Vungle has acquired JetFuel, an influencer marketing platform focused on driving mobile app installs. JetFuel brings a network of >15k influencers reaching billions of users across Instagram, Snapchat, and TikTok.
Q2	6/2/2021	 AARKI	skillz	\$4	\$150	<ul style="list-style-type: none"> Skillz has acquired Aarki, a DSP with a strong focus on the mobile gaming advertising ecosystem. With the acquisition, Skillz intends to form the first integrated esports advertising platform.
	6/2/2021	 revcontent	 Star Mountain Capital  Capital Dynamics	ND	ND	<ul style="list-style-type: none"> Revcontent sold a majority stake to a group of investors led by Star Mountain Capital and Capital Dynamics. Revcontent is a developer of a content marketing and native advertising platform.
	5/5/2021	Chartboost	 zynga	\$21	\$250	<ul style="list-style-type: none"> Zynga has acquired Chartboost, a mobile programmatic ad and monetization platform with >700mm MAUs. The deal continues the trend of combining gaming content / 1st-party data with a complete advertising platform
	4/29/2021	PulsePoint	WebMD	\$44	ND	<ul style="list-style-type: none"> WebMD has acquired PulsePoint, a programmatic platform focused on the healthcare industry. PulsePoint will bolster WebMD's expansion into the healthcare Ad Tech space with its programmatic solutions.
	4/15/2021	 perpetua	ASCENTIAL	\$12	\$52	<ul style="list-style-type: none"> Ascential acquired Perpetua, an eCommerce media optimization platform focused on third-party sellers. Ascential may pay as much as \$250mm depending on the earn-out achievements attained by Perpetua.
	3/29/2021	triplelift	 VISTA EQUITY PARTNERS	\$17	\$1,400	<ul style="list-style-type: none"> Vista Equity made a significant bet in the Ad Tech space via its \$1.4bn majority investment in TripleLift. As of January 2021, TripleLift has recorded 5 years of consecutive growth of greater than 70%.

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AdWeek, Bloomberg, BusinessInsider, BusinessWire, Cision, CNBC, CrunchBase, Destination CRM, Digiday, Financial Express, Forbes, GlobalNewsWire, NewMediaWire, PrivateEquityWire, PRNewsWire, TechCrunch, TheDrum, TheVerge, Variety, VentureBeat, VideoWeek, WSJ. | Note: All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

Ad Tech – 2021 Notable Deals (5 / 5)

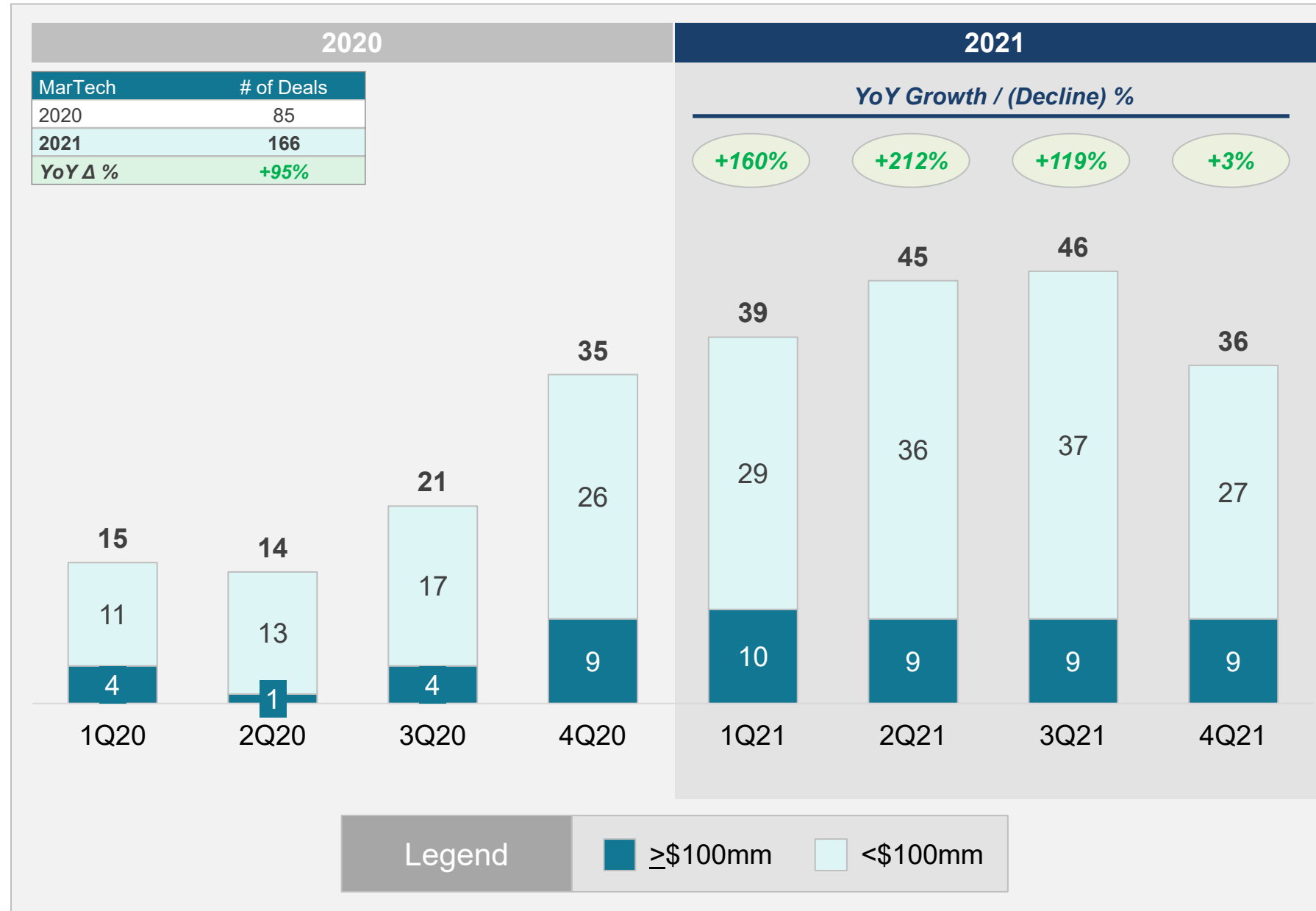
Highlight denotes LUMA Transactions

Ad Tech
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	Announcement Date	Target	Acquirer	Cumulative Capital Raised	Enterprise Value	Commentary
Q1	3/22/2021	 Fyber	 digital turbine®	NA	\$600	<ul style="list-style-type: none"> Digital Turbine has acquired Fyber, a mobile advertising monetization platform. The transaction is Digital Turbine's third announced deal of Q1, and the largest valuation among the three.
	3/21/2021	 ironSource	← Merger → Thoma Bravo Advantage	\$520	\$11,100	<ul style="list-style-type: none"> ironSource, a business platform for the app economy, has merged with a SPAC sponsored by Thoma Bravo. After initially trading up post de-SPAC, shares currently trade at ~\$8, down from \$10 at issuance.
	3/1/2021	 Nielsen Video Ad Tech Assets		NA	ND	<ul style="list-style-type: none"> Roku has acquired Nielsen's Advanced Video Advertising (AVA) business. Announced strategic partnership where Nielsen will integrate measurement capabilities into the Roku platform.
	2/26/2021	 AD COLONY A Subsidiary of Otello Corp.	 digital turbine®	NA	\$400	<ul style="list-style-type: none"> Digital Turbine has acquired AdColony, an in-app marketplace for brands, from parent company Otello. AdColony brings robust video advertising capabilities to combine with Digital Turbine's large device footprint.
	2/17/2021	 TRITON	 iHeart MEDIA INC	ND	\$230	<ul style="list-style-type: none"> iHeartMedia has agreed to acquire Triton Digital, a suite of audio advertising technology, from E.W. Scripps. The addition will further iHeartMedia's advertising technology and data solution in the audio ecosystem.
	2/8/2021	 SPOTX		ND	\$1,170	<ul style="list-style-type: none"> Magnite has acquired to acquire SpotX, a video supply-side platform, from RTL Group. Magnite and SpotX will create the largest independent CTV and video advertising platform for programmatic.
	1/25/2021	 Taboola	← Merger → Ion Acquisition Corp.	\$160	~\$2,600	<ul style="list-style-type: none"> Taboola, a content recommendation engine, went public via its SPAC merger with ION Acquisition Corp. The Company has also secured approximately \$285mm in PIPE financing and will invest \$100mm of it in R&D.
	1/6/2021	 alphonso		\$3	~\$125	<ul style="list-style-type: none"> LG has acquired a majority stake in Alphonso, a CTV advertising technology, data, and measurement company. The investment will further accelerate LG's efforts to build a streaming TV ad business.

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AdWeek, Bloomberg, BusinessInsider, BusinessWire, Cision, CNBC, CrunchBase, Destination CRM, Digiday, Financial Express, Forbes, GlobalNewsWire, NewMediaWire, PrivateEquityWire, PRNewsWire, TechCrunch, TheDrum, TheVerge, Variety, VentureBeat, VideoWeek, WSJ. | Note: All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

Number of Transactions



Source: LUMA, PitchBook, Company announcements.






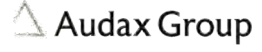


















Observations

- MarTech deal activity rebounded strongly in 2021. Activity was up in all four quarters, though was effectively flat in Q4'21 vs. a relatively strong Q4'20.
- Scaled deal activity rose **+105%**, up from just 18 in 2020. Of these scaled deals, 12 transacted at a purchase price of \$1bn or more.
- Notable MarTech transactions with >\$1bn include: Zendesk's \$4.1bn pending acquisition of Momentive, Cint's \$1.1bn acquisition of Lucid, TransUnion's \$3.1bn acquisition of Neustar, Qualtrics \$1.1bn acquisition of Clarabridge, Thoma Bravo's \$6.4bn acquisition of Medallia, Sinch's \$1.3bn acquisition of Message Media, and Kantar's \$1.5bn acquisition of Numerator.

Looking Ahead

- As the number of MarTech businesses achieving scale and profitability continues to grow, we expect more large-scale transactions (>\$1bn); Private Equity buyers have shown strong appetites at these valuation levels.
- We expect to see increased investment in data / analytics capabilities that arm marketers with superior tools surrounding identity resolution, privacy governance, and measurement/attribution.




















MarTech – 2021 Notable Deals (1 / 8)

Announcement Date	Target	Acquirer	Cumulative Capital Raised	Enterprise Value	Commentary
12/22/2021	 Salesloft.	 VISTA EQUITY PARTNERS	\$245	\$2,300	<ul style="list-style-type: none"> Vista Equity Partners has acquired a majority stake in Salesloft, a sales engagement software. Salesloft will use the funds to expand its reach into EMEA and APAC.
12/22/2021	 dynamic yield	 mastercard.	ND	ND	<ul style="list-style-type: none"> Mastercard has agreed to acquire Dynamic Yield, an AI-powered personalization platform, from McDonald's. Mastercard hopes to leverage its platform to help its customers and partners deliver personalized experiences.
12/20/2021	 INTEGRATE	 Audax Group	\$78	ND	<ul style="list-style-type: none"> Audax Private Equity has acquired a majority stake in Integrate, a B2B precision demand marketing platform. Audax noted Integrate's 80% ARR growth this year and overall market opportunity as key points of their thesis.
12/16/2021	 poshly	 SUZY.	\$5	ND	<ul style="list-style-type: none"> Suzy acquired Poshly, a beauty-focused research platform, in a move to expand their presence in the category. Former Poshly CEO Doreen Bloch joined Suzy as its VP of Audience Management as part of the acquisition.
12/15/2021	 INSIGHTSQUARED	 mediafly	\$50	ND	<ul style="list-style-type: none"> Sales enablement platform Mediafly has acquired Insight Squared, a revenue intelligence and analytics provider. Insight Squared will be integrated with MediaFly's Revenue360 product offering, boosting its capabilities.
12/13/2021	 winback	 wishpond	ND	\$1	<ul style="list-style-type: none"> Wishpond, a digital marketing solutions provider, acquired the assets of Winback, an SMS marketing platform. This is Wishpond's 4th acquisition & will add an SMS marketing product and cart abandonment functionality.
12/8/2021	 ContentCal	 Adobe	\$14	ND	<ul style="list-style-type: none"> Adobe has acquired ContentCal, a B2B SaaS social media content marketing platform. ContentCal's platform enables social media publishing & reporting through a "drag-and-drop" user experience.
12/8/2021	 NetLine CORPORATION	 informa	ND	ND	<ul style="list-style-type: none"> Informa, a publishing & events company has acquired Netline, a B2B multichannel content marketing platform. Netline will be added to Informa's Tech Division, to broaden their audience insight capabilities.
12/6/2021	 evam	 CEECAT CAPITAL	ND	ND	<ul style="list-style-type: none"> Ceecat has acquired Evam, a streaming analytics platform specialized in customer journey orchestration. Ceecat acquired a majority stake in Evam to support the company's expansion in international markets.
12/1/2021	 Welcome	 Optimizely	\$109	ND	<ul style="list-style-type: none"> Optimizely, a DXP will acquire Welcome Software, an all-in-one marketing orchestration platform. The acquisition is intended to create a single platform for campaign creation, delivery, and optimization.
11/29/2021	 tipser	 Bolt	\$29	ND	<ul style="list-style-type: none"> Bolt, a checkout technology platform for digital content, has acquired Tipser, a direct checkout developer tool. The acquisition builds on Bolt's Remote Checkout feature to allow for a more seamless customer journey.
11/19/2021	 ibexa	 QNTM	\$10	ND	<ul style="list-style-type: none"> QNTM Group, one of Scandinavia's largest PE firms, has made a majority investment in Ibexa, a B2B DXP. Ibexa's stable growth, and QNTM's relevant industry experience were central to the investment thesis.

Q4
























Source: LUMA, PitchBook, Company Announcements, AdExchanger, AIThory, Alphamaven, Auto Service World, BizJournals, BusinessOfApps, BusinessWire, Cision, CityBiz, CNBC, CXToday, DemandBase, destinationCRM, DMSInsights, GameIndustryBiz, GeekWire, GlobalNewsWire, MarketingDive, MarTech Series, Music Business Worldwide, NewsnReleases, NewsWire, PRNewswire, Reuters, TechCrunch, VentureBeat, Wichita Business Journal, WSJ. | **Note:** All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

MarTech – 2021 Notable Deals (2 / 8)

	Announcement Date	Target	Acquirer	Cumulative Capital Raised	Enterprise Value	Commentary
Q4	11/17/2021	 LeadDyno	 SURESWIFT CAPITAL	ND	ND	<ul style="list-style-type: none"> SureSwift Capital has completed a buyout of LeadDyno, an affiliate marketing program management software. LeadDyno marks the 13th SaaS company added to SureSwift's growing portfolio.
	11/16/2021	SoundHound Inc.	Archimedes Tech SPAC Partners	\$425	\$2,100	<ul style="list-style-type: none"> SoundHound, a sound & music identification platform, is going public via SPAC at a \$2.1bn valuation. Archimedes will provide proceeds of \$244mm to expand SoundHound's platform & enter new markets globally.
	11/15/2021	 180	 cart.com	ND	ND	<ul style="list-style-type: none"> Cart.com, an end-to-end "commerce-as-a-service" provider, acquired 180Commerce, a sales growth platform. The acquisition hopes to leverage cross-selling opportunities between the two customer bases.
	11/15/2021	narrative  science	 salesforce	\$43	ND	<ul style="list-style-type: none"> Salesforce has acquired Narrative Science, a data storytelling application centered around visualizations. Narrative Science will be integrated within Tableau, which Salesforce acquired in 2019.
	11/11/2021	 lift361  Fluency	Acadia	ND	ND	<ul style="list-style-type: none"> Acadia acquired Lift361 (database management) and ShopFluency (audience segmentation SaaS). The data, analytics, and 1st party data segmentation capabilities will be added to Acadia's mid-market solutions.
	11/10/2021	 embee Mobile Insight Solutions	 similarweb	ND	ND	<ul style="list-style-type: none"> SimilarWeb, a digital intelligence provider, has acquired Embee Mobile, a mobile intelligence provider. Through the deal, SimilarWeb is attempting to strengthen its digital measurement and mobile app offerings.
	11/9/2021	 springbig	Tuatara Capital Acquisition	\$34	\$500	<ul style="list-style-type: none"> SpringBig, a full-stack cannabis marketing software provider, is going public via a SPAC valued at \$500mm. SpringBig has grown at a >100% CAGR since 2019, and will gain \$200mm in proceeds from the transaction.
	11/8/2021	 eyeota	 dun & bradstreet	\$21	\$165	<ul style="list-style-type: none"> D&B, a provider of business decisioning data analytics, has acquired Eyeota, a marketing data solution provider. D&B intends to bolster its "DUNS" platform by leveraging Eyeota's audience targeting capabilities.
	11/8/2021	 PathFactory	VERTU CAPITAL	\$19	ND	<ul style="list-style-type: none"> Vertu Capital has acquired PathFactory, the developer of a B2B content & insight activation platform. This is Vertu's 3rd acquisition of the year & aligns with their B2B digital marketing & content intelligence portfolio.
	11/4/2021	 NetWise	 dun & bradstreet	ND	ND	<ul style="list-style-type: none"> D&B has acquired Netwise, a database software for sales, marketing, advertising, & general data science. Netwise will be merged with Eyeota under the D&B umbrella to bolster D&B's "DUNS" platform.
	11/2/2021	 AGARA	 coinbase	\$13	\$40	<ul style="list-style-type: none"> Coinbase, the cryptocurrency exchange, has acquired Agara, an AI-powered customer support technology. The acquisition enhances Coinbase's CX capabilities and reaffirms their commitment to bringing in 24/7 support.
	10/28/2021	 momentive	zendesk	ND	\$4,130	<ul style="list-style-type: none"> Zendesk will acquire Momentive including its SurveyMonkey platform, in a transaction valued at \$4.1bn. JANA Partners, an activist shareholder of Zendesk, seeks to block the transaction.

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AITharity, Alphamaven, Auto Service World, BizJournals, BusinessOfApps, BusinessWire, Cision, CityBiz, CNBC, CXToday, DemandBase, destinationCRM, DMSInsights, GameIndustryBiz, GeekWire, GlobalNewsWire, MarketingDive, MarTech Series, Music Business Worldwide, NewsnReleases, NewsWire, PRNewswire, Reuters, TechCrunch, VentureBeat, Wichita Business Journal, WSJ. | **Note:** All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

MarTech – 2021 Notable Deals (3 / 8)

























	Announcement Date	Target	Acquirer	Cumulative Capital Raised	Enterprise Value	Commentary
Q4	10/27/2021	LUCID 	Cint	\$64	\$1,070	<ul style="list-style-type: none"> ■ Cint, a digital insights software company, will acquire Lucid, a programmatic survey marketplace. ■ Cint, a Swedish company will use the acquisition to expand its foothold on the U.S. digital survey market.
	10/27/2021	VoiceBase  tenfold 	LIVEPERSON 	ND	ND	<ul style="list-style-type: none"> ■ LivePerson has acquired VoiceBase's (conversational analytics) & Tenfold (communications integration). ■ LivePerson seeks to combine the technologies to create a unified, AI-enabled customer experience system.
	10/21/2021	CHEETAH DIGITAL  	CM Group 	ND	>\$500	<ul style="list-style-type: none"> ■ CM Group a portfolio of companies focused on multichannel digital marketing will merge with Cheetah Digital. ■ The combined CM Group will integrate Cheetah Digital's CDM & cross-channel communications platform.
	10/19/2021	Caper 	instacart 	\$14	\$350	<ul style="list-style-type: none"> ■ Instacart, an online grocery delivery platform, has acquired Caper, an AI-powered shopping cart and checkout. ■ The acquisition will expand Instacart's retailer enablement platform to unify the in-store and online experience.
	10/19/2021	koopid 	dialpad 	\$5	ND	<ul style="list-style-type: none"> ■ Cloud communications platform Dialpad acquired Koopid, provider of AI-powered omnichannel CX software. ■ The acquisition will integrate into Dialpad's Voice Intelligence offering to bolster the products' capabilities.
	10/13/2021	Qubit.	coveo 	\$76	ND	<ul style="list-style-type: none"> ■ Coveo has acquired Qubit, an AI-powered product recommendation software for eCommerce. ■ Coveo went public in Q4, and this acquisition hopes to expand their presence in the EU and U.K.
	10/13/2021	FreshAddress  	towerd@ta	ND	ND	<ul style="list-style-type: none"> ■ TowerData and FreshAddress, two email marketing technology companies, will merge. ■ The merger hopes to better position the combined entities in the email verification and hygiene services space.
	10/11/2021	Pointillist  exceed 	GENESYS 	ND	ND	<ul style="list-style-type: none"> ■ Genesys, a customer experience firm will acquire Pointillist & Exceed.ai to enhance their CXM offering. ■ Pointillist is an AI-driven customer journey orchestrator & Exceed.ai is a cloud-based conversational AI platform.
	10/6/2021	SLINTEL	6sense 	\$26	ND	<ul style="list-style-type: none"> ■ 6Sense, a predictive intelligence platform, has acquired Slintel, a data insights provider. ■ Through the deal, 6Sense seeks to provide a more comprehensive B2B buyer intelligence and insights platform.
	10/5/2021	NEURA 	otonomo	\$32	\$50	<ul style="list-style-type: none"> ■ Otonomo, a car & vehicle data company, has acquired Neura, an AI-powered mobility intelligence platform. ■ Neura will expedite the development of Otonomo's recently expanded mobility intelligence offering.
10/5/2021	mira 	REVEAL MOBILE 	ND	ND	<ul style="list-style-type: none"> ■ Reveal Mobile, a geofencing marketing company, acquired Mira, an OOH location intelligence provider. ■ After the acquisition, Reveal announced they signed Lyft as the first new customer of the expanded company. 	
Q3	9/30/2021	PATHWIRE 	sinch 	\$43	\$1,900	<ul style="list-style-type: none"> ■ Sinch has acquired Pathwire, the cloud-based email provider behind Mailgun, Mailjet, and Email on Acid. ■ The \$1.9bn mixed-consideration transaction further bolsters Sinch's offerings to better compete with Twilio.

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AIThory, Alphamaven, Auto Service World, BizJournals, BusinessOfApps, BusinessWire, Cision, CityBiz, CNBC, CXToday, DemandBase, destinationCRM, DMSInsights, GameIndustryBiz, GeekWire, GlobalNewsWire, MarketingDive, MarTech Series, Music Business Worldwide, NewsnReleases, NewsWire, PRNewswire, Reuters, TechCrunch, VentureBeat, Wichita Business Journal, WSJ. | **Note:** All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

MarTech – 2021 Notable Deals (4 / 8)
























Highlight denotes LUMA Transactions

Ad Tech
MarTech
Digital Content

Announcement Date	Target	Acquirer	Cumulative Capital Raised	Enterprise Value	Commentary
9/16/2021	 KickFire®	 IDG	NA	\$1,300	<ul style="list-style-type: none"> IDG acquired KickFire, a provider of first-party intent data and intelligence data for other MarTech companies. Kickfire bolsters IDG's audience identity solutions with platform and regulatory changes on the horizon.
9/13/2021	 neustar	 TransUnion ^{tu}	NA	\$3,100	<ul style="list-style-type: none"> TransUnion has acquired Neustar, a premier identity resolution company with leading solutions in marketing. Neustar will help the consumer-credit reporting giant diversify beyond its core business.
9/13/2021	 mailchimp	 intuit	NA	\$12,000	<ul style="list-style-type: none"> Intuit has acquired Mailchimp, an SMB email marketing and automation platform, for \$12.0bn. Mailchimp will enable Intuit to further target its predominantly SMB client base with marketing solutions.
9/13/2021	 OneSpace	 ASCENTIAL	\$27	ND	<ul style="list-style-type: none"> Ascential has acquired OneSpace, a content optimization business focused on CPG eCommerce brands. Ascential said that it will cross-sell OneSpace's products to its current customer-base.
9/10/2021	 RingLead	 zoominfo	NA	ND	<ul style="list-style-type: none"> ZoomInfo has acquired RingLead, a provider of data orchestration and revenue operations automation. The acquisition tightens the connection between Zoominfo's intelligence and engagement layers.
9/9/2021	 WIDEN®	 ACQUIA	NA	ND	<ul style="list-style-type: none"> Acquia has acquired Widen, a cloud-native digital asset management vendor catering to enterprise customers. Widen will further Acquia's digital experience platform to better compete with the likes of Adobe.
9/2/2021	 Reflektion	 SITECORE®	\$55	ND	<ul style="list-style-type: none"> Sitecore has acquired Reflektion, an AI-powered search platform for improving shop-to-purchase conversion. Reflektion will be leveraged across all aspects of Sitecore's digital experience platform.
9/1/2021	 DRIFT	 VISTA EQUITY PARTNERS	\$137	ND	<ul style="list-style-type: none"> Vista Equity Partners made a significant growth investment in Drift, a B2B conversational commerce company. Drift, while not yet profitable, has 50,000 customers and achieved 70% ARR growth in 2020.
9/1/2021	 usercentrics	 Cookiebot	NA	ND	<ul style="list-style-type: none"> Usercentrics and Cookiebot have merged and are combining their consent management solutions. Growth equity firm Full In Partners owns a stake in both companies and orchestrated the transaction.
8/11/2021	 gomoxie	 NICE	\$141	ND	<ul style="list-style-type: none"> NICE has acquired GoMoxie, a customer engagement platform focused on digital customer experience. GoMoxie will complement the existing digital CX offerings, including CXone Expert and CXoneSmartReach.
8/10/2021	 Conversocial	 VERINT	\$24	\$50	<ul style="list-style-type: none"> Verint has acquired Conversocial, a conversational AI platform, in a \$50mm all-cash transaction. The deal adds AI conversation and messaging capabilities to Verint, which supports cross-channel engagement.
8/3/2021	 Heyday	 Hootsuite™	\$7	\$48	<ul style="list-style-type: none"> Hootsuite has acquired Heyday, an AI chatbot company that offers customer service automation support. Heyday will enable Hootsuite's clients to leverage conversational AI and create better customer experiences.

























Source: LUMA, PitchBook, Company Announcements, AdExchanger, AIThory, Alphamaven, Auto Service World, BizJournals, BusinessOfApps, BusinessWire, Cision, CityBiz, CNBC, CXToday, DemandBase, destinationCRM, DMSInsights, GameIndustryBiz, GeekWire, GlobalNewsWire, MarketingDive, MarTech Series, Music Business Worldwide, NewsnReleases, NewsWire, PRNewswire, Reuters, TechCrunch, VentureBeat, Wichita Business Journal, WSJ | **Note:** All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

MarTech – 2021 Notable Deals (5 / 8)

	Announcement Date	Target	Acquirer	Cumulative Capital Raised	Enterprise Value	Commentary
Q3	8/2/2021	 XANT	 Aurea	\$299	ND	<ul style="list-style-type: none"> Aurea has acquired XANT (f/k/a InsideSales.com), an AI-powered guided sales engagement software. XANT will be integrated into Aurea's commerce solutions and again be called InsideSales.com.
	7/29/2021	 CLARABRIDGE	 qualtrics	\$204	\$1,125	<ul style="list-style-type: none"> Qualtrics has acquired Clarabridge, an AI-powered conversation analytics platform, in a \$1.1bn all-stock deal. The deal is being positioned as the combination of the leaders in structured and unstructured data for CX.
	7/28/2021	 Vestcom	 AVERY DENNISON	\$255	\$1,450	<ul style="list-style-type: none"> Avery Dennison acquired Vestcom, provider of tech-driven shelf-edge media-solutions for retailers and CPGs. Vestcom will add channel access and data-management capabilities to Avery Dennison's offerings.
	7/27/2021	A P P R L	 Klarna.	\$9	ND	<ul style="list-style-type: none"> Klarna has acquired APPRL, an influencer marketing software enabling creators and retailers to collaborate. The deal is indicative of a trend towards social commerce as the combination of retail & influencer marketing.
	7/26/2021	 Medallia	 THOMABRAVO	\$652	\$6,400	<ul style="list-style-type: none"> Thoma Bravo acquired Medallia, a customer and employee experience SaaS platform, in a \$6.4bn deal. The \$34.00 deal share price represents a ~20% premium to Medallia's unaffected closing stock price.
	7/23/2021	 connexity	 Taboola	\$152	\$800	<ul style="list-style-type: none"> Taboola acquired Connexity, a retail and eCommerce focused media platform, in a mixed consideration deal. This acquisition comes shortly after Taboola's SPAC merger and is expected to boost its profitability.
	7/20/2021	 usermind	 qualtrics	\$60	ND	<ul style="list-style-type: none"> Qualtrics has acquired Usermind, a provider of customer journey orchestration and analytics. Usermind will augment Qualtrics' database of customer and employee profiles with contextual data.
	7/14/2021	 kitewheel <small>orchestrate great experiences</small>	 CSG INTERNATIONAL	NA	ND	<ul style="list-style-type: none"> CSG Systems has acquired Kitewheel, a journey orchestration and analytics SaaS technology company. The acquisition will expand CSG's customer engagement portfolio and unlock new industry verticals.
	7/13/2021	 CHORUS	 zoominfo	\$100	\$575	<ul style="list-style-type: none"> ZoomInfo has acquired Chorus.ai, a conversational sales intelligence tool, in a \$575mm deal. The deal represents a combination of ZoomInfo's top-of-funnel strengths with Chorus.ai's mid-funnel insights.
	7/7/2021	 attendify	 hopin	NA	ND	<ul style="list-style-type: none"> Hopin acquired Attendify, an event marketing platform, to bolster the company's event marketing offerings. The two companies will combine technologies to cater to the end-to-end needs of event professionals.
Q2	6/22/2021	 SharpSpring	 Constant Contact	ND	\$240	<ul style="list-style-type: none"> Constant Contact has acquired SharpSpring, a cloud-based revenue growth and marketing automation platform. SharpSpring will help Constant Contact serve SMB clients with leads, conversion, and return on investment.
	6/9/2021	 Message Media	 sinch	NA	\$1,300	<ul style="list-style-type: none"> Sinch acquired MessageMedia, a SMS / messaging customer relationship manager. Sinch's entrance into SMS comes as competitor Twilio recently announced its acquisition of ZipWhip.

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AIThory, Alphamaven, Auto Service World, BizJournals, BusinessOfApps, BusinessWire, Cision, CityBiz, CNBC, CXToday, DemandBase, destinationCRM, DMSInsights, GameIndustryBiz, GeekWire, GlobalNewsWire, MarketingDive, MarTech Series, Music Business Worldwide, NewsnReleases, NewsWire, PRNewswire, Reuters, TechCrunch, VentureBeat, Wichita Business Journal, WSJ. | **Note:** All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

MarTech – 2021 Notable Deals (6 / 8)

























Announcement Date	Target	Acquirer	Cumulative Capital Raised	Enterprise Value	Commentary
6/9/2021			\$7	ND	<ul style="list-style-type: none"> Attentive has acquired Tone, a B2C text messaging platform that enhances text interactions with AI. Tone will help Attentive bolster revenues with an additional 1,000 customers and incremental B2C capabilities.
6/4/2021			\$29	ND	<ul style="list-style-type: none"> iContact has acquired Moz, a company specializing in SEO for brand growth and recognition. Moz's business will enable iContact to better service and acquire new SMB customers.
6/4/2021			\$8	ND	<ul style="list-style-type: none"> Privy, an email and text marketing tool for SMBs, has been acquired by Attentive. Attentive plans to keep Privy as a standalone division and use the acquisition to increase exposure to SMBs.
5/28/2021	 <small>Marketing Research & Consultancy</small>		NA	\$250	<ul style="list-style-type: none"> Top of Mind, a provider of CRM solutions for the mortgage industry, has been sold to Black Knight. Top of Mind will add to Black Knight's loan origination system and product, pricing, and eligibility engine.
5/24/2021			\$8	ND	<ul style="list-style-type: none"> Sensor Tower has acquired Pathmatics, a marketing intelligence company analyzing ad performance. The acquisition will allow the companies to offer an expanded set of digital and mobile advertising insights.
5/24/2021			\$67	\$100	<ul style="list-style-type: none"> Invoca has acquired DialogTech, a startup that builds tools to analyze inbound phone calls and other contacts. DialogTech will help Invoca expand its conversational intelligence tools.
5/19/2021			\$7	ND	<ul style="list-style-type: none"> Vungle acquired TreSensa, a mobile creative tech company with a customizable Game Engine for playable ads. TreSensa further accelerates Vungle's mission of competing across the complete app growth cycle.
5/17/2021			\$91	\$850	<ul style="list-style-type: none"> Twilio acquired Zipwhip, a toll-free marketing platform with customizable APIs and a suite of integrations. Zipwhip will accelerate Twilio's text messaging business as Twilio predicts it will overtake voice channels.
4/28/2021			\$272	~\$600	<ul style="list-style-type: none"> SparkPost agreed to be acquired by MessageBird, an omnichannel cloud communications platform. SparkPost enables MessageBird, predominantly in Europe and Asia, to accelerate expansion in the US.
4/19/2021			\$86	~\$1,500 <i>(rumored)</i>	<ul style="list-style-type: none"> Kantar has agreed to acquire Numerator, a tech-driven consumer and market intelligence company. With the acquisition of rival Numerator, Kantar is looking to deepen its data pool at the global level.
4/14/2021			\$3	ND	<ul style="list-style-type: none"> Triller has acquired Amplify.AI, an A.I.-based customer engagement platform. Amplify.AI's CEO is set to become the CEO of Triller as the latter attempts to expand into live events.
4/13/2021			NA	\$350	<ul style="list-style-type: none"> Cardlytics has acquired Bridg, a CDP that provides marketers with SKU-level insights. Bridg will play a key role in the expansion of Cardlytics' advertising platform into a holistic solution for marketers.

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AIThory, Alphamaven, Auto Service World, BizJournals, BusinessOfApps, BusinessWire, Cision, CityBiz, CNBC, CXToday, DemandBase, destinationCRM, DMSInsights, GameIndustryBiz, GeekWire, GlobalNewsWire, MarketingDive, MarTech Series, Music Business Worldwide, NewsnReleases, NewsWire, PRNewswire, Reuters, TechCrunch, VentureBeat, Wichita Business Journal, WSJ. | **Note:** All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

MarTech – 2021 Notable Deals (7 / 8)

Highlight denotes LUMA Transactions

Ad Tech
MarTech
Digital Content







	Announcement Date	Target	Acquirer	Cumulative Capital Raised	Enterprise Value	Commentary
Q2	4/8/2021			\$75	~\$500	<ul style="list-style-type: none"> PAR has acquired Punchh, an engagement platform for restaurants, groceries, retailers, & convenience stores. Punchh adds guest-engagement capabilities to PAR's platform of POS, back office, and payment services.
	4/8/2021			\$19	ND	<ul style="list-style-type: none"> Quiq announced its acquisition of Snaps, which specializes in eCommerce Conversational AI. The combination will form a platform with advanced AI and asynchronous messaging capabilities.
Q1	3/26/2021			NA	ND	<ul style="list-style-type: none"> Bazaarvoice, a provider of eCommerce software, received a majority investment from Thomas H. Lee Partners. Terms of the deal were not disclosed, but Marlin Equity Partners will remain a material shareholder.
	3/22/2021			\$51	ND	<ul style="list-style-type: none"> Optimizely, announced it has acquired Zaius, a customer data platform (CDP). With Zaius as part of Optimizely, the platform will add the context of the customer to digital decisions.
	3/5/2021			\$54	\$160	<ul style="list-style-type: none"> Medallia has acquired Decibel, a provider of digital experience analytics software. This acquisition will enable Medallia to include always-on, unsolicited digital feedback in its platform.
	3/4/2021			\$334	\$6,500	<ul style="list-style-type: none"> Okta has acquired its cloud identity management rival Auth0 for a reported \$6.5 billion. With Auth0, Okta will enable developers to embed secure identity management across multiple applications.
	3/3/2021			\$14	~\$54	<ul style="list-style-type: none"> Upland Software announced that it has acquired BlueVenn, a cloud-based customer data platform. With BlueVenn, Upland customers can now securely unify consumer data on its platform.
	3/2/2021			\$1	ND	<ul style="list-style-type: none"> Vungle acquired GameRefinery, a mobile game analytics firm that provides retention and monetization insights. GameRefinery's SaaS offering will augment Vungle's contextual targeting and creative intelligence capabilities.
	2/26/2021			\$67	\$450	<ul style="list-style-type: none"> Cision has acquired Brandwatch, a provider of digital consumer intelligence and social media listening. Together they will provide brands consumer and media intelligence to devise effective customer engagement.
	2/23/2021			\$1	\$145	<ul style="list-style-type: none"> ironSource made its second acquisition of the year, buying Luna Labs, a creative management platform. Luna brings playable and video ad creation tools to automate and optimize interactive ad production.
	2/20/2021			ND	\$215	<ul style="list-style-type: none"> Kaleyra has acquired mGage, a global mobile messaging provider, from Vival. The combination of the two enterprise cloud communications companies will create a stronger CPaaS platform.
	2/8/2021			\$5	~\$68	<ul style="list-style-type: none"> LiveRamp completed the acquisition of DataFleets, a cloud data platform enables the unification of siloed data. DataFleets will be integrated with LiveRamp's existing enterprise data connectivity services.

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AITharity, Alphamaven, Auto Service World, BizJournals, BusinessOfApps, BusinessWire, Cision, CityBiz, CNBC, CXToday, DemandBase, destinationCRM, DMSInsights, GameIndustryBiz, GeekWire, GlobalNewsWire, MarketingDive, MarTech Series, Music Business Worldwide, NewsnReleases, NewsWire, PRNewswire, Reuters, TechCrunch, VentureBeat, Wichita Business Journal, WSJ. | **Note:** All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

MarTech – 2021 Notable Deals (8 / 8)

Highlight denotes LUMA Transactions

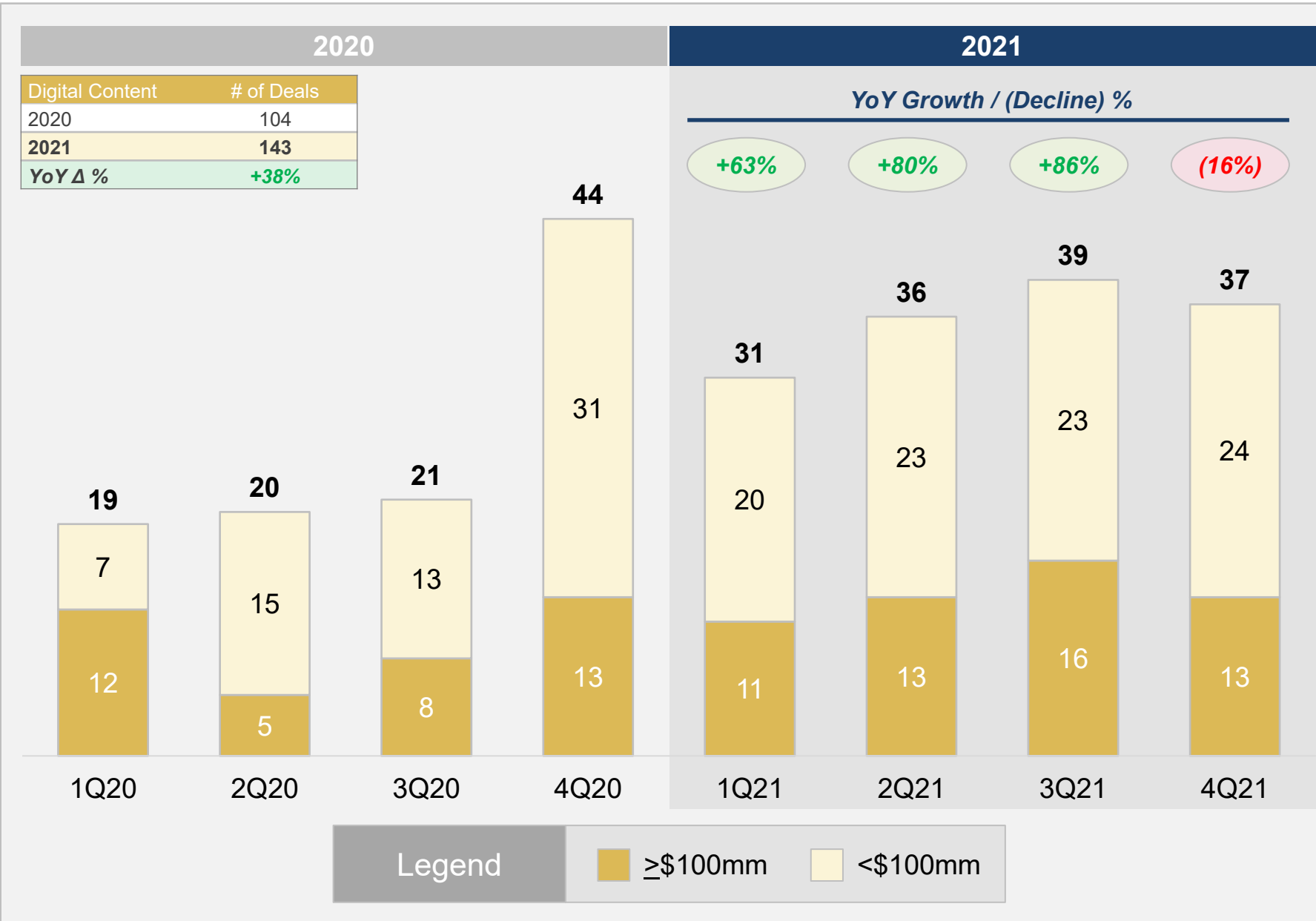
Ad Tech
MarTech
Digital Content

	Announcement Date	Target	Acquirer	Cumulative Capital Raised	Enterprise Value	Commentary
Q1	2/8/2021	 PARSE.LY		\$14	ND	<ul style="list-style-type: none"> Automatic announced that it has acquired Parse.ly, a content analytics solution for brands and publishers. Parse.ly is now part of WPVIP, the organization within Automatic offering enterprise CMS services.
	1/26/2021	 adjust		\$284	\$990	<ul style="list-style-type: none"> AppLovin has acquired Adjust, a global provider of mobile app measurement and marketing solutions. Adjust helps to bolster AppLovin's suite of mobile app tools, complementing previous deals for MAX and SafeDK.
	1/26/2021	 EXPONEA		\$58	ND	<ul style="list-style-type: none"> Digital experience company Bloomreach announced the acquisition of customer data platform (CDP) Exponea. Bloomreach also announced \$150mm in new funding concurrent with the acquisition.

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AIThORITY, Alphamaven, Auto Service World, BizJournals, BusinessOfApps, BusinessWire, Cision, CityBiz, CNBC, CXToday, DemandBase, destinationCRM, DMSInsights, GameIndustryBiz, GeekWire, GlobalNewsWire, MarketingDive, MarTech Series, Music Business Worldwide, NewsReleases, NewsWire, PRNewswire, Reuters, TechCrunch, VentureBeat, Wichita Business Journal, WSJ. | **Note:** All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

Digital Content M&A Activity

Number of Transactions



Source: LUMA, PitchBook, Company announcements.

























Observations

- Of the three categories covered by LUMA, Digital Content M&A activity grew by the smallest factor (+38%), in part because it was the most resilient during the doldrums of the pandemic.
- Game industry consolidation continued, with several \$1bn+ deals including EA's acquisitions of Glu (\$2.1bn) & Playdemic (\$1.4bn), NetMarble's \$2.2bn acquisition of SpinX games, Scopely's \$1bn deal for GSN Games, and Embracer Group's purchases of Asmodee (\$3.1bn) & Gearbox (\$1.4bn).
- The tailwinds of the legalization of gambling also influenced M&A activity with notable deals such as DraftKing's \$1.6bn acquisition of Golden Nugget and Penn National's \$2.0bn acquisition of the Score.

Looking Ahead

- We foresee a continuation of elevated deal activity + deals for Web3 + AR/VR tech, as the concept of the "metaverse" has entered the public consciousness.
- We also expect iGaming / sports betting to remain an active theme, as the wave of gambling legalization has unlocked a rapidly-expanding TAM for which legacy casinos, traditional media companies, and fantasy sports companies are vying.

























Digital Content – 2021 Notable Deals (1 / 7)

Announcement Date	Target	Acquirer	Cumulative Capital Raised	Enterprise Value	Commentary
12/22/2022	 ← Merger →		\$33	~\$5,000	<ul style="list-style-type: none"> Triller, a social video platform, is set to go public via a reverse merger with SeaChange, a CTV software provider. Triller is commonly viewed as a rival to TikTok, with 65mm active monthly users.
12/21/2021			ND	\$125	<ul style="list-style-type: none"> Sweden's Embracer Group has acquired Perfect World Entertainment, a developer of online multiplayer games. The acquisition brings on ~240 employees and will further expand Embracer's North American presence.
12/17/2021			ND	ND	<ul style="list-style-type: none"> Tencent has acquired Turtle Rock Studios, a game developer best known for <i>Back 4 Blood</i> and <i>Left 4 Dead</i>. Turtle Rock will retain independent operations and its existing team will continue to run all studio operations.
12/17/2021			\$44	ND	<ul style="list-style-type: none"> Monumental, an indie game studio, has acquired Crowfall, a PVP-focused "Throne War" MMORPG. The transaction comes on the heels of rumors that Crowfall was on the brink of financial failure.
12/16/2021			\$1	ND	<ul style="list-style-type: none"> Spotify, the music streaming service provider, has acquired Whooshkaa, a podcast content-management platform. Following several other podcast acquisitions, this will give Spotify creators "broadcast-to-podcast" capability.
12/15/2021			ND	\$3,110	<ul style="list-style-type: none"> Embracer Group will acquire Asmodee, a publisher of physical games, digital card games, and board games. Embracer plans to cross-fertilise Asmodee's IP across PC, console, VR, mobile, board and trading card games
12/13/2021			ND	ND	<ul style="list-style-type: none"> Vox, an online media publishing agency is acquiring Group Nine Media, a digital media holding company. The combined company will have 2,000 employees & allows Vox to expand into new topic coverage areas.
12/13/2021			\$6	\$65	<ul style="list-style-type: none"> Vivid Seats, a digital ticket marketplace, has acquired Betcha, a real-money social sports app with gamification. The acquisition will allow Vivid to extend its marketplace technology into the online fantasy sports gaming sector.
12/13/2021			\$9	ND	<ul style="list-style-type: none"> Nike has acquired RTFKT Studios, a metaverse fashion house best known for its line of high-end digital clothing. This will support Nike's goal to serve athletes & creators at the intersection of sport, creativity, gaming, & culture.
12/10/2021			ND	ND	<ul style="list-style-type: none"> GrowthCurve Capital has acquired a majority stake in Mistplay, a mobile play-to-earn, & game discovery platform. GrowthCurve's investment will enable Mistplay to accelerate their AI strategy, and support global growth.
12/10/2021			\$2,240	\$4,800	<ul style="list-style-type: none"> Getty images, a visual content creator & marketplace will go public via CC Neuberger II, a SPAC partnership. The new funds will be used to pay down debt, support global growth and transition to a recurring revenue model.
12/10/2021			ND	ND	<ul style="list-style-type: none"> Sony has acquired Valkyrie, best known for providing content & co-development services to acclaimed studios. Valkyrie Entertainment will join PlayStation Studios as the 17th studio and will aid in developing key franchises.

Q4



















Source: LUMA, PitchBook, Company Announcements, Bloomberg, BusinessWire, Cision, CNBC, DigiDay, EINPresswire, eSportsObserver, ESportsInsider, Forbes, Gambling Insider, Gamesbras, GamesIndustry, GeekWire, IGN, LA Times, MarketWatch, MSN, NewsReleases, Nikkei, NPR, PocketGamer, Polygon, PRNewswire, Reuters, TechCrunch, TheHill, TheVerge, Variety, VentureBeat, VRScout, WSJ, Yahoo | Note: All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

Digital Content – 2021 Notable Deals (2 / 7)

Announcement Date	Target	Acquirer	Cumulative Capital Raised	Enterprise Value	Commentary
12/2/2021			ND	ND	<ul style="list-style-type: none"> Atlas, the developer of a sports betting platform has acquired Maximum Fantasy, a fantasy football platform. The acquisition will allow Atlas to provide a more comprehensive ecosystem that cuts out 3rd parties.
12/1/2021			\$9	ND	<ul style="list-style-type: none"> Niantic, the developer of <i>Pokémon Go</i> has acquired Lowkey, a social gameplay-video editing / sharing platform. This acquisition is part of Niantic's AR / Metaverse strategy and comes shortly after their \$300mm raise at \$9B.
12/1/2021			ND	ND	<ul style="list-style-type: none"> Abry Partners has acquired Best Lawyers, a digital publisher of peer review magazines meant for legal referrals. Best Lawyers's defensible market position was a central component to Abry's investment thesis.
11/23/2021			ND	\$31	<ul style="list-style-type: none"> tinyBuild has acquired fellow indie publisher, Versus Evil, as well as its QA studio Red Cerberus. The acquisition will double tinyBuild's headcount and expand their portfolio to 32 titles across genres.
11/23/2021			\$19	ND	<ul style="list-style-type: none"> Epic Games, the developer of Fortnite, has acquired Harmonix, a studio specialized in music-oriented games. The acquisition will expand Epic's platform, allowing them to create more immersive metaverse-related content.
11/22/2021			\$4	ND	<ul style="list-style-type: none"> RTE, a gaming-tech investment fund has acquired VY, an esports services platform. VY will be integrated into Galaxy Racer, an RTE-backed esports gaming & lifestyle company that runs 11 teams.
11/16/2021			\$13	ND	<ul style="list-style-type: none"> Medium, an online publishing platform has acquired a16z-backed Knowable, a podcast-based lecture platform. The acquisition will allow publishers already on Medium to augment their content with Knowable's capabilities.
11/15/2021			ND	ND	<ul style="list-style-type: none"> Twitter will acquire Threader, an app that lets users compile Twitter threads to share over the 280 character-limit. The functionality brought in from Threader will be added to Twitter Blue, the website's premium subscription.
11/14/2021			\$24	\$1,630	<ul style="list-style-type: none"> Unity has bought the 3D tools division of Weta, a VFX & digital animation platform, for \$1.6bn. Unity is expanding its tools for digital movies, & this deal aims to close the gap between Unity and Unreal engine.
11/9/2021			ND	ND	<ul style="list-style-type: none"> Digital media holding co. Recurrent acquired Donut Media, a digital publisher known for its YouTube channel. Donut's automotive content will expand Recurrent's portfolio that already covers several other verticals.
11/9/2021			ND	\$89	<ul style="list-style-type: none"> VerticalScope, a cloud-based digital community platform, acquired Hometalk, TheStreamable, and Threadloom. Hometalk and TheStreamable are two enthusiast websites and Threadloom offers forum technology.
11/9/2021			ND	\$190	<ul style="list-style-type: none"> FuboTV is set to acquire Molotov, a D2C live TV and AVOD streaming service, in a transaction closing in 1Q22. The acquisition will accelerate growth across both platforms and leverage Molotov's localization capabilities.


















Source: LUMA, PitchBook, Company Announcements, Bloomberg, BusinessWire, Cision, CNBC, DigiDay, EINPresswire, eSportsObserver, ESportsInsider, Forbes, Gambling Insider, Gamesbras, GamesIndustry, GeekWire, IGN, LA Times, MarketWatch, MSN, NewsReleases, Nikkei, NPR, PocketGamer, Polygon, PRNewswire, Reuters, TechCrunch, TheHill, TheVerge, Variety, VentureBeat, VRScout, WSJ, Yahoo | Note: All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

Digital Content – 2021 Notable Deals (3 / 7)

Announcement Date	Target	Acquirer	Cumulative Capital Raised	Enterprise Value	Commentary
11/4/2021			\$265	\$4,108	<ul style="list-style-type: none"> Next Generation Media acquired Moonbug, a digital entertainment company that creates content for children. This is the 2nd acquisition, after HelloSunshine, by Blackstone-backed NGM run by ex-Disney executives.
10/29/2021		KRAFTON	ND	\$750	<ul style="list-style-type: none"> Krafton, the developer behind PUBG, has acquired Unknown Worlds, the developer behind <i>Subnautica</i>. UWE becomes the 6th studio under the Krafton umbrella & will collaborate closely on upcoming video games.
10/28/2021		ACTIVISION	\$1	ND	<ul style="list-style-type: none"> Activision announced the acquisition of Digital Legends, a mobile game developer. Through the deal, Activision intends to support development of a new Call of Duty mobile title.
10/25/2021		B. Riley Principal 150 Merger Corp.	ND	\$1,000	<ul style="list-style-type: none"> Faze Clan, an esports team and creator management company is going public via a SPAC valued at \$1 billion. As part of the deal, Faze estimates it can raise up to ~\$290mm to fund growth beyond content creation.
10/25/2021			\$5	ND	<ul style="list-style-type: none"> Rumble, a rights management video platform has acquired Locals, a content publishing platform. Rumble will integrate Locals with its existing platform through its cloud infrastructure.
10/22/2021			ND	ND	<ul style="list-style-type: none"> CD Projekt Red, the developer of <i>The Witcher</i> game franchise, has acquired indie game studio, Molasses Flood. Molasses Flood is known for survival and base-building games <i>The Flame in the Flood</i> and <i>Drake Hollow</i>.
10/18/2021			\$23	\$1,000	<ul style="list-style-type: none"> Scopely, a mobile game studio, has agreed to acquire GSN games from Sony, in a \$1 billion transaction. The acquisition will add a complementary games portfolio to the Scopely business as well as 400 gamemakers.
10/15/2021			ND	ND	<ul style="list-style-type: none"> Riot, the developer of <i>League of Legends</i>, has acquired Kanga, a startup that facilitates “fan-hubs.” Kanga’s platform will be leveraged to create deeper and more meaningful esports fan experiences.
10/13/2021			ND	ND	<ul style="list-style-type: none"> Murka, a social casino game maker, has acquired Mobile Deluxe, a developer of free-to-play casual games. This is Murka’s first acquisition since Blackstone acquired the studio in 2019.
10/6/2021		Merger → 	ND	\$2,700	<ul style="list-style-type: none"> Dotdash has merged with Meredith, the owner of brands including PEOPLE, Allrecipes, and InStyle. The combination will combine Meredith’s noteworthy brands with Dotdash’s more digitally focused assets.
10/5/2021	REMIXD		ND	ND	<ul style="list-style-type: none"> Global, a media and entertainment group, has acquired Remixd, a digital audio content & technology startup. Remixd’s technology, which converts text-to-audio will be added to Global’s proprietary digital ad platform, DAX.
10/4/2021	<i>brud</i>	Dapper	\$25	>\$150	<ul style="list-style-type: none"> Dapper Labs, the NFT startup behind <i>NBA Top Shot</i>, has acquired Brud, a virtual influencer startup. Brud is best known for its digitally rendered social media influencer characters, such as Lil Miquela.























Source: LUMA, PitchBook, Company Announcements, Bloomberg, BusinessWire, Cision, CNBC, DigiDay, EINPresswire, eSportsObserver, ESportsInsider, Forbes, Gambling Insider, Gamesbras, GamesIndustry, GeekWire, IGN, LA Times, MarketWatch, MSN, NewsReleases, Nikkei, NPR, PocketGamer, Polygon, PRNewswire, Reuters, TechCrunch, TheHill, TheVerge, Variety, VentureBeat, VRScout, WSJ, Yahoo | **Note:** All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

Digital Content – 2021 Notable Deals (4 / 7)

Announcement Date	Target	Acquirer	Cumulative Capital Raised	Enterprise Value	Commentary
9/30/2021		Voodoo	\$3	ND	<ul style="list-style-type: none"> Voodoo has acquired Beach Bum, a game studio based in Israel and specialized in tabletop and card games. It was reported that Beach Bum has generated \$70 million in revenue over the past 12 months.
9/30/2021		SONY	ND	ND	<ul style="list-style-type: none"> Sony has acquired longtime partner Bluepoint Games, developer of <i>Uncharted: The Nathan Drake Collection</i>. The studio built its name on revisiting other developers' work, but the next project is rumored to be an original.
9/29/2021		NETFLIX	ND	ND	<ul style="list-style-type: none"> Night School Studio, the game developer known for titles like <i>Oxenfree</i>, has been acquired by Netflix. The acquisition is part of Netflix's larger initiative to add exclusive games to its subscription platform.
9/27/2021			ND	ND	<ul style="list-style-type: none"> MediaLab has acquired Imgur, a social image-sharing platform with 300 million monthly users. MediaLab, a self-described holding company of consumer internet brands, will invest further in engineering.
9/7/2021		shutterstock	\$41	\$110	<ul style="list-style-type: none"> Shutterstock acquired PicMonkey, a provider of online photo editing and graphic design tools, in a cash deal. PicMonkey will enable Shutterstock customers to create effective content regardless of skill level or expertise.
9/10/2021		STILLFRONT GROUP	ND	\$205	<ul style="list-style-type: none"> Stillfront announced that it has acquired mobile game developer Jawaker for \$205mm. With the acquisition, the publisher aims to expand its games portfolio and grow its presence in the MENA region.
8/31/2021	reworks		\$15	\$600	<ul style="list-style-type: none"> Playtika has acquired Reworks, a developer known for their mobile home design entertainment app, Redecor. Reworks will allow Playtika to establish a presence in the growing category.
8/16/2021		ROBLOX	ND	\$90	<ul style="list-style-type: none"> Roblox acquired Guided, provider of a platform for online gaming communities, for \$90mm. Following the acquisition by Roblox, Guided will continue to operate as an independent product.
8/10/2021			\$33	\$320	<ul style="list-style-type: none"> Unity acquired Parsec, a remote desktop tool for game developers and creatives to collaborate from anywhere. This was Unity's largest acquisition to-date and aims to capitalize on the trend towards remote-work for creators.
8/9/2021			ND	\$1,560	<ul style="list-style-type: none"> DraftKings has acquired Golden Nugget Online Gaming, an online casino gaming platform. Golden Nugget's brand is DraftKings entry into the growing online casino market.
8/5/2021			\$103	\$2,000	<ul style="list-style-type: none"> Penn National Gaming has acquired Score Media and Gaming, an app-based sports betting & media platform. The acquisition will allow Penn to leverage both Barstool's & Score's media presence in the sports betting market.
8/5/2021			ND	\$525	<ul style="list-style-type: none"> Zynga has agreed to acquire StarLark, a Chinese game developer, for \$525mm in a mixed consideration deal. The deal includes the mobile golf title Golf Rival from Betta Games, the second-largest mobile golf game.

























Source: LUMA, PitchBook, Company Announcements, Bloomberg, BusinessWire, Cision, CNBC, DigiDay, EINPresswire, eSportsObserver, ESportsInsider, Forbes, Gambling Insider, Gamesbras, GamesIndustry, GeekWire, IGN, LA Times, MarketWatch, MSN, NewsReleases, Nikkei, NPR, PocketGamer, Polygon, PRNewswire, Reuters, TechCrunch, TheHill, TheVerge, Variety, VentureBeat, VRScout, WSJ, Yahoo | **Note:** All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

Digital Content – 2021 Notable Deals (5 / 7)

	Announcement Date	Target	Acquirer	Cumulative Capital Raised	Enterprise Value	Commentary
Q3	8/5/2021			ND	\$545	<ul style="list-style-type: none"> Embracer Group acquired 8 gaming studios for \$313mm in initial consideration, and up to \$232mm in earnout. The acquisitions are expected to contribute between \$232mm to \$348mm in revenue in the next fiscal year.
	8/3/2021			ND	\$2,200	<ul style="list-style-type: none"> Netmarble agreed to acquire Hong Kong-based social casino game company SpinX for \$2.2bn. The acquisition is an effort to diversify its game portfolio and strengthen global business competitiveness.
	8/2/2021			ND	\$900	<ul style="list-style-type: none"> Next Generation Media acquired HelloSunshine, a media company founded by Reese Witherspoon. This is the first acquisition by Blackstone-backed NGM which is run by former Walt Disney executives.
	7/19/2021			ND	\$1,300	<ul style="list-style-type: none"> Tencent acquired British gaming company Sumo Group for \$1.3bn, a ~40% premium to its unaffected valuation. Tencent intends to bring its expertise and resources to accelerate the growth of Sumo Group.
	7/2/2021			ND	\$360	<ul style="list-style-type: none"> Modern Times Group (MTG) has acquired Indian startup game developer PlaySimple for more than \$360mm. The deal was financed with mixed consideration and there is up to \$150 available in potential earnout.
	7/2/2021			ND	\$27	<ul style="list-style-type: none"> Team17 acquired TouchPress, the parent company of educational games developer and publisher StoryToys. This is Team17's first foray into educational games, an area which they noted was accelerated by COVID.
Q2	6/29/2021	 ← Merger →	Trebia Acquisition Corp.	\$40	\$1,400	<ul style="list-style-type: none"> System1 agreed to a reverse merger with SPAC Trebia Acquisition Corp and will enter the public markets. The company's brands include Startpage, info.com, MapQuest, howstuffworks, and WaterFox.
	6/24/2021	 ← Merger →	890 5th Avenue Partners	\$546	\$1,500	<ul style="list-style-type: none"> BuzzFeed has gone public via merger with 890 5th Avenue Partners, a SPAC. Proceeds will go toward the acquisition of Complex Networks and further consolidation of players in digital media.
	6/24/2021			NA	\$300	<ul style="list-style-type: none"> Complex Networks, digital publisher focused on streetwear, music, and pop culture, was acquired by BuzzFeed. The acquisition will provide BuzzFeed greater scale to better compete for online ad spend.
	6/23/2021			NA	\$1,400	<ul style="list-style-type: none"> EA has acquired Playdemic, a mobile game developer famous for its popular game Golf Clash. EA will have access to Playdemic's experienced developers and Golf Clash's mechanics for future mobile games.
	6/3/2021			NA	\$1,300	<ul style="list-style-type: none"> Blackstone has acquired International Data Group, a technology market intelligence and research company. Blackstone will allow IDG to invest in its technology and product portfolio, including strategic acquisitions.
	6/2/2021			NA	\$378	<ul style="list-style-type: none"> Take-Two has agreed to acquire Nordeus, a developer known for its soccer management game <i>Top Eleven</i>. The acquisition bolsters Take-Two's mobile business and broadens the company's sports portfolio.



















Source: LUMA, PitchBook, Company Announcements, Bloomberg, BusinessWire, Cision, CNBC, DigiDay, EINPresswire, eSportsObserver, ESportsInsider, Forbes, Gambling Insider, Gamesbras, GamesIndustry, GeekWire, IGN, LA Times, MarketWatch, MSN, NewsReleases, Nikkei, NPR, PocketGamer, Polygon, PRNewswire, Reuters, TechCrunch, TheHill, TheVerge, Variety, VentureBeat, VRScout, WSJ, Yahoo | Note: All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

Digital Content – 2021 Notable Deals (6 / 7)

	Announcement Date	Target	Acquirer	Cumulative Capital Raised	Enterprise Value	Commentary
Q2	5/26/2021			NA	\$8,450	<ul style="list-style-type: none"> Amazon has reached a deal to buy the Hollywood studio MGM Holdings. Amazon has continued to invest billions in its film and TV operations as well as live sports to support Prime.
	5/21/2021			\$824	\$635	<ul style="list-style-type: none"> Alden has bought Tribune, owner of The Chicago Tribune and The New York Daily News. The deal makes Alden the second-largest newspaper owner in the U.S. by circulation.
	5/21/2021			\$65	~\$500	<ul style="list-style-type: none"> Snap agreed to acquire WaveOptics, supplier of AR displays with whom Snap collaborated for its Spectacles. The deal is Snap's largest ever, underscoring the company's long-term bet that AR eyewear will be mainstream.
	5/17/2021			NA	\$43,000	<ul style="list-style-type: none"> Pending anti-trust approval, AT&T and Discovery will combine their media assets into a new public company. This consolidation seeks to provide a wide content offering, upping Discovery's streaming profitability.
	5/12/2021			NA	ND	<ul style="list-style-type: none"> AppLovin acquired West Game, a mobile wild-west themed simulation life video game. AppLovin seeks to grow its content portfolio, gain access to data, and improve the efficacy of its software.
	5/12/2021			NA	ND	<ul style="list-style-type: none"> Cash Tornado Slots, a game emulating Las Vegas slot machines, has been acquired by AppLovin. Cash Tornado Slots represents another addition to AppLovin's content portfolio that fuels its platform's data.
	5/11/2021			\$30	\$510	<ul style="list-style-type: none"> Kakao has acquired Tapas Media, a webcomics publisher that focuses on mobile device distribution. Kakao plans to adapt the intellectual property from Radish and Tapas for web-toons, video, and other formats.
	5/10/2021			\$71	\$440	<ul style="list-style-type: none"> Kakao has acquired Radish, an app that distributes both internally curated and independent content. Kakao expressed intent to make significant content acquisitions as they are rumored to be exploring an IPO.
	5/4/2021			\$10	ND	<ul style="list-style-type: none"> Scroll, a subscription service providing streamlined, advertisement-less articles, was acquired by Twitter. Twitter will integrate Scroll's features into its platform as part of its new "Twitter Blue" subscription service.
	5/3/2021			NA	\$5,000	<ul style="list-style-type: none"> Apollo acquired Verizon Media, including iconic brands Yahoo and AOL, as well as its ad tech business. The carveout will allow Verizon Media, which counts 900mm MAU, to aggressively pursue new growth areas.
4/26/2021			NA	ND	<ul style="list-style-type: none"> Sirius XM reached a deal with 99% Invisible, a design and architecture focused podcast and radio company. The deal broadens Sirius' content offering and provides ad revenue during a time of podcast consolidation. 	
Q1	3/24/2021			ND	\$2,700	<ul style="list-style-type: none"> Casino operator Bally's announced it is acquiring online gaming and gambling platform Gamesys for \$2.7bn. The deal will enable Bally's to expand into the digital betting industry, which has surged during the pandemic.

Source: LUMA, PitchBook, Company Announcements, Bloomberg, BusinessWire, Cision, CNBC, DigiDay, EINPresswire, eSportsObserver, ESportsInsider, Forbes, Gambling Insider, Gamesbras, GamesIndustry, GeekWire, IGN, LA Times, MarketWatch, MSN, NewsReleases, Nikkei, NPR, PocketGamer, Polygon, PRNewswire, Reuters, TechCrunch, TheHill, TheVerge, Variety, VentureBeat, VRScout, WSJ, Yahoo | **Note:** All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

Digital Content – 2021 Notable Deals (7 / 7)

	Announcement Date	Target	Acquirer	Cumulative Capital Raised	Enterprise Value	Commentary
Q1	3/24/2021	 ninjakiwi		ND	\$186	<ul style="list-style-type: none"> Modern Times Group acquired New Zealand mobile game developer Ninja Kiwi for up to \$186mm. Ninja Kiwi is the maker of popular game <i>Bloons</i> and a leading tower defense strategy studio.
	3/4/2021			ND	\$302	<ul style="list-style-type: none"> Square, Jack Dorsey's financial services company has acquired Tidal, a Jay-Z founded music streaming platform. The acquisition aims to synergize their platforms to help artists find new ways to support their work.
	2/8/2021			NA	\$2,100	<ul style="list-style-type: none"> Electronic Arts has acquired GluMobile (Nasdaq: GLUU), a developer and publisher of mobile games. The acquisition will immediately add significant scale to Electronic Arts' mobile gaming business.
	2/3/2021			ND	\$450	<ul style="list-style-type: none"> Embracer Group subsidiary Saber Interactive has acquired video game developer and publisher Aspyr Media. Through the acquisition, Embracer Group is onboarding a team of 140 developers led by Aspyr's founders.
	2/3/2021			\$3	\$1,378	<ul style="list-style-type: none"> The Gearbox Entertainment Company will be acquired by Embracer Group for \$1.4bn. Gearbox notably developed popular gaming properties <i>Borderlands</i>, <i>Counter Strike</i>, and <i>Half Life</i>.
	2/1/2021	  Merger	Acies Acquisition Corp.	\$36	\$1,100	<ul style="list-style-type: none"> Mobile social casino game developer Playstudios went public via reverse merger with Acies Acquisition Corp.. The firm seeks to capitalize on the growing social-casino market, which they project will reach \$8.6bn by 2025.
	1/19/2021			\$121	\$600	<ul style="list-style-type: none"> Naver has purchased Wattpad, a digital platform for creative writers, for \$600mm in cash and stock. The South Korean acquirer plans to integrate a portion of Wattpad into its existing publishing platform, Webtoon.
	1/16/2021			ND	\$210	<ul style="list-style-type: none"> Media and Games Invest (MGI) has completed its acquisition of the game developer Kingsisle for \$210mm. The transaction is another step of MGI's buy-and-build strategy now seeking larger and EBITDA-positive targets.
	1/8/2021			ND	ND	<ul style="list-style-type: none"> Roku has acquired the rights to Quibi's content library of short-form video content. The deal will make the defunct short-form streaming service's shows available to watch via the Roku platform.

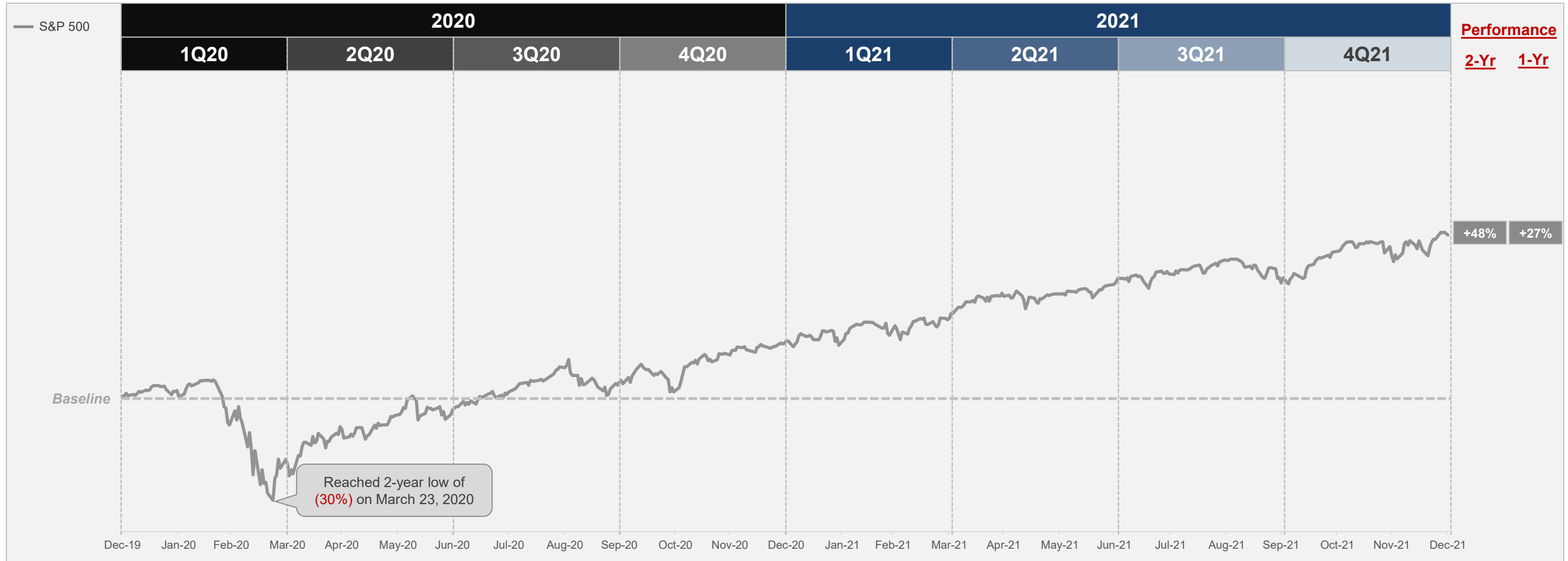
Source: LUMA, PitchBook, Company Announcements, Bloomberg, BusinessWire, Cision, CNBC, DigiDay, EINPresswire, eSportsObserver, ESportsInsider, Forbes, Gambling Insider, Gamesbras, GamesIndustry, GeekWire, IGN, LA Times, MarketWatch, MSN, NewsReleases, Nikkei, NPR, PocketGamer, Polygon, PRNewswire, Reuters, TechCrunch, TheHill, TheVerge, Variety, VentureBeat, VRScout, WSJ, Yahoo | Note: All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

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3	2021 Private Financing Activity
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2021: A Year of Recovery Amid Economic Uncertainty

S&P 500 Index Performance (Q1'2020 – Q4'2021)



The S&P 500 is up +27% in 2021, or +48% since 2019 despite economic uncertainty arising from COVID, supply chain instability, and inflation concerns

Source: FactSet (market data as of 12/31/2021), LUMA analysis.

Technology Still Ahead of Broader Market, But Gap Has Tightened

Nasdaq 100 Index vs. S&P 500 Index Performance (Q1'2020 – Q4'2021)

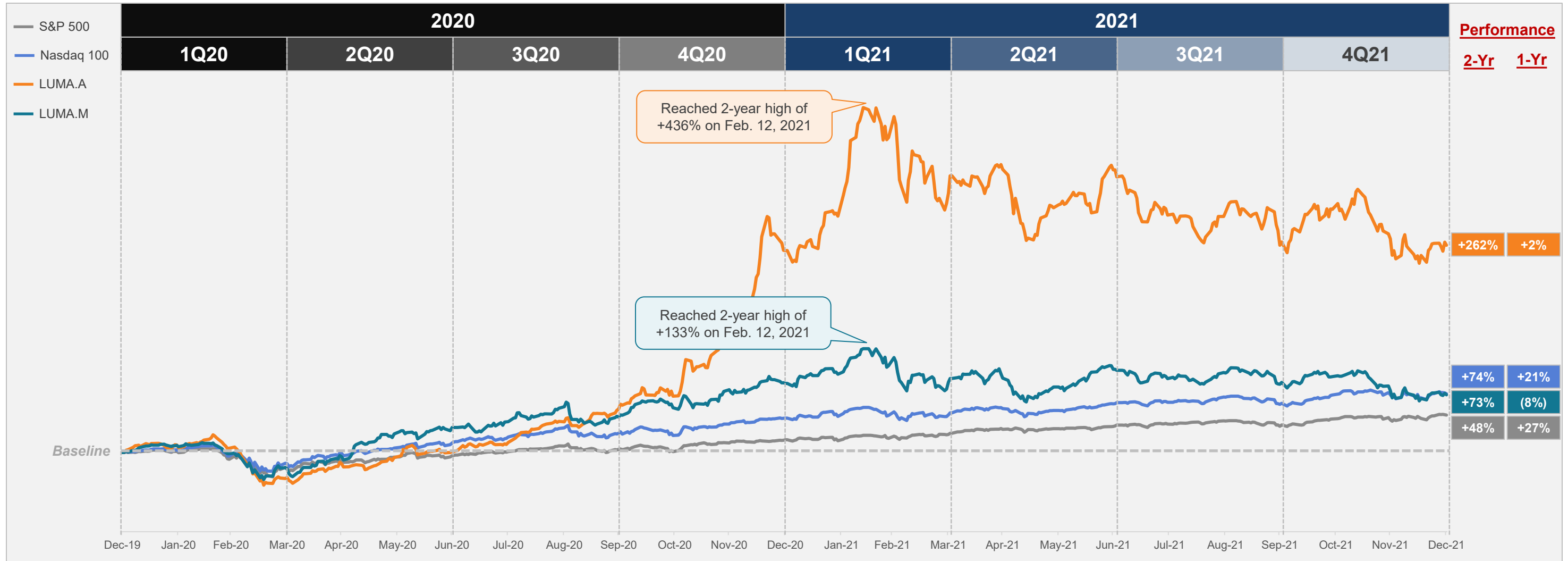


Tech is ahead of the broader market over the past two years, but the gap has tightened during 2021 as tech faced headwinds

Source: FactSet (market data as of 12/31/2021), LUMA analysis.

Ad Tech and MarTech: Off Their Peaks, But Remain Elevated




LUMA Indices vs. Nasdaq 100 Index Performance (Q1'2020 – Q4'2021)



While “flattish” this year, Ad Tech and MarTech are still meaningfully elevated relative to pre-pandemic levels

Source: FactSet (market data as of 12/31/2021), LUMA analysis.

The LUMA Indices Universe at a Glance

 Denotes retroactive additions
 Denotes Q4'21 issuances
 Denotes No Longer Publicly-Traded

Ad Tech



MarTech



Total: 49 Companies

Aggregate Market Cap as of Market Date

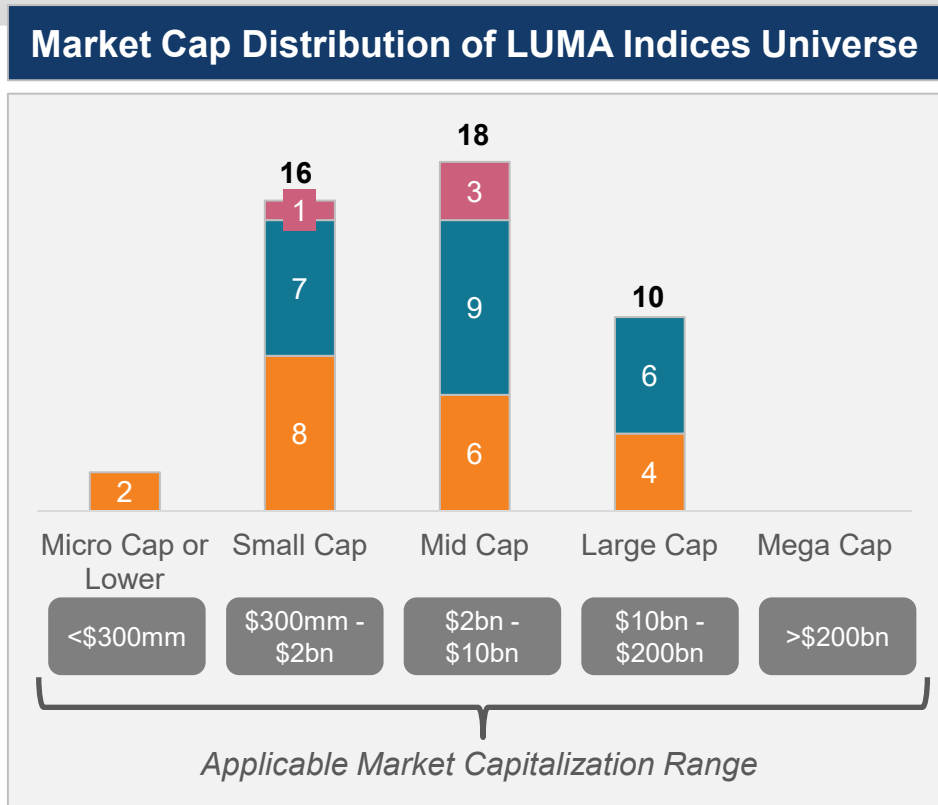
~\$550bn

Aggregate GAAP Revenue, CY22E (Approximate)


\$72bn

Average CY22E GAAP Revenue Growth Rate

27.0%




Int'l Presence of LUMA Indices Universe






9 Countries Represented

7 Stock Exchanges Represented



Source: FactSet (market data as of December 31, 2021) Note: (1) Innovid figures contemplate data available as of their IPO on December 1, 2021.

The LUMA Indices^{BETA} – Recent Updates

 Denotes retroactive additions
 Denotes Q4'21 issuances
 Denotes Current Exclusion

LUMA.A LUMA Public Ad Tech Company Index

LUMA.M LUMA MarTech Public Company Index

LUMA.A (Public Ad Tech Company Index): Includes logos for acuity, ADTHEORENT (red dashed box), affle, APPLOVIN, cardlytics, CRITEO, digital turbine, INNOVD (red dashed box), ironSource, Magnite, MediaAlpha, Mobvista, Outbrain, Perion, PubMatic, Roku, Taboola, telaria (black dashed box), theTradeDesk, TREMOR INTERNATIONAL Ltd., unity, and VIANT.

LUMA.M (MarTech Public Company Index): Includes logos for Amplitude, Appier, BIGCOMMERCE, braze (red dashed box), BRIGHTCOVE, coveo (red dashed box), HubSpot, KALTURA, LIVEPERSON, Medallia (black dashed box), momentive, ON24, Quotient, qualtrics, SEMRUSH, sprinklr, sproutsocial, SQUARESPACE, shopify, twilio, ye xt, zendesk (red dashed box), and zoominfo.

Overlap (companies included in both indices): Includes logos for DoubleVerify, IAS Integral Ad Science, LiveRamp, and ZETA (red dashed box).

~\$190bn
 Combined Capitalization incl. Overlap

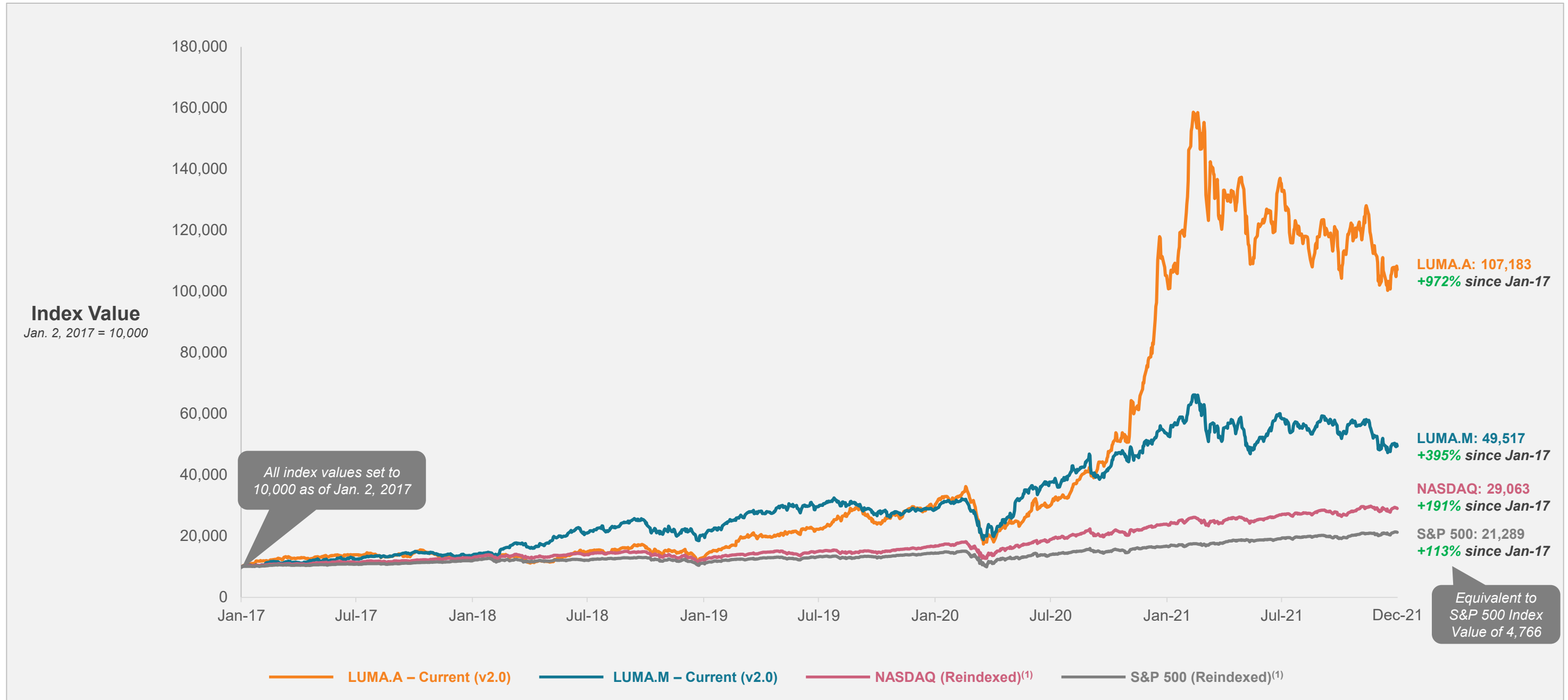
Overlap
 (companies included in both indices)

~\$360bn
 Combined Capitalization incl. Overlap

- In 2Q2021, LUMA launched *The LUMA Indices^{BETA}* to track the performance of public companies in the Ad Tech and MarTech ecosystems
- This quarter, four new companies completed their public issuances: **Innovid** (Ad Tech), **AdTheorent** (Ad Tech), **Braze** (MarTech), and **Coveo** (MarTech). These companies will be incorporated in the indices' next semiannual rebalancing (at the end of 2021).
- Additionally, LUMA has made retroactive additions to both indices. **Zeta Global** has now also been added to LUMA.M and now is part of both the LUMA.A and LUMA.M indices. **ZenDesk**, provider of customer service / CX software, has been added to the LUMA.M index.

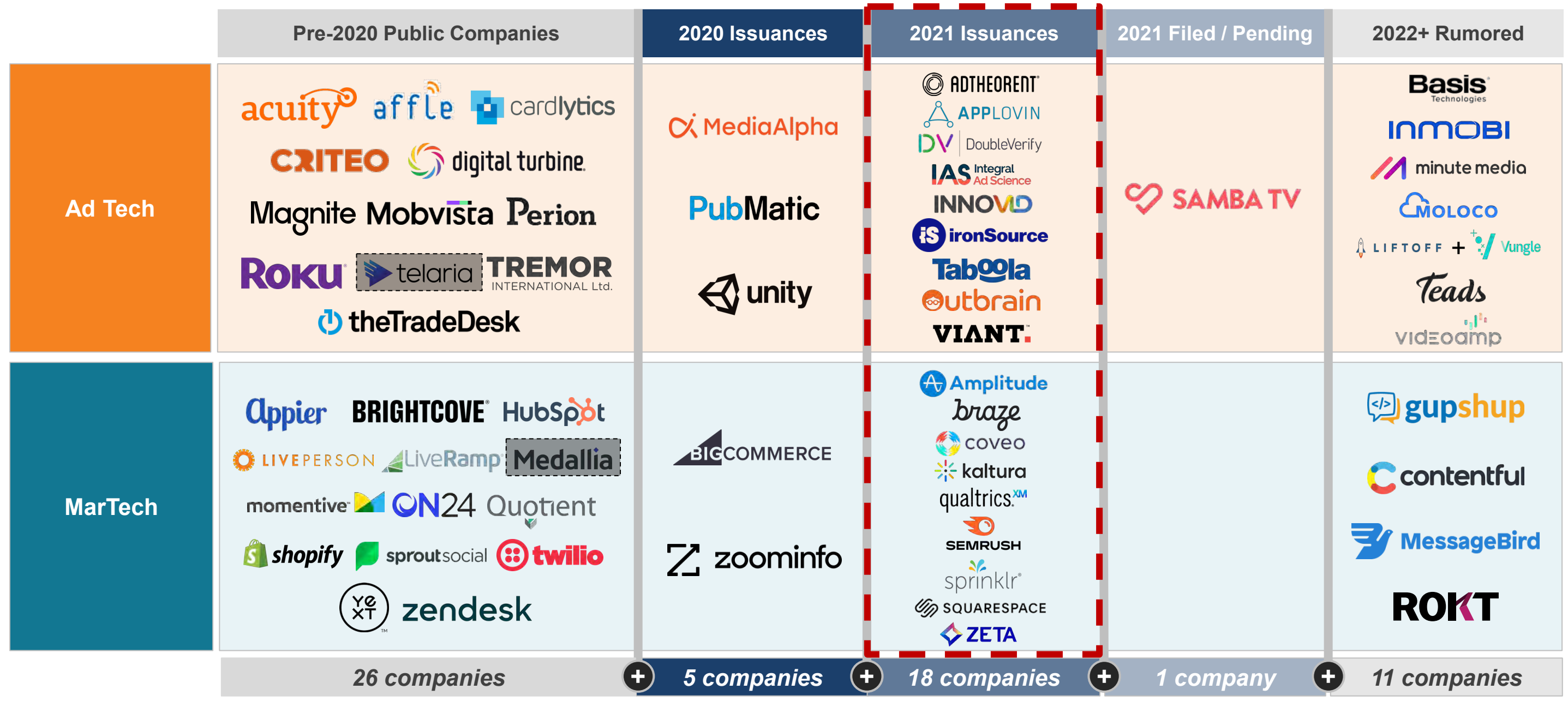
Source: FactSet (market data as of December 31, 2021), LUMA (for index methodology, including constituent selection, allocation / index rebalancing, etc.). For more details on the initiative, visit lumapartners.com/content/presentations/the-luma-indices/

LUMA.A & LUMA.M – Outperforming Key Benchmarks Over Time



Source: FactSet (market data as of December 31, 2021), LUMA (for index methodology, including constituent selection, allocation / index rebalancing, etc.). For more details on methodology, visit lumapartners.com/content/presentations/the-luma-indices/. **Note:** (1) NASDAQ & S&P 500 value re-indexed to 10,000 as of Jan 2, 2017 to be on comparable basis with LUMA.A and LUMA.M.

The LUMA Indices Universe Has Doubled in Number since 2019

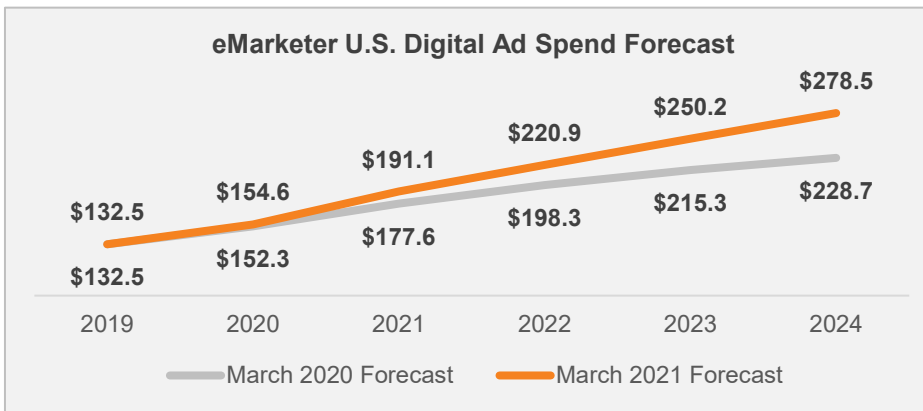


20+ companies going public since 2019

Source: FactSet, Public Company Filings, Company Announcements. Note: [Dashed Box] Denotes formerly public companies. Sum figures below graphic do not contemplate removal of former public companies.

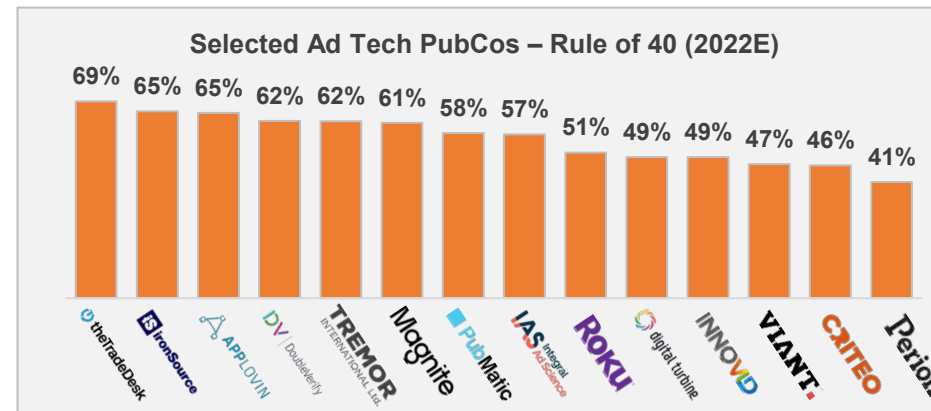
Key Factors Driving Ad Tech Investment Activity

Large & Growing TAM, Accelerated by Pandemic



- The pandemic marked an inflection point in multiple secular consumer trends – notably, the consumption of streaming content and games, and the migration to eCommerce – all of which either directly or indirectly have contributed to a significant increase to expected digital advertising spend.
- CTV/streaming has captured the public market’s attention as the next key area of innovation and growth.
- Due to regulatory and privacy-related scrutiny on the “Triopoly” (GOOG, FB, AMZN), an opportunity is opening for independent players to obtain further market share.

Robust Financial Execution & Maturation



- The wave of newly-public Ad Tech companies happens at a time when many are reaching scale and profitability levels more in line with other technology/software sub-sectors.
- Most of the public cohort is compliant with the “Rule of 40” – the sum of revenue growth and EBITDA margin – a rule of thumb for evaluating financial performance regardless of profitability/maturity stage.
- The publicly-traded cohort is growing rapidly, with average 2022E net revenue growth and EBITDA margins of 27% and 22%, respectively,⁽¹⁾ implying an average Rule of 40 value of ~50%.⁽²⁾

Evolving Perception of Revenue Model

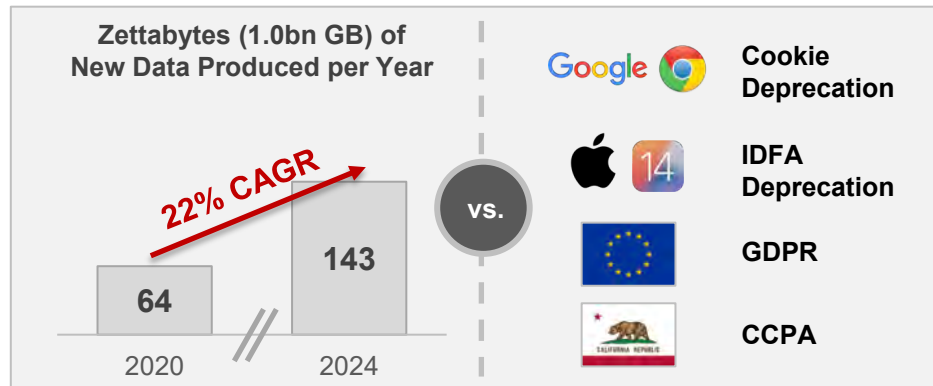
Is it Really ARR? In 2021+, Yes. As Long As Your NRR is > 100%.
by Jason Lemkin | Blog Posts, SaaS Product Pricing, Scale

- Previously, “ARR” was intended to signify only revenue that is contractually recurring subscription revenue.
- Investors have grown increasingly comfortable with a less stringent definition that includes consumption/usage revenue, so long as such revenue is highly recurring or “re-occurring.”
- The prevailing litmus test for ARR is healthy net revenue retention (>100%), which is best evidenced by the healthy public valuations for companies with highly consumption-driven business models; examples of such companies that have demonstrated this trend outside of Ad Tech include Shopify, Bill.com, Snowflake.

Source: LUMA analysis, eMarketer, FactSet (market data as of December 31, 2021), SaaStr. **Note:** See Appendix A for detailed methodology and definitions regarding “Net Revenue” for LUMA.A (including list of companies / metrics excluded from such analysis). (1) “Overlap Public Companies” included in Ad Tech calculation, (2) Rule of 40 contemplates GAAP revenue as opposed to “Net Revenue”, therefore figures shown here may not reconcile with implied Rule of 40 figures presented in Benchmarking section of this presentation.

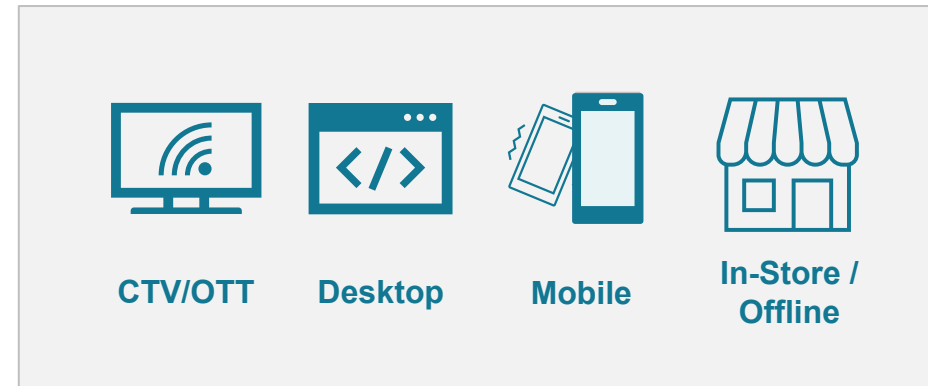
Key Factors Driving MarTech Investment Activity

Raw Data Availability vs. Privacy Restrictions



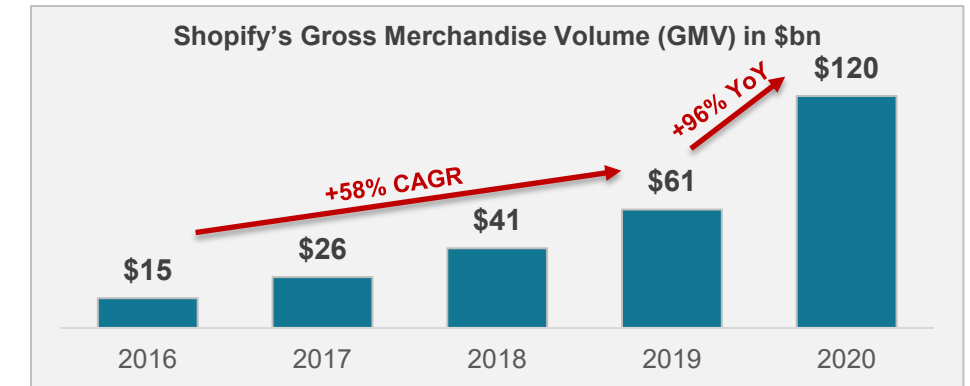
- While the technical availability of consumer data has exploded due to widespread digitization / smart device proliferation, social concerns over data privacy have helped create a fragmented marketing data ecosystem.
- Impacting this ecosystem are regulatory actions undertaken by the public sector, as well as policy changes by major private sector actors such as Apple and Google.
- A large opportunity exists for companies that can ingest, store, analyze, and activate data in a privacy-compliant way across both media and non-media use cases.

Channel Proliferation Necessitating Coordination & Automation



- Despite technological changes, the marketers' objective remains the same: deliver the **right message** to the **right person** at the **right time/place**.
- Consumers seamlessly move between offline and online, as well as between devices, creating significant challenges across the marketing function.
- Marketers increasingly need tools to help orchestrate customer journeys across device/channel; such needs span from systems integration, measurement/analysis, and decisioning/automation.

eCommerce Pandemic Inflection: "Ten Years in Six Months"



- eCommerce has steadily grown over the past decade; however, in 2020 eCommerce grew by an amount equal to several years of growth in only six months due to the elevated online buying amid the pandemic.
- The pandemic was a watershed moment for eCommerce, as the dramatic shift toward online buying in 2020 has led to durable consumer behavioral changes.
- Companies providing software tools facilitating / enabling digital commerce are expected to continue to benefit from the secular megatrend of increased online buying worldwide.

Source: LUMA analysis, IDC, eMarketer, Shopify.

LUMA Indices – Share Price Performance Summary

Company	Category	Share Price at			Relative Metrics		
		End of 2020	52-Week High	End of 2021	% of 52-Wk. Hi	% Change - 2020	% Change - 2021
sproutsocial	MarTech	\$45.41	\$144.26	\$90.69	63%	+183%	+100%
CRITEO	Ad Tech	\$20.51	\$45.45	\$38.87	86%	+18%	+90%
Perion	Ad Tech	\$12.73	\$30.00	\$24.05	80%	+105%	+89%
HubSpot	MarTech	\$396.44	\$852.08	\$659.15	77%	+150%	+66%
affle	Ad Tech	\$10.36	\$16.60	\$15.17	91%	+134%	+46%
Mobvista	Ad Tech	\$0.62	\$1.41	\$0.88	63%	+42%	+42%
TREMOR INTERNATIONAL LTD.	Ad Tech	\$5.36	\$11.65	\$7.50	64%	+153%	+40%
zoominfo	MarTech	\$48.23	\$77.35	\$64.20	83%	NA	+33%
PubMatic	Ad Tech	\$27.96	\$69.92	\$34.05	49%	NA	+22%
shopify	MarTech	\$1,131.95	\$1,690.60	\$1,377.39	81%	+185%	+22%
theTradeDesk	Ad Tech	\$80.10	\$111.64	\$91.64	82%	+208%	+14%
digital turbine	Ad Tech	\$56.56	\$94.74	\$60.99	64%	+693%	+8%
unity	Ad Tech	\$153.47	\$201.12	\$142.99	71%	NA	(7%)
momentive	MarTech	\$25.55	\$27.88	\$21.15	76%	+43%	(17%)
Quotient	MarTech	\$9.42	\$17.59	\$7.42	42%	(4%)	(21%)
twilio	MarTech	\$338.50	\$443.49	\$263.34	59%	+244%	(22%)
ROKU	Ad Tech	\$332.02	\$479.50	\$228.20	48%	+148%	(31%)
LiveRamp	MarTech	\$73.19	\$85.96	\$47.95	56%	+52%	(34%)
ye	MarTech	\$15.72	\$19.98	\$9.92	50%	+9%	(37%)
LIVEPERSON	MarTech	\$62.23	\$71.56	\$35.72	50%	+68%	(43%)
Magnite	Ad Tech	\$30.71	\$61.80	\$17.50	28%	+276%	(43%)
BRIGHTCOVE	MarTech	\$18.40	\$24.77	\$10.22	41%	+112%	(44%)
BIGCOMMERCE	MarTech	\$64.15	\$90.00	\$35.37	39%	NA	(45%)
cardlytics	Ad Tech	\$142.77	\$157.18	\$66.09	42%	+127%	(54%)
MediaAlpha	MarTech	\$39.07	\$64.11	\$15.44	24%	NA	(60%)
acuity	Ad Tech	\$11.23	\$25.60	\$3.76	15%	+975%	(67%)

Note: Excludes companies who became public on or after January 1, 2021.

Observations

- Last year, the rising tide of the post-COVID equity market rally lifted all boats, as only one company between Ad Tech and MarTech was down in 2020.
- In 2021, the story was far more variable, as 12 of the 26 companies traded up on the year by an average of +48%, whereas the other 15 traded down by an average (38%).
- These mixed results come during a period of substantial market volatility, as many companies shown here are trading at a fraction of their respective 52-week highs.
- On average for the full year, Ad Tech and MarTech companies respectively traded up +12% and down (8%).
- Selected companies with noteworthy developments in 2021 include:
 - **CRTO (+90%)**: With its best trading performance in years, Criteo has seemingly gained renewed investor confidence as it positions itself as the leading commerce media platform.
 - **HUBS (+66%)**: After trading up +167% in 2020, HubSpot had yet another great year built on the back of its strong financial performance.
 - **APPS (+8%)**: Digital Turbine finishes the year slightly up after climbing +693% last year; the Company started the year with a flurry of M&A activity, having spent over \$1 billion across the three acquisitions of AdColony, Fyber, and Appreciate. Fellow mobile app monetization platform **Unity** was also approximately flat on the year, down -7% on the year.
 - Despite another strong year of CTV growth and general optimism about the sector, **MGNI (-43%)** and **ROKU (-31%)** traded down significantly, while **PUBM (+22%)** and **TTD (+14%)** finished the year up meaningfully.

Record Number of New Issuances in Ad/MarTech; Results Mixed

IPO / De-SPAC Date	Company	Category	IPO or SPAC?	Initial Price	Day 1		YTD/Current (12/31/2021)	
					Closing Share Price	% Incr. / (Decr.)	Closing Share Price	% Incr. / (Decr.)
1/28/2021	qualtrics	MarTech	Traditional IPO	\$30.00	\$45.50	+52%	\$35.40	+18%
2/10/2021	VIAANT	Ad Tech	Traditional IPO	\$25.00	\$47.72	+91%	\$9.71	(61%)
3/25/2021	SEMRUSH	MarTech	Traditional IPO	\$14.00	\$11.22	(20%)	\$20.85	+49%
4/15/2021	APPROVIN	Ad Tech	Traditional IPO	\$80.00	\$65.20	(19%)	\$94.26	+18%
4/21/2021	DV DoubleVerify	Overlap Ad/MarTech	Traditional IPO	\$27.00	\$36.00	+33%	\$33.28	+23%
5/19/2021	SQUARESPACE	MarTech	Direct Listing IPO	\$50.00	\$43.65	(13%)	\$29.50	(41%)
6/10/2021	ZETA	Overlap Ad/MarTech	Traditional IPO	\$10.00	\$8.89	(11%)	\$8.42	(16%)
6/23/2021	sprinklr	MarTech	Traditional IPO	\$16.00	\$17.60	+10%	\$15.87	(1%)
6/29/2021	ironSource	Ad Tech	SPAC	\$10.98	\$11.00	+0%	\$7.74	(30%)
6/30/2021	Taboola	Ad Tech	SPAC	\$10.54	\$10.35	(2%)	\$7.78	(26%)
6/30/2021	IAS Integral Ad Science	Overlap Ad/MarTech	Traditional IPO	\$18.00	\$20.58	+14%	\$22.21	+23%
7/21/2021	kaltura	MarTech	Traditional IPO	\$10.00	\$12.00	+20%	\$3.37	(66%)
7/23/2021	outbrain	Ad Tech	Traditional IPO	\$20.00	\$20.00	+0%	\$14.00	(30%)
9/28/2021	Amplitude	MarTech	Direct Listing IPO	\$35.00	\$54.80	+57%	\$52.94	+51%
11/17/2021	braze	MarTech	Traditional IPO	\$65.00	\$93.39	+44%	\$77.16	+19%
11/24/2021	coveo	MarTech	Traditional IPO	\$11.87	\$12.81	+8%	\$13.06	+10%
12/1/2021	INNOVD	Ad Tech	SPAC	\$7.95	\$8.75	+10%	\$6.65	(16%)
12/23/2021	ADTHEORENT	Ad Tech	SPAC	\$9.66	\$10.21	+6%	\$5.87	(39%)

Summary Statistics & Observations

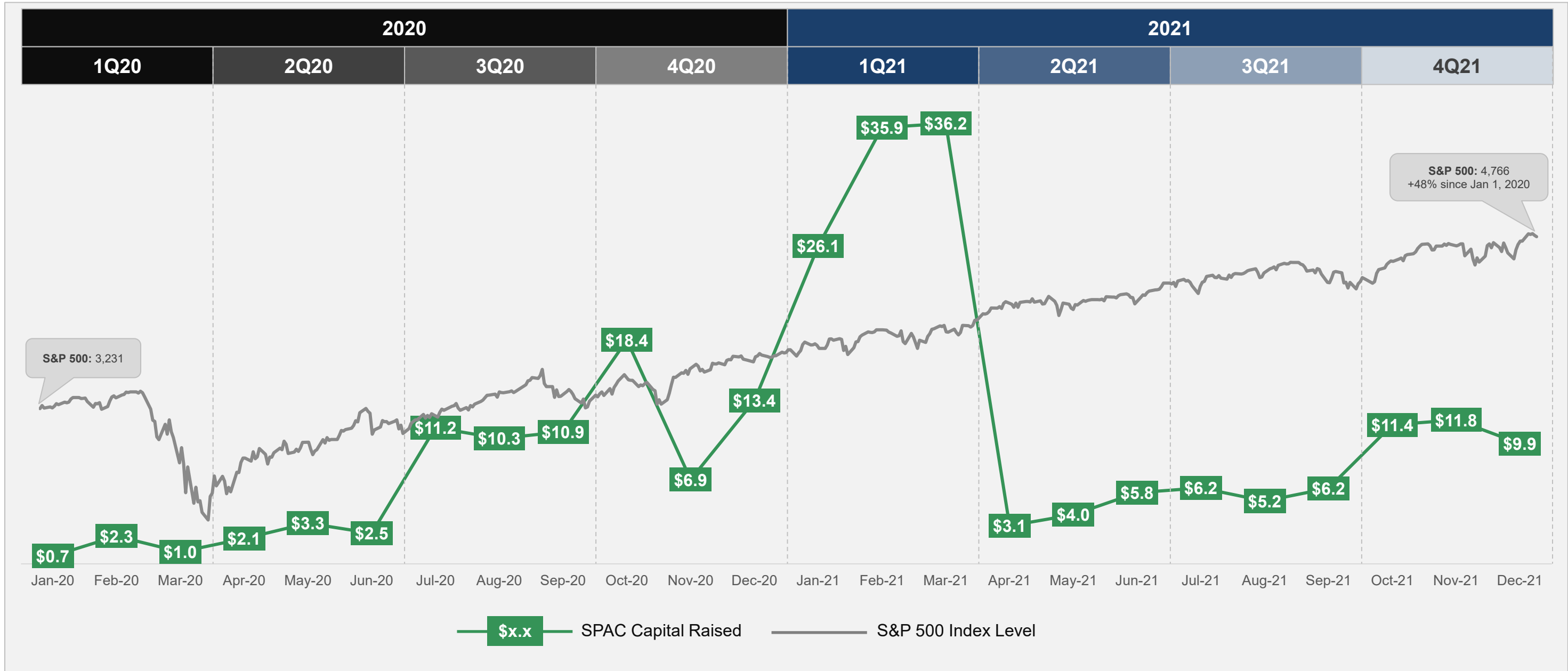
	# of Listings	Day 1 – Average % Incr. / (Decr.)	YTD – Average % Incr. / (Decr.)
Ad Tech	9	+16%	(12%)
MarTech	9	+16%	+3%
Direct Listing	2	+22%	+5%
Trad'l IPO	12	+19%	(1%)
SPAC	4	+3%	(24%)
All Listings	18	+16%	(4%)

- 2021 was an active year for Ad Tech and MarTech issuers, as a total of 18 new issuers came to market.
- Of these 18 issuers,
 - Nine were Ad Tech; nine were MarTech
 - Four were de-SPAC transactions, two were direct listings, and the remaining 12 were traditional IPOs
- These issuers are down an average -4% since their respective issuance dates, despite trading up an average +16% on their first days of trading
- Though the sample size is limited, the Direct Listing transactions traded up by the greatest amount both on Day 1 of trading and on a year-to-date basis relative to the Traditional IPOs and De-SPACs

Sources: FactSet (market data as of December 31, 2021), Public Company Filings, Company Announcements. Note: Summary statistics by Category contemplate the following categorizations for "Overlap" companies: DoubleVerify (Ad Tech), Zeta (MarTech), and Integral Ad Science (Ad Tech). (1) Transactions shown correspond to IPOs unless explicitly indicated as a de-SPAC transaction.

SPAC Fundraising: Collapse from Peak, But Above Pre-2020 Levels

Monthly SPAC Capital Raised (\$ in billions) – Jan-20 to Dec-21



Source: SPACInsider.com, FactSet (market data as of 12/31/2021), LUMA analysis.

Table of Contents

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3	2021 Private Financing Activity
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LUMA.A – Financial Benchmarking Overview

Observations

- The LUMA.A Index cohort now has 24 companies with the addition of the ten new public entrants in 2021.
- The average Enterprise Value of LUMA.A constituents is \$8.8bn with the largest company being The Trade Desk (\$45.9bn) and the smallest company being Acuity Ads (\$156mm).
- LUMA.A companies have an average '22E Net Revenue of ~\$850mm and trade at an average EV / '22E Net Revenue of 9.4x. Of the LUMA.A companies, Roku is expected to have the highest Revenue in '22E (\$3.8bn) followed closely by AppLovin (\$3.7bn).
- Unity Software is trading at the highest EV / '22E Net Revenue at 32.5x. Outbrain is trading at the lowest EV / '22E Net Revenue multiple at 1.8x. The average Net Revenue Growth Rate for '22E is 26.4%, a drop from the average '21E Net Revenue Growth Rate of 38.1% during which companies were growing relative to a COVID-affected comparison period.
- LUMA.A companies have an average expected '22E EBITDA Margin of 25.9%.⁽³⁾ AppLovin has the highest '22E EBITDA at \$1.1bn. EBITDA Margins are expected to remain almost flat with the average for '21E EBITDA Margin at 25.9% while average '22E EBITDA Margin is 26.1%.

Number of Companies

24

Four overlap with LUMA.M

Average Enterprise Value

\$8.8bn

Average '22E Net Revenue⁽¹⁾

~\$850mm

Average EV / '22E Net Revenue⁽²⁾

9.4x

Average '22E Net Rev. Growth %

+26.4%

Down from +38.4% in 2021E

Average '22E EBITDA Margin %⁽³⁾

26.1%

Source: LUMA, PitchBook, Company announcements. **Note:** Discrepancies between Average 2022E Revenue, Average EV / 2022E Revenue, and Average EV are due to certain companies lacking 2022E revenue estimates (thus being excluded from averages). **(1)** Figure rounded to nearest \$10 million. **(2)** Net Revenue definitions vary by company – see Appendix A for detailed methodology and definitions regarding “Net Revenue” for LUMA.A. **(3)** EBITDA margins calculated on Net Revenue basis – see appendix A for detailed methodology and definitions.

LUMA.A – Summary Valuation Statistics

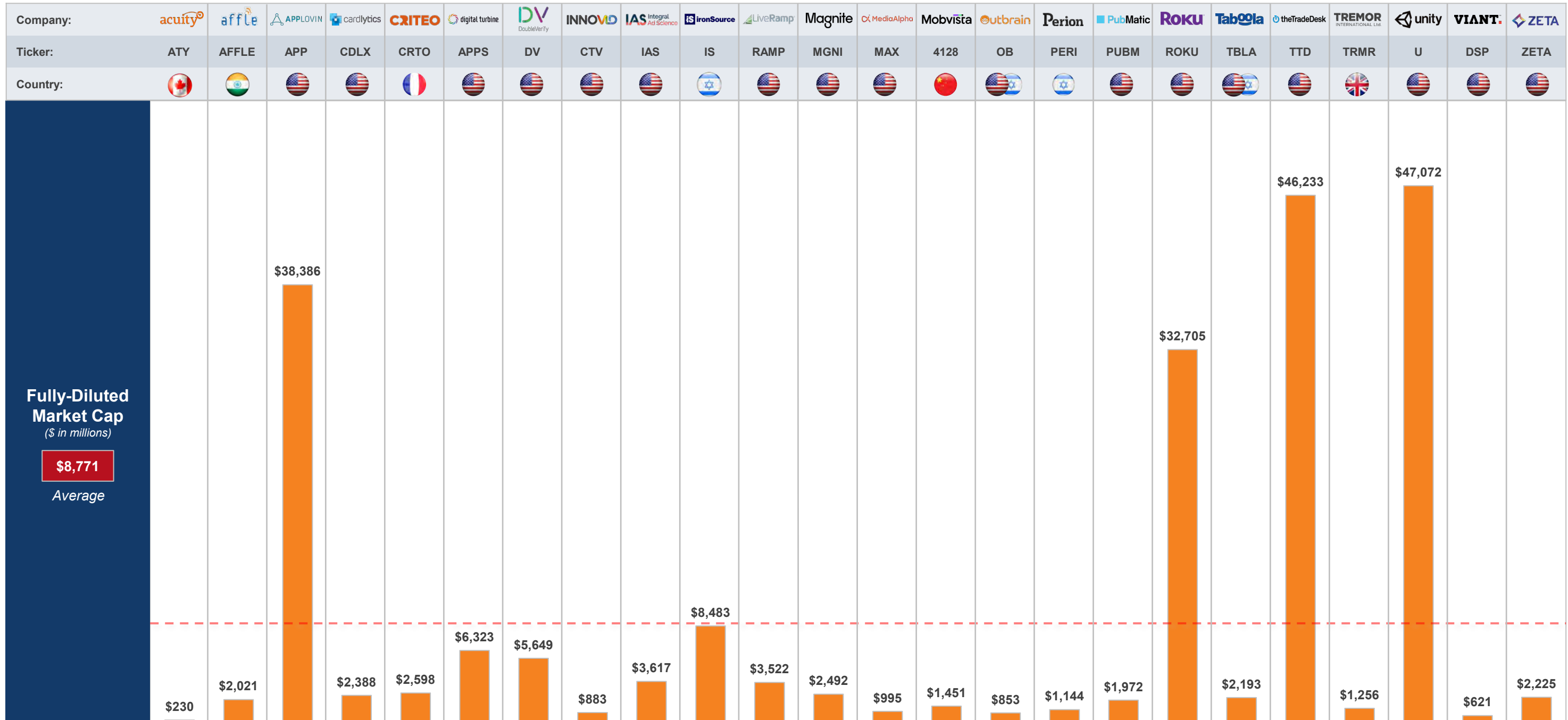
IMPORTANT: FIGURES REFLECT DEFINITIONAL ADJUSTMENTS TO CONFORM TO CUSTOMARY FINANCIAL DEFINITIONS UTILIZED IN THE ADVERTISING TECHNOLOGY SUB-SECTOR. SEE APPENDIX A FOR DETAIL ON METHODOLOGY & DEFINITIONS.

Company	Ticker	Exchange	Share Price	FD Market Cap	Enterprise Value	EV / Net Revenue			EV / EBITDA		
						CY2020A	CY2021E	CY2022E	CY2020A	CY2021E	CY2022E
Acuity Ads*	ATY	NASDAQ	\$3.76	\$230	\$157	3.7x	3.1x	2.7x	12.5x	9.3x	9.2x
Affle ⁽¹⁾	AFFLE	BSE	\$15.17	\$2,021	\$1,970	71.3x	NA	NA	NM	NM	49.2x
AppLovin	APP	NASDAQ	\$94.26	\$38,386	\$39,172	27.0x	14.1x	10.5x	NM	54.2x	34.7x
Cardlytics*	CDLX	NASDAQ	\$66.09	\$2,388	\$2,346	36.7x	24.2x	18.0x	NM	NM	NM
Criteo [†]	CRTO	NASDAQ	\$38.87	\$2,598	\$2,214	2.7x	2.4x	2.2x	8.8x	6.9x	6.3x
Digital Turbine ⁽²⁾	APPS	NASDAQ	\$60.99	\$6,323	\$6,484	28.2x	20.3x	13.5x	NM	46.6x	25.3x
DoubleVerify	DV	NYSE	\$33.28	\$5,649	\$5,329	21.8x	16.2x	12.4x	72.8x	51.2x	40.8x
Innovid ⁽³⁾	CTV	NYSE	\$6.65	\$883	\$726	10.6x	7.7x	5.6x	NM	NM	46.5x
Integral Ad Science	IAS	NASDAQ	\$22.21	\$3,617	\$3,785	15.7x	12.0x	9.4x	67.1x	38.3x	32.2x
ironSource	IS	NYSE	\$7.74	\$8,483	\$7,730	23.5x	14.3x	10.9x	74.3x	41.4x	32.6x
LiveRamp	RAMP	NYSE	\$47.95	\$3,522	\$2,986	6.7x	5.7x	4.7x	NM	65.3x	43.7x
Magnite ⁽⁴⁾	MGNI	NASDAQ	\$17.50	\$2,492	\$3,026	8.5x	6.7x	5.7x	40.0x	21.2x	17.0x
MediaAlpha*	MAX	NYSE	\$15.44	\$995	\$1,093	12.8x	10.7x	9.5x	18.8x	18.6x	16.4x
Mobvista*	1860	HKG	\$0.88	\$1,451	\$1,382	16.9x	NA	NA	NM	NA	NA
Outbrain ^{†(5)}	OB	NASDAQ	\$14.00	\$853	\$607	3.1x	2.2x	1.8x	14.8x	6.9x	5.7x
Perion Network [†]	PERI	NASDAQ	\$24.05	\$1,144	\$1,003	7.7x	NA	NA	30.6x	15.5x	13.4x
PubMatic	PUBM	NASDAQ	\$34.05	\$1,972	\$1,835	12.3x	8.1x	6.5x	36.5x	21.1x	19.8x
Roku	ROKU	NASDAQ	\$228.20	\$32,705	\$31,011	17.4x	11.1x	8.1x	NM	67.8x	56.6x
Taboola ^{†(6)}	TBLA	NASDAQ	\$7.78	\$2,193	\$2,170	5.7x	4.2x	3.3x	20.4x	12.3x	10.8x
The Trade Desk	TTD	NASDAQ	\$91.64	\$46,233	\$45,728	54.7x	38.5x	29.6x	NM	NM	NM
Tremor International ⁽⁷⁾	TRMR	LSE	\$7.50	\$1,256	\$922	4.4x	3.1x	2.6x	15.2x	6.2x	5.9x
Unity Software	U	NYSE	\$142.99	\$47,072	\$45,914	59.4x	42.3x	32.5x	NM	NM	NM
Viant [†]	DSP	NASDAQ	\$9.71	\$621	\$609	5.5x	4.3x	3.4x	19.1x	17.9x	15.8x
Zeta Global	ZETA	NYSE	\$8.42	\$2,225	\$2,292	6.2x	5.1x	4.4x	58.0x	37.4x	29.4x
Average						19.3x	12.2x	9.4x	34.9x	29.9x	25.6x
Median						12.6x	8.1x	6.5x	25.5x	21.2x	22.6x
25th Percentile						6.1x	4.3x	3.4x	16.1x	13.1x	12.7x
75th Percentile						24.4x	14.3x	10.9x	53.5x	45.3x	36.3x

Source: FactSet (market data as of 12/31/2021), Company Filings. **Note:** Figures correspond to calendar years, or closest equivalent period. See Appendices A and B for company-specific details and methodologies. Forward estimates excluded for companies whose relevant metrics are not available on a forward basis (i.e., excluded if brokers do not forecast the specific metric such as "Ex-TAC Gross Profit" or similar such top-line metric) * Denotes usage of Gross Profit as proxy for Net Revenue † Denotes usage of Revenue ex-TAC as proxy for Net Revenue. EBITDA multiples less than zero or greater than 75.0x are considered not meaningful ("NM"). (1) Affle figures contemplate Revenue less Inventory and Data Costs (2) Digital Turbine figures presented on a pro forma basis inclusive of recent material acquisitions (Fyber, AdColony) for CY2021; consensus figures contemplated thereafter. Source data for analysis compiled by LUMA from public filings and equity research reports of the respective target companies. (3) Innovid forward projections per Company's June 2021 Investor Presentation. (4) Magnite Figures presented on a pro forma basis inclusive of Telaria and SpotX acquisitions for all presented periods. Latest Pro Forma figures available are utilized for each respective period (i.e., CY 2021 Net Revenue figures are per Craig Hallum's May 3, 2021 equity research report; CY 2022 Net Revenue figures are per Craig Hallum's July 3, 2021 report). (5) Outbrain forward projections per Jefferies Equity Research as of November 12, 2021. (6) Taboola forward Net Revenue projections per Keybank Research as of December 5, 2021. (7) Tremor International's share price contemplates ordinary share price that represent approximately half of the NASDAQ-listed ADS share price.

LUMA.A – Valuation Statistics

IMPORTANT: FIGURES REFLECT DEFINITIONAL ADJUSTMENTS TO CONFORM TO CUSTOMARY FINANCIAL DEFINITIONS UTILIZED IN THE ADVERTISING TECHNOLOGY SUB-SECTOR. SEE APPENDIX A FOR DETAIL ON METHODOLOGY & DEFINITIONS.

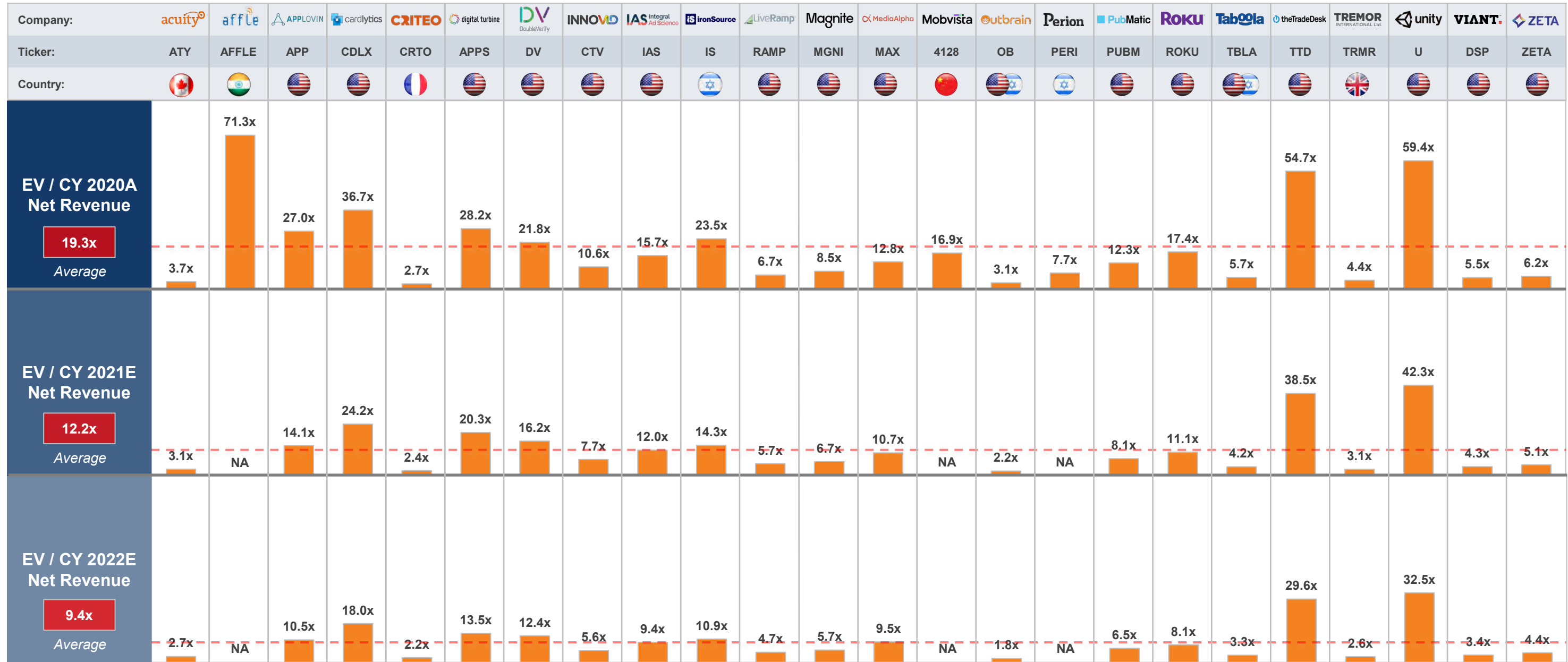


Source: FactSet (market data as of 12/31/2021), Company Filings. See Appendices A and B for company-specific details and methodologies.



LUMA.A – EV / Net Revenue

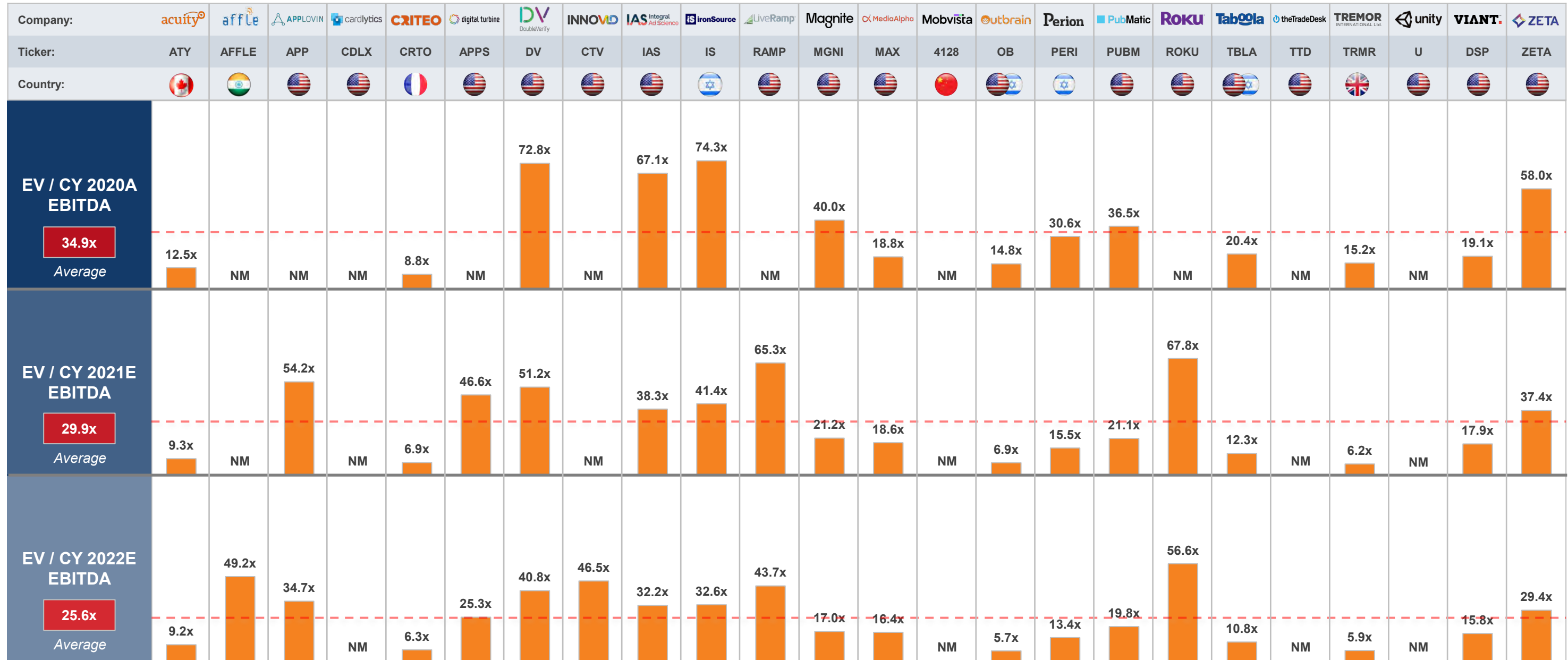
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Source: FactSet (market data as of 12/31/2021), Company Filings. See Appendices A and B for company-specific details and methodologies.

LUMA.A – EV / EBITDA

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Source: FactSet (market data as of 12/31/2021), Company Filings. Note: Figures correspond to calendar years, or closest equivalent period. Please see Appendix B for company-specific details. EBITDA margins calculated with "Net Revenue" as denominator, therefore figures shown here may not correspond to a given company's reported EBITDA margin. EBITDA multiples less than zero or greater than 75.0x are considered not meaningful ("NM"). See Appendices A and B for company-specific details and methodologies.

LUMA.A – Net Revenue

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Company:	acuity	afble	APPROVIN	cardlytics	CRITEO	digital turbine	DoubleVerify	INNOVD	IAS Integral Ad Science	ironSource	LiveRamp	Magnite	MediaAlpha	Mobvista	outbrain	Perion	PubMatic	Roku	Taboola	theTradeDesk	TREMOR INTERNATIONAL LTD	unity	VIAANT	ZETA	
Ticker:	ATY	AFFLE	APP	CDLX	CRTO	APPS	DV	CTV	IAS	IS	RAMP	MGNI	MAX	4128	OB	PERI	PUBM	ROKU	TBLA	TTD	TRMR	U	DSP	ZETA	
Country:	Canada	India	USA	USA	France	USA	USA	USA	USA	Israel	USA	USA	USA	USA	China	USA/Israel	Israel	USA	USA	USA/Israel	USA	UK	USA	USA	USA
CY 2020A Net Revenue (\$ in millions) \$393 Average	\$43	\$28	\$1,451	\$64	\$825	\$230	\$244	\$69	\$241	\$329	\$443	\$356	\$85	\$82	\$194	\$130	\$149	\$1,778	\$382	\$836	\$212	\$772	\$111	\$368	
CY 2021E Net Revenue (\$ in millions) \$643 Average	\$50	NA	\$2,783	\$97	\$917	\$320	\$328	\$95	\$315	\$540	\$525	\$455	\$102	NA	\$271	NA	\$227	\$2,794	\$513	\$1,188	\$299	\$1,087	\$142	\$446	
CY 2022E Net Revenue (\$ in millions) \$832 Average	\$58	NA	\$3,745	\$130	\$1,026	\$479	\$431	\$130	\$403	\$712	\$634	\$530	\$115	NA	\$336	NA	\$283	\$3,810	NA	\$1,547	\$349	\$1,413	\$177	\$518	
'21E Growth % YoY	17%	NA	92%	52%	11%	39%	34%	38%	31%	64%	18%	28%	19%	NA	40%	NA	53%	57%	34%	42%	41%	41%	28%	21%	
'22E Growth % YoY	15%	NA	35%	34%	12%	50%	32%	37%	28%	32%	21%	17%	13%	NA	24%	NA	25%	36%	28%	30%	17%	30%	25%	16%	
'20A - '22E CAGR %	16%	NA	61%	43%	11%	44%	33%	38%	29%	47%	20%	22%	16%	NA	31%	NA	38%	46%	31%	36%	28%	35%	27%	19%	

Source: FactSet (market data as of 12/31/2021), Company Filings. See Appendices A and B for company-specific details and methodologies.

LUMA.A – EBITDA Margin (NR Basis)⁽¹⁾

IMPORTANT: FIGURES REFLECT DEFINITIONAL ADJUSTMENTS TO CONFORM TO CUSTOMARY FINANCIAL DEFINITIONS UTILIZED IN THE ADVERTISING TECHNOLOGY SUB-SECTOR. SEE APPENDIX A FOR DETAIL ON METHODOLOGY & DEFINITIONS.

Company:	acuity	affle	APPROVIN	cardlytics	CRITEO	digital turbine	DoubleVerify	INNOVD	IAS Integral Ad Science	ironSource	LiveRamp	Magnite	MediaAlpha	Mobvista	outbrain	Perion	PubMatic	Roku	Taboola	theTradeDesk	TREMOR INTERNATIONAL LTD	unity	VIAANT	ZETA	
Ticker:	ATY	AFFLE	APP	CDLX	CRTO	APPS	DV	CTV	IAS	IS	RAMP	MGNI	MAX	4128	OB	PERI	PUBM	ROKU	TBLA	TTD	TRMR	U	DSP	ZETA	
Country:																									
CY 2020A EBITDA Margin Net Revenue Basis	29.2%	NC	23.8%	(12.2%)	30.4%	32.3%	30.0%	3.8%	23.4%	31.6%	5.8%	21.3%	NC	(9.6%)	21.1%	25.1%	33.8%	8.4%	27.8%	33.9%	28.5%	(3.3%)	28.8%	10.7%	
	19.3%																								
Average																									
CY 2021E EBITDA Margin Net Revenue Basis	33.7%	NC	26.0%	(17.4%)	34.8%	43.6%	31.8%	7.6%	31.4%	34.6%	8.7%	31.3%	NC	NA	32.5%	NA	38.4%	16.4%	37.4%	41.2%	50.1%	(1.4%)	23.9%	13.7%	
	25.9%																								
Average																									
CY 2022E EBITDA Margin Net Revenue Basis	29.4%	NC	30.1%	(2.9%)	34.5%	53.4%	30.3%	12.0%	29.1%	33.3%	10.8%	33.6%	NC	NA	31.9%	NA	32.7%	14.4%	NA	38.4%	45.0%	2.2%	21.7%	15.0%	
	26.1x																								
Average																									
'20A Change (bps)	1200	NA	NA	(1980)	(120)	NA	NA	NA	NA	NA	(360)	NA	NA	NA	NA	(60)	NA	NA	(4240)	2660	NA	NA	NA	NA	
'21E Change (bps)	450	NA	210	(520)	430	1120	170	380	800	300	300	1010	NA	NA	1140	NA	450	790	960	720	2150	190	(490)	300	
'22E Change (bps)	(430)	NA	420	1450	(30)	990	(150)	440	(230)	(120)	210	220	NA	NA	(70)	NA	(570)	(200)	NA	(280)	(500)	360	(220)	130	

Source: FactSet (market data as of 12/31/2021), Company Filings. Note: EBITDA margins calculated with "Net Revenue" as denominator, and therefore may not correspond to a given company's reported EBITDA margin. "NC" denotes not calculated. See Appendices A and B for details on methodology.

LUMA.A – Summary Financial Statistics

IMPORTANT: FIGURES REFLECT DEFINITIONAL ADJUSTMENTS TO CONFORM TO CUSTOMARY FINANCIAL DEFINITIONS UTILIZED IN THE ADVERTISING TECHNOLOGY SUB-SECTOR. SEE APPENDIX A FOR DETAIL ON METHODOLOGY & DEFINITIONS.

Company	Ticker	Net Revenue			Net Revenue Growth %			EBITDA			EBITDA Margin %		
		CY2020A	CY2021E	CY2022E	CY2020A	CY2021E	CY2022E	CY2020A	CY2021E	CY2022E	CY2020A	CY2021E	CY2022E
Acuity Ads*	ATY	\$43	\$50	\$58	(0.4%)	17.2%	15.4%	\$13	\$17	\$17	29.2%	33.7%	29.4%
Affle ⁽¹⁾	AFFLE	\$28	NA	NA	NA	NA	NA	\$18	\$26	\$40	64.6%	NA	NA
AppLovin	APP	\$1,451	\$2,783	\$3,745	NA	91.8%	34.6%	\$346	\$722	\$1,128	23.8%	26.0%	30.1%
Cardlytics*	CDLX	\$64	\$97	\$130	(20.0%)	51.8%	34.2%	(\$8)	(\$17)	(\$4)	(12.2%)	(17.4%)	(2.9%)
Criteo [†]	CRTO	\$825	\$917	\$1,026	(12.8%)	11.1%	11.8%	\$251	\$319	\$354	30.4%	34.8%	34.5%
Digital Turbine ⁽²⁾	APPS	\$230	\$320	\$479	NA	38.9%	49.8%	\$74	\$139	\$256	32.3%	43.6%	53.4%
DoubleVerify	DV	\$244	\$328	\$431	33.5%	34.5%	31.5%	\$73	\$104	\$131	30.0%	31.8%	30.3%
Innovid ⁽³⁾	CTV	\$69	\$95	\$130	21.8%	37.8%	37.2%	\$3	\$7	\$16	3.8%	7.6%	12.0%
Integral Ad Science	IAS	\$241	\$315	\$403	12.7%	30.9%	28.0%	\$56	\$99	\$117	23.4%	31.4%	29.1%
ironSource	IS	\$329	\$540	\$712	NA	64.1%	31.8%	\$104	\$187	\$237	31.6%	34.6%	33.3%
LiveRamp	RAMP	\$443	\$525	\$634	16.4%	18.5%	20.7%	\$26	\$46	\$68	5.8%	8.7%	10.8%
Magnite ⁽⁴⁾	MGNI	\$356	\$455	\$530	NA	27.8%	16.6%	\$76	\$142	\$178	21.3%	31.3%	33.6%
MediaAlpha*	MAX	\$85	\$102	\$115	NA	19.2%	13.0%	\$58	\$59	\$66	68.0%	57.9%	57.8%
Mobvista*	1860	\$82	-	-	(31.1%)	NA	NA	(\$8)	-	-	(9.6%)	NA	NA
Outbrain ^{†(5)}	OB	\$194	\$271	\$336	NA	39.6%	23.8%	\$41	\$88	\$107	21.1%	32.5%	31.9%
Perion Network [†]	PERI	\$130	NA	NA	3.8%	NA	NA	\$33	\$64	\$75	25.1%	NA	NA
PubMatic	PUBM	\$149	\$227	\$283	NA	52.6%	24.9%	\$50	\$87	\$93	33.8%	38.4%	32.7%
Roku	ROKU	\$1,778	\$2,794	\$3,810	57.5%	57.1%	36.4%	\$150	\$457	\$548	8.4%	16.4%	14.4%
Taboola ^{†(6)}	TBLA	\$382	\$513	\$655	25.5%	34.3%	27.5%	\$106	\$176	\$201	27.8%	34.2%	30.7%
The Trade Desk	TTD	\$836	\$1,188	\$1,547	26.5%	42.0%	30.2%	\$284	\$489	\$594	33.9%	41.2%	38.4%
Tremor International ⁽⁷⁾	TRMR	\$212	\$299	\$349	(34.9%)	41.1%	16.8%	\$61	\$150	\$157	28.5%	50.1%	45.0%
Unity Software	U	\$772	\$1,087	\$1,413	NA	40.7%	30.1%	(\$25)	(\$15)	\$31	(3.3%)	(1.4%)	2.2%
Viant [†]	DSP	\$111	\$142	\$177	NA	28.4%	25.0%	\$32	\$34	\$39	28.8%	23.9%	21.7%
Zeta Global	ZETA	\$368	\$446	\$518	NA	21.3%	16.1%	\$40	\$61	\$78	10.7%	13.7%	15.0%
Average					7.6%	38.1%	26.4%				23.2%	27.3%	27.8%
Median					12.7%	37.8%	27.5%				26.5%	31.8%	30.3%
25th Percentile					(12.8%)	27.8%	16.8%				10.2%	16.4%	15.0%
75th Percentile					25.5%	42.0%	31.8%				30.7%	34.8%	33.6%

Source: FactSet (market data as of 12/31/2021), Company Filings. **Note:** Figures correspond to calendar years, or closest equivalent period. See Appendices A and B for company-specific details and methodologies. Forward estimates excluded for companies whose relevant metrics are not available on a forward basis (i.e., excluded if brokers do not forecast the specific metric such as "Ex-TAC Gross Profit" or similar such top-line metric) * Denotes usage of Gross Profit as proxy for Net Revenue † Denotes usage of Revenue ex-TAC as proxy for Net Revenue ‡ Denotes figures presented on estimated pro forma basis. EBITDA multiples less than zero or greater than 75.0x are considered not meaningful ("NM"). (1) Affle figures contemplate Revenue less Inventory and Data Costs (2) Digital Turbine figures presented on an estimated pro forma basis inclusive of estimates for recent material acquisitions (Fyber, AdColony) for CY2021; consensus figures contemplated thereafter (due to the fact such figures are projected on a combined basis). Source data for analysis compiled by LUMA from public filings and equity research reports of the respective target companies. See Appendix B for further details on methodology. (3) Innovid forward projections per Company's June 2021 Investor Presentation. (4) For Magnite, CY 2021 figures are presented on an estimated pro forma basis inclusive of estimates for Telaria and SpotX acquisitions for all presented periods. Pro forma figures are estimated by adjusting initial pro forma forecast published by Craig Hallum (as of May 3rd, 2021) with figures derived from (i) interim reported financial performance versus prior consensus estimates (e.g., Q2/Q3 actuals versus consensus for corresponding periods), and (ii) revisions to consensus estimates of future performance. Current estimates for Magnite contemplate Craig Hallum equity research as of November 17, 2021. See Appendix B for further details on methodology. (5) Outbrain forward projections per Jefferies Equity Research as of November 12, 2021. (6) Taboola forward Net Revenue projections per Keybank Research as of December 5, 2021. (7) Tremor International's share price contemplates ordinary share price that represent approximately half of the NASDAQ-listed ADS share price.

LUMA.A – Summary Financial Statistics

IMPORTANT: FIGURES REFLECT DEFINITIONAL ADJUSTMENTS TO CONFORM TO CUSTOMARY FINANCIAL DEFINITIONS UTILIZED IN THE ADVERTISING TECHNOLOGY SUB-SECTOR. SEE APPENDIX A FOR DETAIL ON METHODOLOGY & DEFINITIONS.

Company	Ticker	R&D Expense % of Net Revenue			G&A Expense % of Net Revenue			S&M Expense % of Net Revenue		
		CY2020A	CY2021E	CY2022E	CY2020A	CY2021E	CY2022E	CY2020A	CY2021E	CY2022E
Acuity Ads*	ATY	24.5%	21.9%	19.6%	11.0%	12.0%	12.5%	33.7%	34.0%	38.1%
Affle ⁽¹⁾	AFFLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
AppLovin	APP	11.3%	11.1%	11.7%	4.1%	4.2%	4.0%	42.5%	39.7%	37.5%
Cardlytics*	CDLX	20.1%	31.6%	28.6%	46.8%	51.4%	42.9%	55.5%	56.8%	49.5%
Criteo [†]	CRTO	14.6%	14.6%	14.3%	12.7%	14.3%	13.4%	37.8%	33.8%	33.9%
Digital Turbine ⁽²⁾	APPS	8.7%	22.4%	17.6%	14.7%	39.0%	25.5%	8.4%	21.3%	17.2%
DoubleVerify	DV	19.0%	18.3%	18.6%	13.8%	16.2%	12.9%	22.6%	21.6%	20.7%
Innovid ⁽³⁾	CTV	8.7%	22.4%	17.6%	14.7%	39.0%	25.5%	8.4%	21.3%	17.2%
Integral Ad Science	IAS	NA	18.4%	18.2%	NA	17.5%	15.1%	NA	24.8%	24.5%
ironSource	IS	NA	15.3%	14.4%	NA	11.0%	9.6%	NA	36.7%	35.6%
LiveRamp	RAMP	21.7%	25.0%	24.3%	16.5%	17.0%	16.4%	31.0%	30.4%	30.0%
Magnite ⁽⁴⁾	MGNI	13.4%	17.7%	19.3%	13.9%	12.9%	14.4%	20.3%	29.3%	31.0%
MediaAlpha*	MAX	14.5%	13.1%	12.4%	38.5%	51.1%	46.0%	24.0%	20.4%	20.1%
Mobvista*	1860	39.0%	NA	NA	4.9%	NA	NA	20.7%	NA	NA
Outbrain ^{†(5)}	OB	NA	13.8%	13.5%	NA	23.8%	19.8%	NA	33.3%	31.8%
Perion Network [†]	PERI	23.7%	NA	NA	12.1%	NA	NA	30.0%	NA	NA
PubMatic	PUBM	8.3%	7.2%	8.3%	13.6%	15.2%	15.1%	29.1%	26.4%	29.7%
Roku	ROKU	20.0%	16.6%	17.2%	9.7%	9.1%	9.1%	16.8%	15.2%	16.2%
Taboola ^{†(6)}	TBLA	NA	21.1%	21.6%	NA	21.5%	15.9%	NA	35.1%	32.6%
The Trade Desk	TTD	15.5%	15.9%	16.2%	16.2%	16.2%	17.5%	17.3%	18.0%	17.8%
Tremor International ⁽⁷⁾	TRMR	NA	5.9%	6.2%	NA	18.2%	19.9%	NA	26.8%	27.0%
Unity Software	U	41.4%	49.2%	45.2%	19.8%	23.0%	21.4%	24.1%	26.0%	25.1%
Viant [†]	DSP	7.9%	11.4%	9.0%	15.9%	23.0%	18.2%	26.2%	31.3%	30.4%
Zeta Global	ZETA	41.4%	49.2%	45.2%	19.8%	23.0%	21.4%	24.1%	26.0%	25.1%
Average		19.7%	20.1%	19.0%	16.6%	21.8%	18.9%	26.2%	29.0%	28.1%
Median		17.3%	17.7%	17.6%	14.3%	17.5%	16.4%	24.1%	26.8%	29.7%
25th Percentile		11.8%	13.8%	13.5%	12.3%	14.3%	13.4%	20.4%	21.6%	20.7%
75th Percentile		23.2%	22.4%	19.6%	16.4%	23.0%	21.4%	30.7%	33.8%	32.6%

Source: FactSet (market data as of 12/31/2021), Company Filings. **Note:** Figures correspond to calendar years, or closest equivalent period. See Appendices A and B for company-specific details and methodologies. Forward estimates excluded for companies whose relevant metrics are not available on a forward basis (i.e., excluded if brokers do not forecast the specific metric such as "Ex-TAC Gross Profit" or similar such top-line metric) * Denotes usage of Gross Profit as proxy for Net Revenue † Denotes usage of Revenue ex-TAC as proxy for Net Revenue. ‡ Denotes figures presented on estimated pro forma basis. EBITDA multiples less than zero or greater than 75.0x are considered not meaningful ("NM"). (1) Affle figures contemplate Revenue less Inventory and Data Costs (2) Digital Turbine figures presented on an estimated pro forma basis inclusive of estimates for recent material acquisitions (Fyber, AdColony) for CY2021; consensus figures contemplated thereafter (due to the fact such figures are projected on a combined basis). Source data for analysis compiled by LUMA from public filings and equity research reports of the respective target companies. See Appendix B for further details on methodology. (3) Innovid forward projections per Company's June 2021 Investor Presentation. (4) For Magnite, CY 2021 figures are presented on an estimated pro forma basis inclusive of estimates for Telaria and SpotX acquisitions for all presented periods. Pro forma figures are estimated by adjusting initial pro forma forecast published by Craig Hallum (as of May 3rd, 2021) with figures derived from (i) interim reported financial performance versus prior consensus estimates (e.g., Q2/Q3 actuals versus consensus for corresponding periods), and (ii) revisions to consensus estimates of future performance. Current estimates for Magnite contemplate Craig Hallum equity research as of November 17, 2021. See Appendix B for further details on methodology. (5) Outbrain forward projections per Jefferies Equity Research as of November 12, 2021. (6) Taboola forward Net Revenue projections per Keybank Research as of December 5, 2021. (7) Tremor International's share price contemplates ordinary share price that represent approximately half of the NASDAQ-listed ADS share price.

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LUMA.M – Financial Benchmarking Overview

Observations

- The LUMA.M Index cohort now has 26 companies, with the addition of the eleven new public entrants during 2021.
- The average Enterprise Value of LUMA.M constituents is \$14.5bn with the largest company being Shopify (\$170.5bn) and the smallest company being Kaltura (\$368mm).
- LUMA.M companies have an average '22E Revenue \$893mm at an average EV / '22 Revenue of 12.2x. Of the LUMA.M companies, Shopify is expected to have the highest Revenue in '22E (\$6.1bn).
- Amplitude is trading at the highest EV / '22E Revenue at 28.4x. Kaltura is trading at the lowest EV / '22E Revenue multiple at 1.5x. The average Revenue Growth Rate for '22E is 24.8% a significant drop from the average '21E Revenue Growth Rate of 32.8% during which companies were growing relative to a COVID-affected comparison period.
- LUMA.M companies have an average '22E EBITDA of \$92mm at an average '22E EBITDA Margin of 4.7%. Shopify has the highest '22E EBITDA at \$811mm. Average EBITDA Margins are expected to drop as the average '21E EBITDA Margin is currently projected to be 5.7% of revenue, versus the average '22E EBITDA Margin of 4.7% of revenue.

Number of Companies

26

Four overlap with LUMA.M

Average Enterprise Value

\$14.0bn

Average '22E Net Revenue⁽¹⁾

~\$900mm

Average EV / '22E Revenue

11.2x

Average '22E Revenue Growth %

+24.8%

Down from +32.8% in 2021E

Average '22E EBITDA Margin %

4.7%

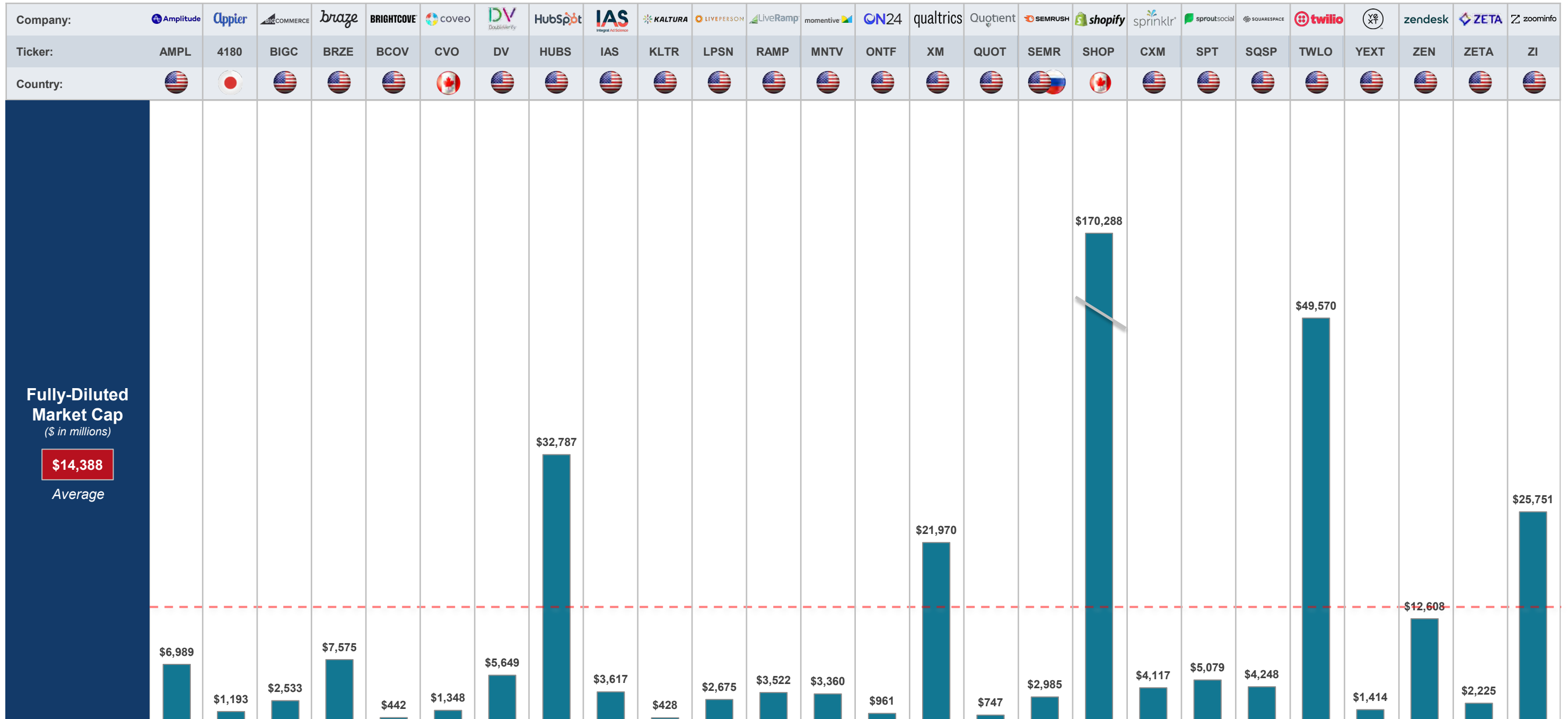
Source: LUMA, PitchBook, Company announcements. Note: Discrepancies between Average 2022E Revenue, Average EV / 2022E Revenue, and Average EV are due to certain companies lacking 2022E revenue estimates (thus being excluded from averages). (1) Figure rounded to nearest \$10 million.

LUMA.M – Summary Valuation Statistics

Company	Ticker	Exchange	Share	FD	Enterprise	EV / Net Revenue			EV / EBITDA		
			Price	Market Cap	Value	CY2020A	CY2021E	CY2022E	CY2020A	CY2021E	CY2022E
Amplitude	AMPL	NASDAQ	\$52.94	\$6,989	\$6,670	65.1x	40.5x	28.4x	NA	NM	NM
Appier	4180	TYO	\$11.58	\$1,193	\$1,017	12.1x	9.5x	7.2x	NM	NM	NM
BigCommerce	BIGC	NASDAQ	\$35.37	\$2,533	\$2,472	16.2x	11.4x	8.9x	NM	NM	NM
Braze	BRZE	NASDAQ	\$77.16	\$7,575	\$7,498	49.9x	32.2x	22.7x	NA	NM	NM
Brightcove	BCOV	NASDAQ	\$10.22	\$442	\$403	2.0x	1.9x	1.8x	19.7x	19.0x	18.5x
Coveo	CVO	TSE	\$13.06	\$1,348	\$2,160	33.3x	26.1x	20.1x	NA	NM	NM
DoubleVerify	DV	NYSE	\$33.28	\$5,649	\$5,329	21.8x	16.2x	12.4x	72.8x	51.2x	40.8x
Hubspot	HUBS	NYSE	\$659.15	\$32,787	\$32,331	36.6x	25.1x	19.4x	NM	NM	NM
Integral Ad Science	IAS	NASDAQ	\$22.21	\$3,617	\$3,785	15.7x	12.0x	9.4x	67.1x	38.3x	32.2x
Kaltura	KLTR	NASDAQ	\$3.37	\$428	\$310	2.6x	1.9x	1.5x	NA	NM	NM
LivePerson	LPSN	NASDAQ	\$35.72	\$2,675	\$2,613	7.1x	5.6x	4.4x	68.9x	NM	NM
LiveRamp	RAMP	NYSE	\$47.95	\$3,522	\$2,986	6.7x	5.7x	4.7x	NM	65.3x	43.7x
Momentive	MNTV	NASDAQ	\$21.15	\$3,360	\$3,350	8.9x	7.5x	6.3x	73.8x	69.1x	52.5x
ON24	ONTF	NYSE	\$17.35	\$961	\$566	3.6x	2.8x	2.5x	20.4x	NM	NM
Qualtrics	XM	NASDAQ	\$35.40	\$21,970	\$22,122	29.0x	20.9x	16.3x	NM	NM	NM
Quotient	QUOT	NYSE	\$7.42	\$747	\$710	1.6x	1.4x	1.6x	15.4x	25.7x	13.8x
SEMrush	SEMR	NYSE	\$20.85	\$2,985	\$2,797	22.4x	15.0x	11.8x	NM	NM	NM
Shopify	SHOP	TSE	\$1,377.39	\$170,288	\$163,848	55.9x	35.8x	26.8x	NM	NM	NM
Sprinklr	CXM	NYSE	\$15.87	\$4,117	\$3,575	9.2x	7.3x	6.1x	NM	NM	NM
SproutSocial	SPT	NASDAQ	\$90.69	\$5,079	\$4,929	37.1x	26.5x	20.2x	NM	NM	NM
Squarespace	SQSP	NYSE	\$29.50	\$4,248	\$4,515	7.3x	5.8x	4.8x	38.7x	39.3x	32.2x
Twilio	TWLO	NYSE	\$263.34	\$49,570	\$45,455	25.8x	16.4x	12.4x	NM	NM	NM
Yext	YEXT	NYSE	\$9.92	\$1,414	\$1,318	3.7x	3.4x	3.0x	NM	NM	NM
Zendesk	ZEN	NYSE	\$104.29	\$12,608	\$12,847	12.5x	9.6x	7.6x	NM	NM	NM
Zeta	ZETA	NYSE	\$8.42	\$2,225	\$2,292	6.2x	5.1x	4.4x	NA	37.4x	29.4x
ZoomInfo	ZI	NASDAQ	\$64.20	\$25,751	\$26,828	56.3x	36.5x	27.4x	NM	NM	63.3x
Average						21.1x	14.7x	11.2x	47.1x	43.2x	36.3x
Median						14.1x	10.5x	8.3x	52.9x	38.8x	32.2x
25th Percentile						6.8x	5.6x	4.5x	20.2x	34.5x	29.4x
75th Percentile						32.2x	24.0x	18.7x	69.9x	54.7x	43.7x

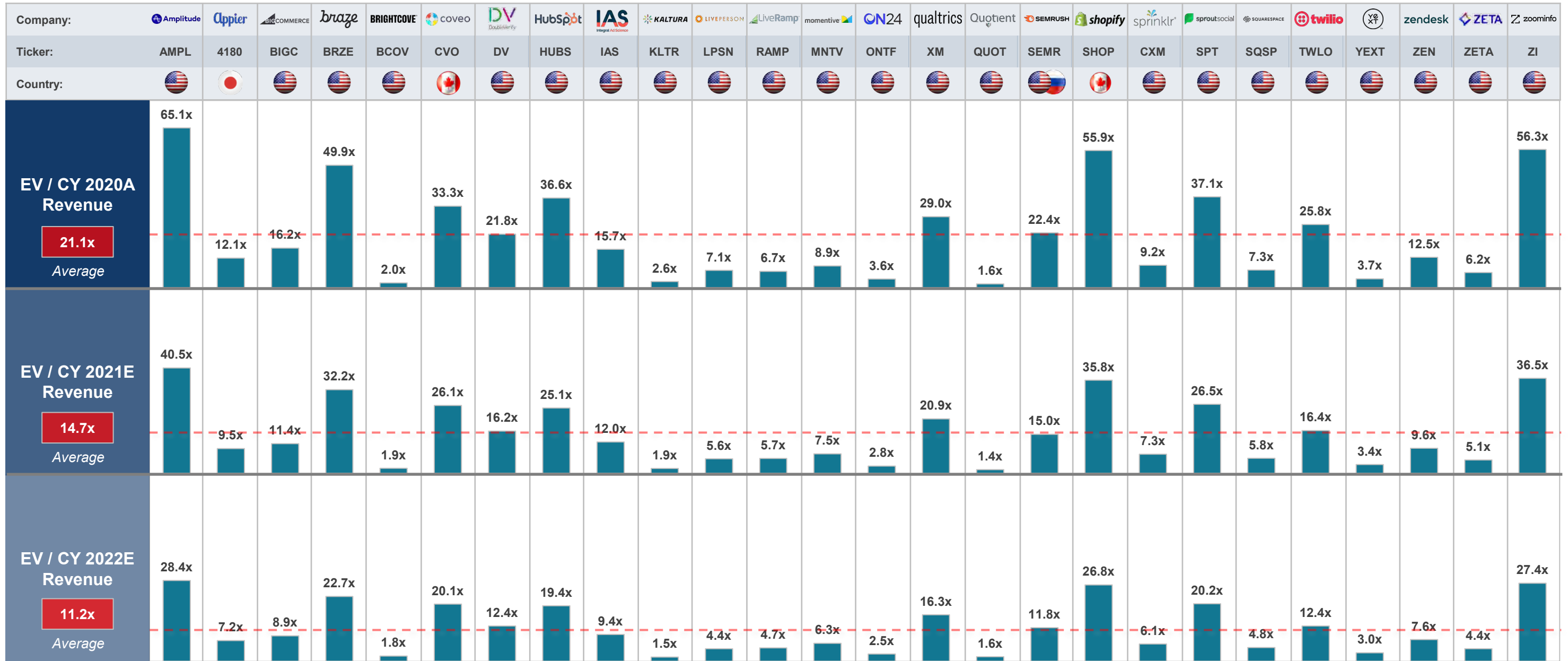
Source: FactSet (market data as of 12/31/2021), Company Filings. See Appendices A and B for company-specific details and methodologies.

LUMA.M – Valuation Statistics



Source: FactSet (market data as of 12/31/2021), Company Filings. See Appendices A and B for company-specific details and methodologies.

LUMA.M – EV / Revenue



Source: FactSet (market data as of 12/31/2021), Company Filings. See Appendices A and B for company-specific details and methodologies.

LUMA.M – EV / EBITDA

Company:																										
Ticker:	AMPL	4180	BIGC	BRZE	BCOV	CVO	DV	HUBS	IAS	KLTR	LPSN	RAMP	MNTV	ONTF	XM	QUOT	SEMR	SHOP	CXM	SPT	SQSP	TWLO	YEXT	ZEN	ZETA	ZI
Country:																										
EV / CY 2020A EBITDA Average 47.1x	NM	NM	NM	NM	19.7x	NM	72.8x	NM	67.1x	NM	68.9x	NM	73.8x	20.4x	NM	15.4x	NM	NM	NM	NM	38.7x	NM	NM	NM	58.0x	NM
EV / CY 2021E EBITDA Average 43.2x	NM	NM	NM	NM	19.0x	NM	51.2x	NM	38.3x	NM	NM	65.3x	69.1x	NM	NM	25.7x	NM	NM	NM	NM	39.3x	NM	NM	NM	37.4x	NM
EV / CY 2022E EBITDA Average 36.3x	NM	NM	NM	NM	18.5x	NM	40.8x	NM	32.2x	NM	NM	43.7x	52.5x	NM	NM	13.8x	NM	NM	NM	NM	32.2x	NM	NM	NM	29.4x	63.3x

Source: FactSet (market data as of 12/31/2021), Company Filings. See Appendices A and B for company-specific details and methodologies.

LUMA.M – Revenue

Company:																										
Ticker:	AMPL	4180	BIGC	BRZE	BCOV	CVO	DV	HUBS	IAS	KLTR	LPSN	RAMP	MNTV	ONTF	XM	QUOT	SEMR	SHOP	CXM	SPT	SQSP	TWLO	YEXT	ZEN	ZETA	ZI
Country:																										
CY 2020A Revenue (\$ in millions) \$499 Average	\$102	\$84	\$152	\$150	\$197	\$65	\$244	\$883	\$241	\$120	\$367	\$443	\$376	\$157	\$764	\$446	\$125	\$2,929	\$387	\$133	\$621	\$1,762	\$355	\$1,030	\$368	\$476
CY 2021E Revenue (\$ in millions) \$700 Average	\$165	\$107	\$217	\$233	\$210	\$83	\$328	\$1,288	\$315	\$165	\$470	\$525	\$447	\$203	\$1,058	\$499	\$186	\$4,579	\$487	\$186	\$782	\$2,767	\$391	\$1,333	\$446	\$735
CY 2022E Revenue (\$ in millions) \$893 Average	\$235	\$140	\$277	\$330	\$219	\$108	\$431	\$1,663	\$403	\$210	\$595	\$634	\$532	\$224	\$1,357	\$453	\$237	\$6,110	\$591	\$244	\$933	\$3,664	\$445	\$1,690	\$518	\$980
'21E Growth % YoY	61%	28%	42%	55%	6%	28%	34%	46%	31%	37%	28%	18%	19%	29%	39%	12%	49%	56%	26%	40%	26%	57%	10%	29%	21%	54%
'22E Growth % YoY	43%	31%	28%	42%	4%	30%	32%	29%	28%	27%	27%	21%	19%	10%	28%	(9%)	27%	33%	21%	31%	19%	32%	14%	27%	16%	33%
'20A - '22E CAGR %	51%	29%	35%	48%	5%	29%	33%	37%	29%	32%	27%	20%	19%	19%	33%	1%	38%	44%	24%	36%	23%	44%	12%	28%	19%	43%

Source: FactSet (market data as of 12/31/2021), Company Filings. See Appendices A and B for company-specific details and methodologies.

LUMA.M – EBITDA Margin

Company:																										
Ticker:	AMPL	4180	BIGC	BRZE	BCOV	CVO	DV	HUBS	IAS	KLTR	LPSN	RAMP	MNTV	ONTF	XM	QUOT	SEMR	SHOP	CXM	SPT	SQSP	TWLO	YEXT	ZEN	ZETA	ZI
Country:																										
CY 2020A EBITDA Margin	(21.8%)	(12.3%)	(16.1%)	(20.3%)	10.4%	(33.7%)	30.0%	12.7%	23.4%	(7.0%)	10.3%	5.8%	12.1%	17.6%	(0.5%)	10.3%	(3.0%)	16.6%	(10.6%)	(13.6%)	18.8%	10.5%	(3.2%)	11.1%	10.7%	49.3%
4.1% Average																										
CY 2021E EBITDA Margin	(5.9%)	NA	(6.4%)	(16.6%)	10.1%	(30.3%)	31.8%	12.4%	31.4%	(7.6%)	3.2%	8.7%	10.9%	NA	NA	5.5%	0.2%	17.0%	(8.5%)	(2.1%)	14.7%	9.1%	(1.7%)	10.2%	13.7%	43.2%
5.7% Average																										
CY 2022E EBITDA Margin	(13.8%)	1.0%	(6.7%)	(30.1%)	10.0%	(32.5%)	30.3%	12.6%	29.1%	(9.8%)	(2.3%)	10.8%	12.0%	(1.5%)	5.6%	11.4%	(0.1%)	13.3%	(7.3%)	(1.3%)	15.0%	8.3%	1.2%	10.0%	15.0%	43.2%
4.7% Average																										
'20A Change (bps)	2730	NA	NA	NA	560	(360)	(1580)	30	NA	NA	1500	1900	(50)	NA	NA	0	NA	1200	NA	360	NA	740	1250	310	NA	NA
'21E Change (bps)	NA	930	970	NA	(30)	NA	170	(30)	800	NA	(720)	300	(120)	(1620)	630	(480)	320	40	NA	1160	(410)	(150)	150	(80)	NA	(600)
'22E Change (bps)	(800)	400	(30)	(1360)	(10)	(250)	(150)	20	(230)	(210)	(550)	210	120	(300)	(20)	580	(30)	(380)	130	80	30	(80)	290	(20)	130	0

Source: FactSet (market data as of 12/31/2021), Company Filings. See Appendices A and B for company-specific details and methodologies.

LUMA.M – Summary Financial Statistics

Company	Ticker	Net Revenue			Net Revenue Growth %			EBITDA			EBITDA Margin %		
		CY2020A	CY2021E	CY2022E	CY2020A	CY2021E	CY2022E	CY2020A	CY2021E	CY2022E	CY2020A	CY2021E	CY2022E
Amplitude	AMPL	\$102	\$165	\$235	49.7%	60.8%	42.7%	(\$22)	(\$10)	(\$33)	(21.8%)	(5.9%)	(13.8%)
Appier	4180	\$84	\$107	\$140	NA	27.6%	31.2%	(\$10)	(\$3)	\$1	(12.3%)	(3.0%)	1.0%
BigCommerce	BIGC	\$152	\$217	\$277	NA	42.2%	27.9%	(\$25)	(\$14)	(\$19)	(16.1%)	(6.4%)	(6.7%)
Braze	BRZE	\$150	\$233	\$330	NA	55.2%	41.6%	(\$31)	(\$39)	(\$99)	(20.3%)	(16.6%)	(30.1%)
Brightcove	BCOV	\$197	\$210	\$219	7.0%	6.4%	4.1%	\$21	\$21	\$22	10.4%	10.1%	10.0%
Coveo	CVO	\$65	\$83	\$108	16.9%	27.7%	30.0%	(\$22)	(\$25)	(\$35)	(33.7%)	(30.3%)	(32.5%)
DoubleVerify	DV	\$244	\$328	\$431	33.5%	34.5%	31.5%	\$73	\$104	\$131	30.0%	31.8%	30.3%
Hubspot	HUBS	\$883	\$1,288	\$1,663	30.8%	45.9%	29.1%	\$112	\$160	\$209	12.7%	12.4%	12.6%
Integral Ad Science	IAS	\$241	\$315	\$403	12.7%	30.9%	28.0%	\$56	\$99	\$117	23.4%	31.4%	29.1%
Kaltura	KLTR	\$120	\$165	\$210	NA	37.1%	27.4%	(\$8)	(\$13)	(\$21)	(7.0%)	(7.6%)	(9.8%)
LivePerson	LPSN	\$367	\$470	\$595	25.7%	28.2%	26.7%	\$38	\$15	(\$14)	10.3%	3.2%	(2.3%)
LiveRamp	RAMP	\$443	\$525	\$634	16.4%	18.5%	20.7%	\$26	\$46	\$68	5.8%	8.7%	10.8%
Momentive	MNTV	\$376	\$447	\$532	22.2%	18.9%	19.0%	\$45	\$48	\$64	12.1%	10.9%	12.0%
ON24	ONTF	\$157	\$203	\$224	NA	29.5%	10.3%	\$28	\$3	(\$3)	17.6%	1.5%	(1.5%)
Qualtrics	XM	\$764	\$1,058	\$1,357	NA	38.5%	28.3%	(\$4)	\$61	\$76	(0.5%)	5.8%	5.6%
Quotient	QUOT	\$446	\$499	\$453	2.2%	12.0%	(9.3%)	\$46	\$28	\$51	10.3%	5.5%	11.4%
SEMrush	SEMR	\$125	\$186	\$237	NA	49.2%	27.4%	(\$4)	\$0	(\$0)	(3.0%)	0.2%	(0.1%)
Shopify	SHOP	\$2,929	\$4,579	\$6,110	85.6%	56.3%	33.4%	\$486	\$780	\$811	16.6%	17.0%	13.3%
Sprinklr	CXM	\$387	\$487	\$591	NA	25.9%	21.3%	(\$41)	(\$41)	(\$43)	(10.6%)	(8.5%)	(7.3%)
SproutSocial	SPT	\$133	\$186	\$244	29.4%	39.8%	31.4%	(\$18)	(\$4)	(\$3)	(13.6%)	(2.1%)	(1.3%)
Squarespace	SQSP	\$621	\$782	\$933	NA	25.9%	19.3%	\$117	\$115	\$140	18.8%	14.7%	15.0%
Twilio	TWLO	\$1,762	\$2,767	\$3,664	55.3%	57.1%	32.4%	\$185	\$251	\$302	10.5%	9.1%	8.3%
Yext	YEXT	\$355	\$391	\$445	18.7%	10.2%	13.9%	(\$11)	(\$7)	\$5	(3.2%)	(1.7%)	1.2%
Zendesk	ZEN	\$1,030	\$1,333	\$1,690	26.1%	29.5%	26.8%	\$114	\$136	\$170	11.1%	10.2%	10.0%
Zeta	ZETA	\$368	\$446	\$518	NA	21.3%	16.1%	\$40	\$61	\$78	10.7%	13.7%	15.0%
ZoomInfo	ZI	\$476	\$735	\$980	NA	54.2%	33.5%	\$235	\$318	\$424	49.3%	43.2%	43.2%
Average					28.8%	34.0%	24.8%				4.1%	5.7%	4.7%
Median					25.7%	30.2%	27.7%				10.3%	5.7%	6.9%
25th Percentile					16.7%	25.9%	19.6%				(9.7%)	(2.8%)	(2.1%)
75th Percentile					32.2%	45.0%	31.4%				12.5%	12.0%	12.4%

Source: FactSet (market data as of 12/31/2021), Company Filings. See Appendices A and B for company-specific details and methodologies.

LUMA.M – Summary Financial Statistics

Company	Ticker	R&D Expense % of Net Revenue			G&A Expense % of Net Revenue			S&M Expense % of Net Revenue		
		CY2020A	CY2021E	CY2022E	CY2020A	CY2021E	CY2022E	CY2020A	CY2021E	CY2022E
Amplitude	AMPL	NA	19.7%	22.2%	NA	14.7%	15.8%	NA	47.4%	52.8%
Appier	4180	16.6%	13.8%	14.2%	8.7%	10.6%	8.0%	51.1%	34.1%	32.3%
BigCommerce	BIGC	30.1%	26.9%	26.5%	20.8%	21.2%	20.2%	45.3%	42.0%	42.5%
Braze	BRZE	NA	18.5%	21.9%	NA	17.5%	19.7%	NA	46.1%	49.8%
Brightcove	BCOV	16.7%	14.8%	14.9%	10.6%	12.5%	11.9%	27.7%	32.8%	33.2%
Coveo	CVO	NA	33.8%	37.9%	NA	44.9%	24.3%	NA	56.8%	56.6%
DoubleVerify	DV	19.0%	18.3%	18.6%	13.8%	16.2%	12.9%	22.6%	21.6%	20.7%
Hubspot	HUBS	18.7%	18.3%	18.4%	9.5%	8.9%	8.8%	45.5%	44.8%	45.1%
Integral Ad Science	IAS	NA	18.4%	18.2%	NA	17.5%	15.1%	NA	24.8%	24.5%
Kaltura	KLTR	NA	28.0%	26.1%	NA	16.2%	17.7%	NA	27.1%	31.8%
LivePerson	LPSN	29.6%	29.5%	29.2%	16.5%	11.9%	12.2%	40.9%	35.4%	41.2%
LiveRamp	RAMP	21.7%	25.0%	24.3%	16.5%	17.0%	16.4%	31.0%	30.4%	30.0%
Momentive	MNTV	21.9%	21.6%	21.8%	16.9%	15.3%	15.1%	39.3%	42.3%	40.5%
ON24	ONTF	12.0%	15.1%	15.7%	13.1%	14.4%	13.4%	38.0%	47.8%	47.9%
Qualtrics	XM	18.9%	18.3%	18.8%	9.0%	9.8%	9.6%	51.6%	47.3%	47.7%
Quotient	QUOT	8.1%	8.1%	7.7%	7.6%	7.7%	6.9%	21.3%	20.6%	19.7%
SEMrush	SEMR	13.9%	13.8%	14.8%	22.6%	22.2%	22.1%	43.5%	42.7%	43.1%
Shopify	SHOP	12.4%	12.8%	13.5%	7.3%	6.9%	6.9%	18.9%	18.8%	19.5%
Sprinklr	CXM	NA	11.6%	12.7%	NA	13.3%	12.4%	NA	55.4%	53.9%
SproutSocial	SPT	21.5%	19.3%	19.4%	25.9%	21.2%	20.2%	42.6%	40.3%	39.7%
Squarespace	SQSP	23.5%	21.0%	20.5%	7.9%	12.3%	10.5%	41.4%	42.7%	42.1%
Twilio	TWLO	19.4%	18.6%	19.3%	10.8%	10.4%	10.1%	23.6%	25.4%	24.3%
Yext	YEXT	11.6%	12.7%	13.9%	16.7%	16.9%	17.8%	55.2%	53.3%	50.6%
Zendesk	ZEN	18.9%	20.2%	20.2%	11.1%	10.8%	10.5%	41.8%	43.1%	42.7%
Zeta	ZETA	NA	9.1%	8.2%	NA	18.3%	17.9%	NA	21.2%	22.0%
ZoomInfo	ZI	7.1%	11.9%	11.6%	9.2%	8.9%	8.6%	25.1%	26.4%	26.7%
Average		18.0%	18.4%	18.9%	13.4%	15.3%	14.0%	37.2%	37.3%	37.7%
Median		18.9%	18.4%	18.7%	11.1%	14.6%	13.2%	40.9%	41.1%	40.8%
25th Percentile		13.2%	13.8%	14.4%	9.1%	10.7%	10.2%	26.4%	26.6%	27.5%
75th Percentile		21.6%	20.8%	21.8%	16.6%	17.4%	17.7%	44.4%	45.7%	47.1%

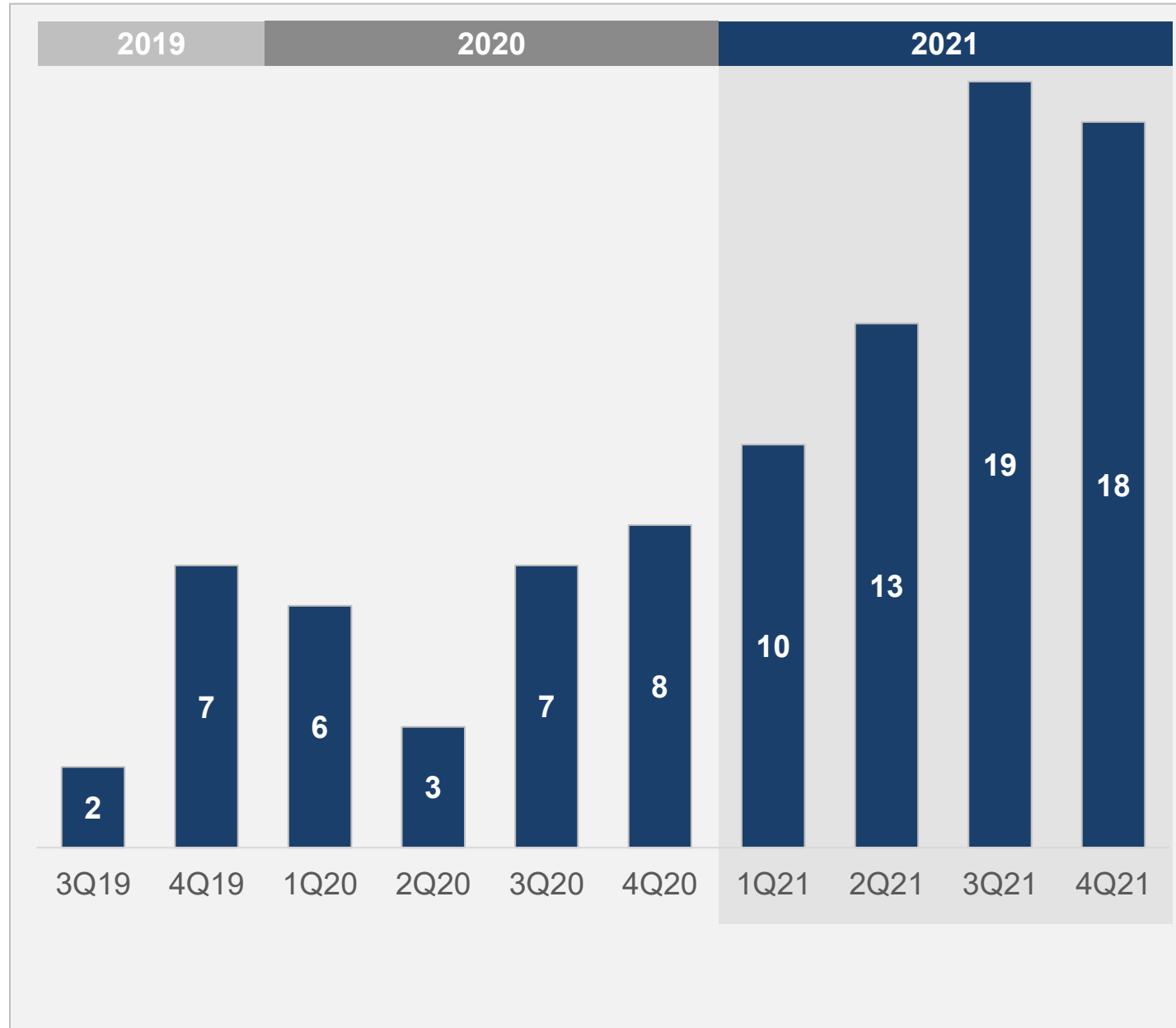
Source: FactSet (market data as of 12/31/2021), Company Filings. See Appendices A and B for company-specific details and methodologies.

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Private Financing Trends in the Media & Marketing Technology Sector

Notable Scaled (>100mm) Private Financings⁽¹⁾ (H2'19 to Present)

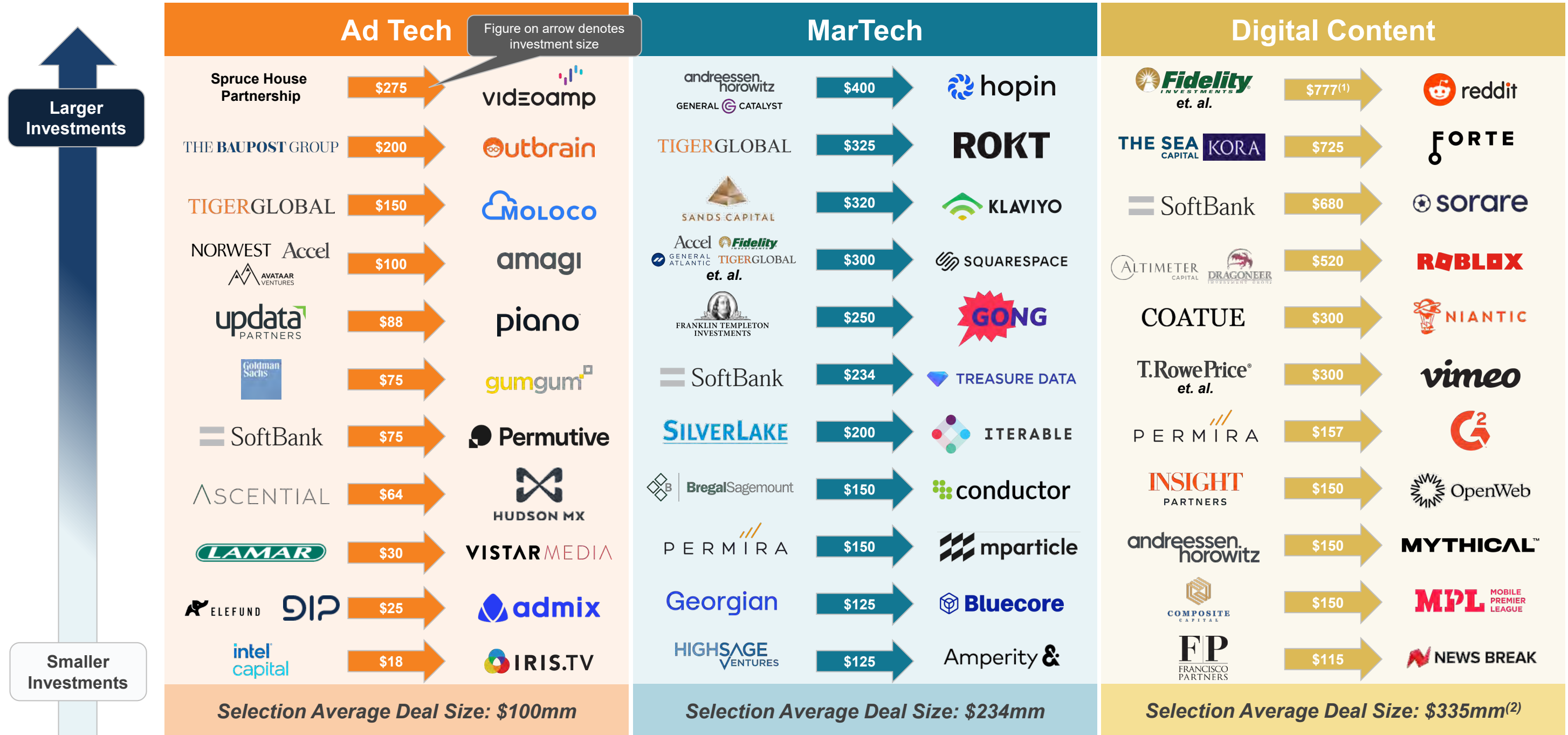


Observations

- Private capital markets have remained a healthy source of capital for growth-stage companies in Ad Tech, MarTech, and Digital Content (particularly the explosion of activity around the emerging Web3 opportunity); selected highlights include:
 - **Ad Tech:** VideoAmp (\$275mm); Moloco (\$150mm); HudsonMX (\$62mm)
 - **MarTech:** Hopin (\$400mm); Rokr (\$325mm); Klaviyo (\$320mm)
 - **Digital Content:** Reddit (\$777mm); Forte (\$725mm); Sorare (\$680mm)
- Investment firms have shown an increasing degree of comfort with large check sizes (>\$100mm) and multi-billion dollar valuations
 - Many companies involved in such transactions are completing their final financing round prior to listing as a public company
 - Investment firms see such opportunities as highly attractive, given the short timeline to “exit”, easily-calculated upside based on public comparables, and favorable pricing relative to eventual IPO investors
- A variety of investment firm types have become active in these late stage private financings – it is no longer strictly seen as a “venture” / high risk investment strategy. Frequent investors in the space can be categorized as follows:
 - **Traditional Venture:** e.g., a16z, Accel, Sequoia, Founders Fund, Greylock
 - **Private Equity:** e.g., Bain Capital, General Atlantic, Silverlake, Thoma Bravo
 - **Institutional (Public) Asset Management:** e.g., Franklin Templeton, Fidelity
 - **Public/Private Hybrid:** e.g., Tiger Global, Coatue Management
 - **Corporate Venture:** e.g., Dentsu Ventures, Intel Capital, Salesforce Ventures
 - **Sovereign Wealth Funds:** e.g., Qatar Investment Authority, GIC (Singapore)

Source: LUMA, PitchBook. Note: (1) “Scaled Transactions” are reflective of private financings occurred within ad tech, martech, and digital content as determined by LUMA in prior quarters at the time of production of Quarterly Market Reports.

























Selected 2021 Private Financings by Category



Note: All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021. (1) Reddit contemplates the sum of its two financing rounds during 2021. (2) Calculation contemplates Reddit's two financings as separate transactions.

Ad Tech & MarTech – 2021 Key Financings (1 / 12)





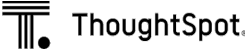



















Ad Tech
MarTech
Digital Content

	Announcement Date	Company	Selected / Key Investor(s)	Capital Raised in Transaction	Valuation	Commentary
Q4	12/16/2021	 MAVRCK	 SUMMIT PARTNERS	\$120	ND	<ul style="list-style-type: none"> ■ Mavrck, an enterprise influencer marketing platform, has secured a \$120mm investment from Summit Partners. ■ The new funds will support further product development and scaling the company's cloud-based operations.
	12/16/2021	 ROKT	 TIGERGLOBAL	\$325	\$1,950	<ul style="list-style-type: none"> ■ Tiger Global led a \$325mm Series for Rokt, a contextual eCommerce checkout software, at a \$1.95bn valuation. ■ Rokt will use the funds for R&D, international expansion, and potential strategic acquisitions.
	12/9/2021	 Tethr	 IAG CAPITAL PARTNERS	\$15	\$30	<ul style="list-style-type: none"> ■ Tethr, a communication intelligence platform, has secured a \$15mm Series B led by IAG Capital Partners. ■ Tethr will use the funds for developing their recently announced "Tethr Essentials" offering.
	12/9/2021	 inrupt	 FORTE VENTURES	\$30	\$170	<ul style="list-style-type: none"> ■ Tim Berners-Lee's identity startup, Inrupt, has secured a \$30mm Series A led by Forte Ventures. ■ Inrupt will use the funds for expanding global footprint to take advantage of the changing GDPR framework.
	12/9/2021	 kevel	 FULCRUM EQUITY PARTNERS	\$10	\$70	<ul style="list-style-type: none"> ■ Kevel, an ad-serving API that helps to build server-side ad platforms, has secured a \$10mm Series B. ■ Fulcrum Equity Partners led the Series A and continues to provide financial support to the company.
	12/7/2021	 Heap	 SIXTH STREET GROWTH	\$110	\$960	<ul style="list-style-type: none"> ■ Sixth Street has led a \$110m Series D in Heap, a customer data tracking software company. ■ Heap will use the funds for scaling global operations and accelerate research into product development.
	12/7/2021	 moengage	 STEADVIEW CAPITAL MANAGEMENT	\$30	ND	<ul style="list-style-type: none"> ■ MoEngage, a user engagement & analytics platform, has secured a \$30mm Series D led by Steadview Capital. ■ MoEngage will use the funds for scaling product offerings and growing headcount.
	12/6/2021	 Universe	 ADDITION	\$30	\$110	<ul style="list-style-type: none"> ■ Universe, a no-code website building platform, has secured a \$30mm Series B led by Addition. ■ Universe will use the funds for exploring Web3 and bringing a no-code approach to NFTs / blockchain.
	12/6/2021	 GENESYS	 salesforce ventures	\$580	\$21,000	<ul style="list-style-type: none"> ■ Genesys, a call center software provider, raised \$580mm at a \$21bn valuation in an oversubscribed round. ■ Salesforce Ventures led the round, with participation from ServiceNow Ventures, Zoom, Blackrock, and D1.
	11/30/2021	 solutions by text	 edisonpartners	\$35	ND	<ul style="list-style-type: none"> ■ Solutions By Text, a text messaging platform, has secured \$35mm in growth financing led by Edison Partners. ■ Proceeds will accelerate the adoption and extensibility of compliant text-based solutions in consumer finance.
	11/17/2021	 hightouch	 ICONIQ Growth	\$39	\$450	<ul style="list-style-type: none"> ■ HighTouch, a SaaS solution provider that syncs customer data across tools, raised \$40mm in its Series B round. ■ The new funds will drive growth for its Reverse ETL product and allow the company to aggressively ramp hiring.
	11/16/2021	 EasySend	 OAK HC/FT	\$56	ND	<ul style="list-style-type: none"> ■ EasySend, a no-code customer journey company has secured a \$56mm Series B led by Oak HC/FT. ■ The company plans to bring in technologies such as RPA to streamline the customer journey process.

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AlleyWatch, Bloomberg, BusinessWire, Cision, Crunchbase, FinsMes, Forbes, GeekWire, GlobalNewsWire, Holler, IrishTimes, PE Wire, PRNewsWire, PRWeb, PYMNTS, Reuters, SaaS Industry, Seattle Times, SecurityWeek, TechCrunch, Technically, VentureBeat, WSJ. Note: All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

Ad Tech & MarTech – 2021 Key Financings (2 / 12)

Ad Tech
MarTech
Digital Content

	Announcement Date	Company	Selected / Key Investor(s)	Capital Raised in Transaction	Valuation	Commentary
Q4	11/16/2021	 conductor	 Bregal Sagemount	\$150	\$525	<ul style="list-style-type: none"> Conductor, a search and content intelligence platform, has secured a \$150mm round led by Bregal Sagemount. The new funds will both support organic growth and enable Conductor to pursue M&A initiatives.
	11/16/2021	 People Data Labs	 CRAFT	\$45	\$225	<ul style="list-style-type: none"> People Data Labs, a B2B sales & marketing API solution, has secured a \$45mm Series B led by Craft Ventures. The team has grown to 80 FTEs, and the new funding will help double headcount in 2022.
	11/15/2021	 ThoughtSpot.	 MARCH CAPITAL	\$100	\$4,200	<ul style="list-style-type: none"> ThoughtSpot, an enterprise cloud analytics platform, has secured a \$100mm Series F led by March Capital. The funding comes at a \$4.2bn valuation, a notable step up from the \$1.95bn Series E valuation.
	11/15/2021	 mixpanel	 BainCapital	\$200	\$1,050	<ul style="list-style-type: none"> Mixpanel, an API-based user journey analytics platform, has secured a \$200mm Series C led by Bain Capital. The new funding, 7 years after their Series B, will be used towards building partnerships to grow market share.
	11/11/2021	 ometria	 INFRAVIA	\$40	ND	<ul style="list-style-type: none"> Ometria, an AI-powered CDP focused on retail, has secured a \$40mm Series C led by InfraVia Growth. The company will use the funds to triple the size of the company's product & engineering team.
	11/11/2021	 pendo	 THOMABRAVO	\$110	\$2,600	<ul style="list-style-type: none"> Pendo, a customer engagement analytics platform, has announced a \$110mm round led by Thoma Bravo. Thoma Bravo will support growth plans, strategic acquisition efforts, and continued product innovation.
	11/10/2021	 habu	 WING	\$25	\$145	<ul style="list-style-type: none"> Habu, a data clean room software, has secured a \$25mm Series B led by Wing Venture Capital. The new funding comes on the heels of Habu's announcement they are partnering with Snowflake.
	11/10/2021	 knak.	 INSIGHT PARTNERS	\$25	ND	<ul style="list-style-type: none"> Knak, a codeless email & landing page creation startup, has secured a \$25mm Series A led by Insight Partners. Knak will use the funds to grow headcount and establish a channel program to meet growing customer demand.
	11/10/2021	 AudioMob	 MAKERS FUND Lightspeed	\$14	\$110	<ul style="list-style-type: none"> AudioMob, an in-game mobile audio ad server, secured a \$14mm Series A led by Makers Fund & Lightspeed. AudioMob will use the funds to continue R&D, file patents in more countries, & expand offices in the U.K. & UAE.
	11/4/2021	 Reltio	 BRIGHTON PARK CAPITAL	\$120	\$1,700	<ul style="list-style-type: none"> Reltio, a master data management platform, has raised \$120mm at \$1.7bn in a round led by Brighton Park. The new funds will support organic growth by continuing to invest in the company's product development.
	11/3/2021	 TREASURE DATA	 SoftBank	\$234	\$1,200	<ul style="list-style-type: none"> Treasure Data, an enterprise CDP, has raised \$234mm in the largest ever single funding round for a CDP. The new funding, led by SoftBank, will be used to execute on CDP innovation & accelerate global growth.
	11/2/2021	 Permutive	 SoftBank	\$75	ND	<ul style="list-style-type: none"> Permutive, an audience platform for publishers & advertisers, has secured a \$75mm Series C from Softbank. Permutive will use the new funds to grow its "on-device" technology & scale its Audience Platform.

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AlleyWatch, Bloomberg, BusinessWire, Cision, Crunchbase, FinsMes, Forbes, GeekWire, GlobalNewsWire, Holler, IrishTimes, PE Wire, PRNewsWire, PRWeb, PYMNTS, Reuters, SaaS Industry, Seattle Times, SecurityWeek, TechCrunch, Technically, VentureBeat, WSJ. **Note:** All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.





















Ad Tech & MarTech – 2021 Key Financings (3 / 12)

Ad Tech
MarTech
Digital Content

	Announcement Date	Company	Selected / Key Investor(s)	Capital Raised in Transaction	Valuation	Commentary
Q4	11/1/2021	Apollo.io	TRIBE CAPITAL	\$32	ND	<ul style="list-style-type: none"> Apollo.io, a B2B go-to-market acceleration platform, has secured a \$32mm Series B led by Tribe Capital. Funding follows 200% aggregate user growth in the last 12 months, and 18 continuous months of profitability.
	10/26/2021	admix	ELEFUND DIP	\$25	\$97	<ul style="list-style-type: none"> Admix, a programmatic ad platform for esports, VR, and AR has secured a \$25mm Series B. Elefund and DIP Capital led the round, which will see funds used towards metaverse-related R&D.
	10/21/2021	videoamp	Spruce House Partnership	\$275	\$1,400	<ul style="list-style-type: none"> VideoAmp, a CTV data management & measurement company, has secured a \$275mm Series F round. The new funding hopes to solidify VideoAmp's position in cross-platform media measurement & optimization.
	10/14/2021	groove	Viking	\$45	ND	<ul style="list-style-type: none"> Groove, an enterprise sales engagement platform, has secured a \$45mm Series B led by Viking Global. Groove has grown enterprise ARR by 114% and plans to drive further growth through international expansion.
	10/13/2021	GRIN	LONE PINE CAPITAL*	\$110	\$910	<ul style="list-style-type: none"> Grin, an influencer marketing management platform, has secured a \$110m Series B led by Lone Pine Capital. Grin will use the new funding to grow its executive leadership & expand into international markets.
	10/9/2021	mparticle	PERMIRA	\$150	\$800	<ul style="list-style-type: none"> mParticle, a CDP provider, has secured a \$150mm Series E led by Permira's Growth Fund. The new funds will support mParticle's global go-to-market expansion & significant R&D expenditure.
Q3	9/29/2021	TOTANGO	Great Hill PARTNERS	\$100	ND	<ul style="list-style-type: none"> Totango, a SaaS platform for tracking customer engagement, raised \$100mm led by Great Hill Partners. The funding will go towards investments in go-to-market and product development.
	9/27/2021	optimove	SUMMIT PARTNERS	\$75	ND	<ul style="list-style-type: none"> Optimove, an AI-powered CRM provider, raised a \$75mm growth investment led by Summit Partners. The Company will use the new funding for strategic hiring and to explore M&A opportunities.
	9/21/2021	tact.ai	NOVARTIS Lilly McKesson Ventures	\$33	ND	<ul style="list-style-type: none"> Novartis Capital, Lilly, & McKesson Ventures invested in Tact.ai, a life sciences customer engagement company. The new funding looks to capitalize on the increased focus on the life sciences sector amid the global pandemic.
	9/14/2021	CreatorIQ	Kayne Anderson Capital Advisors, L.P.	\$40	ND	<ul style="list-style-type: none"> Kayne Anderson Capital Advisors invested in CreatorIQ, an influencer marketing platform targeting enterprises. The new capital will be used to expand its eCommerce capabilities and improve attribution tracking.
	9/13/2021	commercetools	Accel	\$140	\$1,900	<ul style="list-style-type: none"> Accel has invested in commercetools, a provider of eCommerce APIs used to customize payment & checkout. The deal implies a significant premium to the Company's previous \$140mm Series C valuation.
9/10/2021	amagi	NORWEST Accel AVATAAR VENTURES	\$100	ND	<ul style="list-style-type: none"> Multiple investors have invested in Amagi, an Indian cloud broadcast and ad targeting software company. The company reported 136% revenue increases and 44% year-over-year growth in new customers. 	

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AlleyWatch, Bloomberg, BusinessWire, Cision, Crunchbase, FinsMes, Forbes, GeekWire, GlobalNewsWire, Holler, IrishTimes, PE Wire, PRNewsWire, PRWeb, PYMNTS, Reuters, SaaS Industry, Seattle Times, SecurityWeek, TechCrunch, Technically, VentureBeat, WSJ. Note: All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

Ad Tech & MarTech – 2021 Key Financings (4 / 12)

	Announcement Date	Company	Selected / Key Investor(s)	Capital Raised in Transaction	Valuation	Commentary
Q3	9/9/2021	 YOTPO.	 shopify	\$30	ND	<ul style="list-style-type: none"> Shopify made a strategic investment in Yotpo, an eCommerce marketing platform focused on D2C channels. The investment marks the start of a multi-year platform partnership that brings cross-selling potential for both.
	9/9/2021	 affinity	 MENLO VENTURES	\$80	ND	<ul style="list-style-type: none"> Menlo Ventures has invested in Affinity, a CRM geared towards financial services and consulting firms. The funds will be used to expand sales, marketing, and engineering to support new products & customers.
	9/8/2021	 ZEOTAP		\$11	ND	<ul style="list-style-type: none"> Zeotap, a CDP provider raised, closed an \$11mm extension to its \$60mm Series C. The financing will support Zeotap as it invests in product R&D and workforce expansion.
	9/2/2021	 pixelate	 JAVELIN VENTURE PARTNERS	\$18	ND	<ul style="list-style-type: none"> WTI and Javelin invested in Pixelate, a data analytics platform that provides programmatic inventory ratings. The funds will go to improving capabilities in fraud protection, privacy, & compliance analytics within the platform.
	8/31/2021	Walnut.	 8° EIGHT ROADS™	\$15	ND	<ul style="list-style-type: none"> Eight Roads led the Series A of Walnut, a sales experience platform that optimizes product demos. Funds will be used to grow headcount in Europe, the U.S., and Israel and to develop its technology and platform.
	8/30/2021	 DISQO	 SAGEVIEW CAPITAL™	\$85	ND	<ul style="list-style-type: none"> Sageview has invested in DISQO, a provider of cloud-based APIs for measurement & research. The new capital will be used to scale its operations and accelerate its existing product roadmap.
	8/26/2021	#paid	 SANDS CAPITAL	\$15	ND	<ul style="list-style-type: none"> Sands has invested in #Paid, a creator marketing platform that connects brands with content creators. Funds will aid in scaling the current business model and adding new offerings leveraging AI & ML functionality.
	8/19/2021	 Nacelle	TIGERGLOBAL	\$50	ND	<ul style="list-style-type: none"> Tiger Global has invested in Nacelle, a headless eCommerce infrastructure platform. This funding will go towards building the customer success team & improving its go-to-market strategy.
	8/17/2021	 INFO SUM	 chrysalis investments	\$65	ND	<ul style="list-style-type: none"> Chrysalis invested in Infosum, a data collaboration platform designed to enable better customer experiences. Funds will accelerate hiring, expansion into new geographies, and product development.
	8/17/2021	 MOLOCO	TIGERGLOBAL	\$150	\$1,500	<ul style="list-style-type: none"> Tiger invested in MOLOCO, a leader in ML & growth solutions for mobile app and eCommerce marketers. The new funding will be used to expand its machine learning engine to more industries and use cases.
	8/16/2021	 SEISMIC	 PERMIRA JMI	\$170	\$3,000	<ul style="list-style-type: none"> JMI, Permira, and JSV invested in Seismic, a developer of customized sales materials automation software. This Series E round nearly doubles its September 2020 valuation; funds will be used to grow global headcount.
8/16/2021	 adverity	 SoftBank	\$120	ND	<ul style="list-style-type: none"> Softbank's Vision Fund has invested in Adverity, a cross-channel marketing campaign synchronizing platform. The proceeds will be used to further develop Adverity's predictive technology stack for marketers. 	

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AlleyWatch, Bloomberg, BusinessWire, Cision, Crunchbase, FinsMes, Forbes, GeekWire, GlobalNewsWire, Holler, IrishTimes, PE Wire, PRNewsWire, PRWeb, PYMNTS, Reuters, SaaS Industry, Seattle Times, SecurityWeek, TechCrunch, Technically, VentureBeat, WSJ. **Note:** All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

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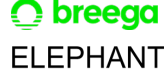












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	Announcement Date	Company	Selected / Key Investor(s)	Capital Raised in Transaction	Valuation	Commentary
Q3	8/5/2021	Bluecore	Georgian	\$125	\$1,000	<ul style="list-style-type: none"> Georgian has invested in BlueCore, a decision-making platform for marketers that leverages Big Data. The funding will be used to accelerate eCommerce product development & investment in AI & analytics.
	8/5/2021	Wildfire	TTV Capital QED Investors	\$15	ND	<ul style="list-style-type: none"> Wildfire Systems, a consumer rewards platform, has raised \$15mm co-led by TTV Capital and QED Investors. The Company enables customers to offer consumer rewards and loyalty programs like cashback for purchases.
	8/4/2021	Fullstory	PERMIRA	\$103	\$1,800	<ul style="list-style-type: none"> Permira invested in FullStory, a mobile and web platform offering customer experience analytics data. The growth capital will be used to expand product capabilities and to accelerate international expansion.
	7/30/2021	Moengage	MULTIPLES	\$33	ND	<ul style="list-style-type: none"> Multiples Asset Management invested in MoEngage, a data-insights-led customer engagement platform. The funds will be used to open new offices in the U.S., fuel product innovation, and to sell internationally.
	7/28/2021	Gupshup	TIGERGLOBAL	\$240	\$1,400	<ul style="list-style-type: none"> Tiger Global invested primary and secondary capital in Gupshup, a cloud-based messaging platform. The primary capital will be used to broaden product offerings and fund potential acquisition opportunities.
	7/28/2021	SUZY	H.L.G. GROWTH PARTNERS	\$50	ND	<ul style="list-style-type: none"> HIG invested in Suzy, a real-time market research platform designed to enhance understanding of consumers. Suzy tripled headcount since the beginning of the pandemic and will continue hiring into sales and marketing.
	7/28/2021	Contentful	TIGERGLOBAL	\$175	~\$3,000	<ul style="list-style-type: none"> Tiger Global invested in Contentful, a content platform to manage digital experiences across any channel. The new funds will be invested product development for better content experiences.
	7/28/2021	Dixa	GENERAL ATLANTIC	\$105	ND	<ul style="list-style-type: none"> General Atlantic lead the Series C round of Dixa, a platform that accelerates successful product adoption. The new funds will be used towards product development and acquisitions.
	7/27/2021	Pendo	B Capital Group	\$356	\$2,600	<ul style="list-style-type: none"> B Capital has invested in Pendo, a customer engagement analytics platform that optimizes trial conversions. The Series F will fund global sales expansion, strategic M&A, and headcount growth.
	7/22/2021	Oktopost	EXPEDITION GROWTH CAPITAL	\$20	ND	<ul style="list-style-type: none"> Expedition invested in Oktopost, an enterprise-grade platform for B2B marketers to manage social media. The new funds will be used to increase headcount, advance its product roadmap, and explore acquisitions.
	7/22/2021	Sendlane	Five Elms Capital	\$20	ND	<ul style="list-style-type: none"> Five Elms Capital has invested in Sendlane, a multichannel marketing automation platform. The Company noted they have grown 100% year-over-year and reached \$7mm in ARR.
	7/20/2021	fabric	stripes	\$100	\$850	<ul style="list-style-type: none"> Stripes led the new funding of Fabric, a platform that augments digital storefronts with point-of-sale technology. The new funds will support international expansion aimed at mid-sized & enterprise B2B & B2C brands.

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AlleyWatch, Bloomberg, BusinessWire, Cision, Crunchbase, FinsMes, Forbes, GeekWire, GlobalNewsWire, Holler, IrishTimes, PE Wire, PRNewsWire, PRWeb, PYMNTS, Reuters, SaaS Industry, Seattle Times, SecurityWeek, TechCrunch, Technically, VentureBeat, WSJ. Note: All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

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	Announcement Date	Company	Selected / Key Investor(s)	Capital Raised in Transaction	Valuation	Commentary
Q3	7/19/2021			\$19	\$129	<ul style="list-style-type: none"> Audigent, a DMP, has secured Series B funding from GoPhillyFund, a joint-venture between EPAM and BFTP. The funding will go towards improving its first-party data offering and other R&D expenses.
	7/13/2021			\$33	ND	<ul style="list-style-type: none"> Grafton Capital has invested in Xtremepush, a multi-channel customer engagement platform provider. They will use the funds to double headcount to 140 people and accelerate global expansion of sales.
	7/13/2021			\$150	\$1,500	<ul style="list-style-type: none"> The QIA sovereign fund has invested in Impact, a partnership management and optimization platform. The funding will be used for expanding its partnership network and the tools available to customers.
	7/13/2021			\$100	>\$1,000	<ul style="list-style-type: none"> HighSage invested in customer data platform Amperity at a >\$1bn valuation. The new capital will be used to grow sales & marketing, expand internationally, and support R&D efforts.
	7/12/2021			\$30	ND	<ul style="list-style-type: none"> Lamar has made a strategic investment in Vistar, an end-to-end DOOH programmatic platform. The funding will strengthen Vistar's balance sheet, expand its R&D, and extend its reach into new markets.
	7/9/2021			\$40	ND	<ul style="list-style-type: none"> Didomi, a customer management platform, raised \$40mm in a round led by Breega and Elephant. The investment will support efforts to develop open APIs and open-source SDKs for its customers.
Q2	7/7/2021			\$200	ND	<ul style="list-style-type: none"> Baupost invested in Outbrain, an open web platform matching audiences with content recommendations. The investment from the hedge fund was the last private financing round before Outbrain's IPO.
	6/24/2021			\$28	ND	<ul style="list-style-type: none"> Tulip, a cloud-based mobile marketing solutions platform, received Series C funding led by Arrowroot Capital. The new financing will go towards increasing headcount on Tulip's sales team as they expand internationally.
	6/22/2021			\$60	ND	<ul style="list-style-type: none"> Insight Partners has led a Series C for Commerce IQ, an algorithmic eCommerce management platform. The round will fund international expansion and Amazon-focused product research and development
	6/16/2021			\$100	ND	<ul style="list-style-type: none"> PSG has led a round for IntroHive, a SaaS CRM automation platform catering to B2B firms. The funds will be used for strategic acquisition, scaling operations, and expanding R&D + sales headcount.
	6/15/2021			\$200	\$2,000	<ul style="list-style-type: none"> SilverLake led a Series E round for Iterable, a cross-channel platform for customer experiences. The funds will be spent on increasing headcount, marketing, R&D initiatives, and geographic expansion.
	6/15/2021			\$115	~\$500	<ul style="list-style-type: none"> Uberall, provider of location-based SaaS solutions for brick-and-mortar operators, raised a round led by Bregal. Funds will go toward growth in the U.S. and Canada and acquiring proximity SEO company MomentFeed.

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AlleyWatch, Bloomberg, BusinessWire, Cision, Crunchbase, FinsMes, Forbes, GeekWire, GlobalNewsWire, Holler, IrishTimes, PE Wire, PRNewsWire, PRWeb, PYMNTS, Reuters, SaaS Industry, Seattle Times, SecurityWeek, TechCrunch, Technically, VentureBeat, WSJ. **Note:** All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.




















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	Announcement Date	Company	Selected / Key Investor(s)	Capital Raised in Transaction	Valuation	Commentary
Q2	6/10/2021	 SLINTEL	GGVCAPITAL	\$20	ND	<ul style="list-style-type: none"> GGV led a Series A for Slintel, which specializes in go-to-market analysis and B2B customer behavior analytics. The company will use the funds to continue building upon its go-to-market engine product.
	6/9/2021	 Amplitude	SEQUOIA	\$150	\$4,000	<ul style="list-style-type: none"> Amplitude, a marketing analytics company focused on consumer goods, has received funding led by Sequoia. Amplitude will accelerate ML for AI-enabled analytics, enterprise data trust, and ecosystem integrations.
	6/9/2021	 CONTENTSTACK™	INSIGHT PARTNERS	\$58	ND	<ul style="list-style-type: none"> Insight Partners led a Series B for ContentStack, a content experience platform. Funds will be used to expand internationally, further develop partnerships, and accelerate product development.
	6/3/2021	 GONG	FRANKLIN TEMPLETON INVESTMENTS	\$250	\$7,250	<ul style="list-style-type: none"> Franklin Templeton invested in Gong, an AI-based research firm dealing with revenue and market analytics. This funding will be used to grow Gong's revenue intelligence services as well as general product development.
	6/2/2021	 dealhub	IGP ISRAEL GROWTH PARTNERS	\$20	ND	<ul style="list-style-type: none"> IGP invested in DealHub, developer of RevAmp, which enables sales teams to build dialogue with its buyers. The financing will be used to increase headcount, as well as build and source relationships with new customers.
	6/2/2021	 Outreach	PREMJI INVEST Steadfast	\$200	\$4,400	<ul style="list-style-type: none"> Premji and Steadfast invested in Outreach, a sales engagement platform focused on sales automation. The new funds will be used to accelerate market expansion into new geographic territories.
	5/27/2021	 RevenueCat	Y	\$40	\$300	<ul style="list-style-type: none"> Y Combinator's Continuity Fund invested in RevenueCat, an SDK for developers of subscription-based software. RevenueCat looks to add the Amazon App Store to its service offering following this funding round.
	5/26/2021	 yalo	B Capital Group	\$50	ND	<ul style="list-style-type: none"> B Capital invested in Yalo, a marketing solution that uses messaging and conversation via social media. Yalo will use the funds to increase market share in Latin America and Southeast Asia.
	5/25/2021	 popmenu	Base10	\$65	ND	<ul style="list-style-type: none"> Base10 Partners has led a financing round for Popmenu, a digital marketing and SaaS platform for restaurants. Popmenu intends to use the capital to accelerate product development of the platform.
	5/25/2021	 CONTENTSQUARE	SoftBank	\$500	\$2,800	<ul style="list-style-type: none"> Softbank Vision Fund II invested in ContentSquare, a customer behavior analysis company. The funds will be used to develop its platform as well as further advance its AI solutions.
	5/25/2021	 QUALIFIED	salesforce	\$51	ND	<ul style="list-style-type: none"> Salesforce has invested in Qualified.com, a conversational sales and marketing platform. The funding will fuel product innovation and expand the team in engineering, sales, and marketing.
	5/18/2021	 piano	updata PARTNERS	\$88	ND	<ul style="list-style-type: none"> Updata Partners led an \$88mm investment in Piano, an advertising and content analytics platform. Piano plans to boost its analytics offerings with its recent integration of customer journey orchestration.

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AlleyWatch, Bloomberg, BusinessWire, Cision, Crunchbase, FinsMes, Forbes, GeekWire, GlobalNewsWire, Holler, IrishTimes, PE Wire, PRNewsWire, PRWeb, PYMNTS, Reuters, SaaS Industry, Seattle Times, SecurityWeek, TechCrunch, Technically, VentureBeat, WSJ. **Note:** All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.




















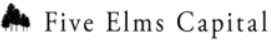




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Announcement Date	Company	Selected / Key Investor(s)	Capital Raised in Transaction	Valuation	Commentary
5/18/2021	 KLAVIYO	 SANDS CAPITAL	\$320	\$9,150	<ul style="list-style-type: none"> Sands Capital invested in Klaviyo, a marketing automation platform, in a \$320mm Series C round. Klaviyo will use the funding to develop its products and expand both domestically and internationally.
5/13/2021	 GRIN	IMAG/NARY	\$16	ND	<ul style="list-style-type: none"> GRIN, an influencer marketing software for DTC brands, raised a new round led by Imaginary Ventures. GRIN will invest in channel integrations, reporting, analytics and new tools to support the creator economy.
5/12/2021	choozle	 Boathouse	\$15	ND	<ul style="list-style-type: none"> Choozle, a media buying platform for small and mid-size firms, received funding from Boathouse Capital. The Company intends use the funds to drive growth through product innovations and accelerate sales.
5/11/2021	 airkit	 EQT	\$40	ND	<ul style="list-style-type: none"> EQT has led a Series B for Airkit, a low-code customer experience launching platform. Airkit will use the funds to further develop its product as well as improving its go-to-market strategy.
5/11/2021	 apptopia	 ABS CAPITAL PARTNERS	\$20	ND	<ul style="list-style-type: none"> ABS invested in the Series C of Apptopia, a cross-channel data and competitor analysis company. The company reached profitability and is looking to use the funds to drive expansion outside of mobile apps.
5/10/2021	 ADWANTED GROUP	 SWEN Capital Partners	\$18	ND	<ul style="list-style-type: none"> SWEN & Financière Arvebe invested in Adwanted, a campaign manager and advertising solutions company. The financing will be used for future European M&A plans.
5/4/2021	 CRAYON	 Baird Capital BAIRD	\$22	ND	<ul style="list-style-type: none"> Crayon, a competitive intelligence platform for marketing and business decisions, raised \$22mm from Baird. The funds will go to product development and increasing headcount.
4/29/2021	 MOLOCO	 신한은행 SHINHAN BANK	ND	\$1,000	<ul style="list-style-type: none"> South Korea's Shinhan invested in MOLOCO, a machine learning-based programmatic advertising company. The funding will be used in recruiting engineers for strengthening software capabilities and infrastructure.
4/28/2021	 MessageBird	EURAZEO	\$800	~\$3,800	<ul style="list-style-type: none"> Eurazeo has acquired a minority stake in Messagebird, a predictive email intelligence platform. Funds supported MessageBird's acquisition of SparkPost and will enable further geographic expansion.
4/27/2021	 Placer.ai	 BUCKLEY	\$50	ND	<ul style="list-style-type: none"> Buckley Ventures invested in Placer.ai, a location and foot traffic data and analytics company. The firm plans on expanding personnel and building out operations in Israel with the new funding.
4/22/2021	 BigID	 Advent International GLOBAL PRIVATE EQUITY	\$30	\$1,250	<ul style="list-style-type: none"> Advent International invested in BigID, an actionable data intelligence platform. The company was not seeking further funding but took advantage of the new funds at a higher valuation.
4/21/2021	ActiveCampaign >	TIGERGLOBAL	\$240	~\$3,000	<ul style="list-style-type: none"> Tiger invested in ActiveCampaign, a marketing automation platform for small and mid-size businesses. The funds will fuel product development, global expansion, and acceleration of partner ecosystem initiatives.

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AlleyWatch, Bloomberg, BusinessWire, Cision, Crunchbase, FinsMes, Forbes, GeekWire, GlobalNewsWire, Holler, IrishTimes, PE Wire, PRNewsWire, PRWeb, PYMNTS, Reuters, SaaS Industry, Seattle Times, SecurityWeek, TechCrunch, Technically, VentureBeat, WSJ. **Note:** All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

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	Announcement Date	Company	Selected / Key Investor(s)	Capital Raised in Transaction	Valuation	Commentary
Q2	4/13/2021			\$75	ND	<ul style="list-style-type: none"> Goldman has invested in GumGum, a company providing tools to analyze and place ads based on content. GumGum plans on building out its contextual Ad Tech for streaming and TV as the sectors continue to rise.
	4/8/2021			\$210	~\$5,000	<ul style="list-style-type: none"> Softbank Vision Fund II invested in OneTrust, a privacy security, data governance, and ESG platform. The extension brings the Series C round to \$510mm and total funds raised to \$920mm.
	4/8/2021			\$100	\$1,400	<ul style="list-style-type: none"> Gupshup, a messaging-focused customer engagement platform, raised \$100M from Tiger Global Management. The company will use the capital to scale its product as well as advance go-to-market strategies.
	4/7/2021			\$18	ND	<ul style="list-style-type: none"> Intel led a funding round for Iris.TV, a platform for media distributors regarding ad buying analytics and strategy. The round will allow Iris.TV to grow its video data platform and strengthen its API data for targeting.
	4/6/2021			\$100	\$1,050	<ul style="list-style-type: none"> Steadfast invested in Sendbird, developer of a chat and messaging API platform. The funding will be used for expanding the platform's functionality as well as additional client sourcing.
	4/1/2021			\$22	ND	<ul style="list-style-type: none"> Rossel invested in AppTweak, a company that provides developers with insights about app store optimization. AppTweak intends to use the funds to increase international presence and broaden its managed services.
	4/1/2021			\$36	ND	<ul style="list-style-type: none"> Holler, a conversational media platform, raised \$36mm in a Series B led by CityRock. The funds will be used to develop new creative content and to conduct further research in conversational media.
Q1	3/30/2021			\$125	\$2,100	<ul style="list-style-type: none"> 6Sense, an AI-powered predictive sales & marketing platform, raised a \$125mm Series D round. The Company plans to invest the funds in expanding its platform and predictive capabilities.
	3/24/2021			\$23	ND	<ul style="list-style-type: none"> Ketch, an online privacy regulation and data compliance company, has raised a \$23mm Series A round. Ketch is coming out of stealth and is designed to automate compliance with data regulations.
	3/18/2021			\$19	ND	<ul style="list-style-type: none"> OpenReel, a startup that makes it easier for teams to record videos remotely, has raised a \$19mm Series A. The Company intends to use the proceeds to fund development of new product features
	3/18/2021			\$20	ND	<ul style="list-style-type: none"> Growth marketing automation company Act-On raised \$20mm from its founder and Beedie Capital. Act-On says it will use the proceeds to improve its products and expand its own marketing.
	3/16/2021			\$45	\$370	<ul style="list-style-type: none"> SafeGraph, a data-as-a-service company focused on physical places, raised a \$45mm Series B. The Company plans to capitalize on increased demand for data and offer new ways for customers to buy data.

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AlleyWatch, Bloomberg, BusinessWire, Cision, Crunchbase, FinsMes, Forbes, GeekWire, GlobalNewsWire, Holler, IrishTimes, PE Wire, PRNewsWire, PRWeb, PYMNTS, Reuters, SaaS Industry, Seattle Times, SecurityWeek, TechCrunch, Technically, VentureBeat, WSJ. **Note:** All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.




























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Announcement Date	Company	Selected / Key Investor(s)	Capital Raised in Transaction	Valuation	Commentary
3/16/2021	SQUARESPACE	Fidelity Spruce House Investment Management TIGERGLOBAL DRACORE T.RowePrice GENERAL ATLANTIC Accel	\$300	\$10,000	<ul style="list-style-type: none"> Squarespace, an online website creation and hosting service, raised \$300mm from new and existing backers. The capital was raised prior to the Company's May '21 IPO, and will be used to advance its growth initiatives.
3/8/2021	hopin	ANDREESSEN HOROWITZ GENERAL CATALYST	\$400	\$5,650	<ul style="list-style-type: none"> Virtual events platform and video-focused software company Hopin raised \$400mm in a Series C round. The Company plans to use funds for product and engineering and to be operationally IPO-ready next year.
3/4/2021	CHURNZERO	JMI	\$25	ND	<ul style="list-style-type: none"> Customer retention software firm ChurnZero Inc. has raised \$25 million in funding in a round led by JMI. The funds will be used to expand the team, accelerate product development, and invest in marketing.
3/4/2021	Jungle Scout	SUMMIT PARTNERS	\$110	ND	<ul style="list-style-type: none"> Developer of Amazon seller software Jungle Scout raised \$110mm with primary investor Summit Partners. Funding will be used in part to acquire Downstream Impact, a firm specializing in Amazon advertising.
2/28/2021	YOTPO.	Bessemer Venture Partners Hanaco ACCESS INDUSTRIES vertex VENTURES	\$230	\$1,400	<ul style="list-style-type: none"> eCommerce marketing cloud company Yotpo has raised a \$230mm Series E round from multiple investors. The Company intends to invest in product and marketing, as well strategic acquisitions.
2/25/2021	lexer	BLACKBIRD KING RIVER	\$26	ND	<ul style="list-style-type: none"> Customer data platform Lexer has raised a \$26mm Series B led by Blackbird Ventures and King River Capital. The funding will be used to add 50 people to accelerate product development in the next year.
2/25/2021	terminus	Great Hill PARTNERS	\$90	~\$400	<ul style="list-style-type: none"> B2B, account-based marketing platform Terminus raised a \$90mm Series C led by Great Hill Partners. The company intends to use the funds to accelerate data products innovation, hiring, and market expansion.
2/24/2021	blueshift	FORT ROSS VENTURES AVATAR GROWTH CAPITAL	\$30	ND	<ul style="list-style-type: none"> Customer data platform company Blueshift raised a \$30mm Series C led by Fort Ross Ventures. The round will be used to expand into markets outside the U.S. and Europe and accelerate its technology.
2/22/2021	Creatio	VOLITION CAPITAL	\$68	ND	<ul style="list-style-type: none"> Low-code CRM automation platform Creatio raised \$68mm in a round led by Volition Capital. The round represents Creatio's first infusion of external funding; it plans to invest in R&D, marketing, and sales.
2/22/2021	HIGHSPOT	TIGERGLOBAL	\$200	\$2,300	<ul style="list-style-type: none"> Sales enablement platform company Highspot announced a \$200mm Series E led by Tiger Global. The funding will fuel product innovation, international expansion, and building the partner ecosystem.
2/18/2021	ps Postscript	greylock	\$35	ND	<ul style="list-style-type: none"> Postscript, a platform for Shopify stores to connect with customers via SMS, raised \$35mm in a Series B round. Postscript plans to build more two-way interactions enabling re-orders, subscription management, and reviews.
2/17/2021	Oribi	ibex INVESTORS	\$16	ND	<ul style="list-style-type: none"> No-code marketing analytics company Oribi raised \$16mm in a Series B round led by Ibex Ventures. Investment will enable the company to continue challenging Google Analytics in the space.

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AlleyWatch, Bloomberg, BusinessWire, Cision, Crunchbase, FinsMes, Forbes, GeekWire, GlobalNewsWire, Holler, IrishTimes, PE Wire, PRNewsWire, PRWeb, PYMNTS, Reuters, SaaS Industry, Seattle Times, SecurityWeek, TechCrunch, Technically, VentureBeat, WSJ. Note: All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

Ad Tech & MarTech – 2021 Key Financings (11 / 12)









Ad Tech
MarTech
Digital Content

Announcement Date	Company	Selected / Key Investor(s)	Capital Raised in Transaction	Valuation	Commentary
2/16/2021	 PEX	 CUE BALL  ILLUMINATE  NEXTGEN VENTURE PARTNERS  SUSA  Tencent 腾讯	\$57	ND	<ul style="list-style-type: none"> Digital content rights management company Pex raised \$57mm in funding from new and existing investors. Investment will be used to continue building a better system of managing copyright and payments online.
2/15/2021	 personetics®	 WARBURG PINCUS	\$75	ND	<ul style="list-style-type: none"> Data-driven personalization and customer engagement solution provider Personetics has raised \$75mm. The funds will be used to deliver vision of “self-driving finance” for its financial institution customers.
2/10/2021	 wirewheel AI DATA PRIVACY	 ForgePoint CAPITAL	\$20	ND	<ul style="list-style-type: none"> WireWheel, provider of data privacy technology, announced a \$20mm Series B led by ForgePoint Capital. The funding will enable WireWheel to speed its go-to-market plans and extend its SaaS platform.
2/3/2021	 HUDSON MX	 ASCENTIAL	\$64	ND	<ul style="list-style-type: none"> Hudson MX, media buying and accounting SaaS solution, raised a \$64mm Series D financing led by Ascential. The funds will enable Hudson MX to continue to scale its platform and organizational structure.
2/3/2021	 leadspace	 JVP	\$46	ND	<ul style="list-style-type: none"> AI and big data-enabled CDP provider Leadspace raised \$46mm in a financing round led by JVP. The company plans to use the funding to grow the team in both Israel and the U.S.
2/3/2021	 TEALIUM	 Georgian SILVERLAKE WATERMAN	\$96	\$1,200	<ul style="list-style-type: none"> Customer data orchestration company Tealium raised \$96mm led by Georgian and Silver Lake Waterman. Funds will be used to accelerate product innovation to address the growing demand for CDPs.
2/1/2021	 emotive	 crv	\$50	\$400	<ul style="list-style-type: none"> Emotive, provider of mobile messaging capabilities for B2C businesses, raised \$50mm in Series B financing. The company will continue developing the product, grow its headcount >200 people, and open new offices.
1/28/2021	 mediafly	 Boathouse	\$25	ND	<ul style="list-style-type: none"> Mediafly, a sales enablement company, raised \$25mm from existing investors including Boathouse Capital. The Company will use proceeds for product development / building out product features.
1/27/2021	 SPARKPOST	 NEWSRING LLR	\$180	ND	<ul style="list-style-type: none"> SparkPost, an email delivery, optimization, and analytics platform, raised \$180mm from multiple investors. Proceeds will be invested in product innovation and potential strategic acquisitions.
1/26/2021	 bloomreach	 SIXTH STREET	\$150	\$900	<ul style="list-style-type: none"> Bloomreach, an eCommerce search and web site creation API company, raised \$150mm from Sixth Street. Proceeds were used in its acquisition of Exponea, as well as engineering and product development spend.
1/21/2021	 SOCI	 JMI	\$80	ND	<ul style="list-style-type: none"> Soci, a localized marketing startup, raised a \$80mm Series D led by JMI Equity. The funding will allow Soci to make the platform more comprehensive through acquisitions and integrations.
1/19/2021	 sitecore®	Undisclosed	\$1,200	ND	<ul style="list-style-type: none"> Digital experience software provider Sitecore received \$1,200mm from an undisclosed private investor. The Company plans to use the funding to invest in product innovation.

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AlleyWatch, Bloomberg, BusinessWire, Cision, Crunchbase, FinsMes, Forbes, GeekWire, GlobalNewsWire, Holler, IrishTimes, PE Wire, PRNewsWire, PRWeb, PYMNTS, Reuters, SaaS Industry, Seattle Times, SecurityWeek, TechCrunch, Technically, VentureBeat, WSJ. Note: All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

Ad Tech & MarTech – 2021 Key Financings (12 / 12)






















Ad Tech
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	Announcement Date	Company	Selected / Key Investor(s)	Capital Raised in Transaction	Valuation	Commentary
Q1	1/12/2021			\$60	\$1,360	<ul style="list-style-type: none"> Brand tech company You & Mr. Jones raised \$60mm from Merian Chrysalis, completing its \$260mm Series B. The funds will expand the technology platform to help marketers across digital, mobile, and eCommerce.
	1/7/2021			\$78	ND	<ul style="list-style-type: none"> Glia, a digital customer service provider, raised a \$78mm Series C round led by Insight Partners. The Company plans to expand every department across its organization, with a focus on product development.
	1/7/2021			\$200	~\$1,000	<ul style="list-style-type: none"> Digital product design SaaS tool provider Quantum Metric raised a \$200mm Series B led by Insight Partners. The investment will be used to continue to build features and functionality on its platform.
	1/6/21			\$100	\$1,100	<ul style="list-style-type: none"> SalesLoft, a sales platform that provides AI-based tools closed a \$100mm round led by Owl Rock Capital. The Company plans to invest in product innovation, scale the enterprise business, and expand into new markets.

Source: LUMA, PitchBook, Company Announcements, AdExchanger, AlleyWatch, Bloomberg, BusinessWire, Cision, Crunchbase, FinsMes, Forbes, GeekWire, GlobalNewsWire, Holler, IrishTimes, PE Wire, PRNewsWire, PRWeb, PYMNTS, Reuters, SaaS Industry, Seattle Times, SecurityWeek, TechCrunch, Technically, VentureBeat, WSJ. **Note:** All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.





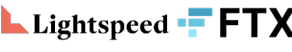













Digital Content – 2021 Key Financings (1 / 6)

Ad Tech
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Digital Content

	Announcement Date	Company	Selected / Key Investor(s)	Capital Raised in Transaction	Valuation	Commentary
Q4	12/20/2021	 REC ROOM	COATUE	\$145	\$3,500	<ul style="list-style-type: none"> Coatue led a \$145mm Series E of Rec Room, an integrated gaming and game-creation platform. Rec Room has 37mm users on its platform, and monthly users have increased 450% since November 2020.
	12/14/2021	 mixhalo	 FORTRESS	\$24	ND	<ul style="list-style-type: none"> Mixhalo, an audio platform for conducting live events, has secured a \$24mm Series B led by Fortress. Mixhalo has made a series of key engineering hires and appointed veteran tech lawyer Dana Jewell as its GC.
	12/2/2021	 100 THIEVES	 gbv green bay ventures	\$60	\$460	<ul style="list-style-type: none"> 100 Thieves, an eSports team management company, has secured a \$60mm Series C led by GBV. The new funding will be used to support the core esports & apparel businesses and to fund strategic M&A.
	12/1/2021	 tagger	 Five Elms Capital	\$15	\$85	<ul style="list-style-type: none"> Five Elms Capital has increased their investment in Tagger, an influencer social listening platform, by \$15mm. The funds will expedite Tagger's product development and global expansion of its influencer marketing offering.
	11/22/2021	 NIAN TIC	COATUE	\$300	\$9,000	<ul style="list-style-type: none"> Niantic, the studio behind Pokémon Go, has raised \$300mm from Coatue at a \$9bn valuation. Niantic will use the funds to invest in current games and new apps and expand the Lightship developer platform.
	11/19/2021	 AiMi	 GREAT MOUNTAIN PARTNERS	\$20	ND	<ul style="list-style-type: none"> AiMi, an AI/ML-powered music streaming platform, has secured a \$20mm Series B led by GMP. AiMi will invest on revamping its OS with new programming language and more tools for artists and producers.
	11/18/2021	 anyword	 innovation endeavors	\$21	ND	<ul style="list-style-type: none"> Anyword, an AI-powered copywriting tool, has secured a \$21mm Series B led by Innovation Endeavors. The funds will be used to grow headcount, expand the platform, and onboard more marketers / publishers
	11/17/2021	 overwolf	 andreesen horowitz	\$75	ND	<ul style="list-style-type: none"> Overwolf, a platform to develop and monetize games, has secured a \$75mm Series D led by a16z. Overwolf says it amassed 87,000 in game creators and 20mm gamers using their products monthly.
	11/12/2021	 FORTE	 THE SEA CAPITAL KORA	\$725	ND	<ul style="list-style-type: none"> Forte, a blockchain solution for game publishers, has secured a \$725mm Series B, led by Sea Capital & Kora. The platform is currently invite-only and in private testing with 40+ game developer partners.
	11/11/2021	 SANDBOX ^{VR}	 andreesen horowitz	\$37	ND	<ul style="list-style-type: none"> Sandbox VR, a VR social multiplayer game studio, has secured a \$37mm Series B led by Andreesen Horowitz. The funds will be used to open 10 new retail locations across the globe, 2 corporate, and 2 franchise locations.
	11/9/2021	 OpenWeb	 INSIGHT PARTNERS	\$150	\$1,000	<ul style="list-style-type: none"> OpenWeb, a conversational social engagement platform, secured a \$150mm Series E led by Insight Partners. Funding will be used towards product development, expanding global headcount, and strategic acquisitions.
	11/9/2021	 JACKPOCKET	LEFT LANE	\$120	\$613	<ul style="list-style-type: none"> Jackpocket, a lottery app, has secured a \$120M series D led by Left Lane Capital. The funds will be used to expand its lottery app into a broader suite of mobile games.

Source: LUMA, PitchBook, Company Announcements, BizJournals, BlockWorks, Bloomberg, BusinessWire, ClearWater, dot.LA, FinsMes, Forbes, Reuters, TechCrunch, The Wrap, VentureBeat, Yahoo. | Note: All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

Digital Content – 2021 Key Financings (2 / 6)

	Announcement Date	Company	Selected / Key Investor(s)	Capital Raised in Transaction	Valuation	Commentary
Q4	11/8/2021	 mod.io		\$26	ND	<ul style="list-style-type: none"> Mod.io, a platform supporting user-generated content in games, secured Series A funding from Tencent. The funds will support more cross-platform developers implementing user-generated content and modifications.
	11/4/2021	MYTHICAL™		\$150	\$1,250	<ul style="list-style-type: none"> Mythical Games, a developer of “playable NFTs” has secured a \$150mm Series C led by Andreessen Horowitz. The funds will be used to accelerate growth as the popularity of NFTs continues to rise.
	11/4/2021			\$21	ND	<ul style="list-style-type: none"> Faraway, a developer of blockchain based games, has secured a \$21mm Series A led by Lightspeed & FTX. The studio plans to develop blockchain games with highly social player-driven economies.
	11/3/2021			\$50	\$700	<ul style="list-style-type: none"> GatherTown, a provider of a metaverse platform, has secured a \$50mm Series B led by Sequoia and Index. The company raised a \$26mm Series A in March 2021 and now has raised a total of \$76mm this year.
	11/2/2021	AXIOS		\$85	\$430	<ul style="list-style-type: none"> Axios, a digital media publisher, has secured a \$85mm Series D led by Cox Enterprises. The funding comes on the heels of a failed deal to sell to Axel Springer.
	11/2/2021			\$18	\$300	<ul style="list-style-type: none"> Upland, an NFT-based virtual real estate game, has secured a \$18mm Series A, led by Animoca. The funds will be used to grow teams in the U.S. and EU, and to build out new brand partnerships.
	11/2/2021	THE SANDBOX		\$93	ND	<ul style="list-style-type: none"> The Sandbox, an open NFT metaverse platform, has secured a \$93mm Series B led by SoftBank. This is the first investment into a crypto asset by SoftBank’s Vision Fund II.
	11/2/2021			\$20	ND	<ul style="list-style-type: none"> Splash, a game developer for music in Roblox, raised new funds from Amazon’s Alexa Fund and BITKRAFT. The investment will be used to improve AI-powered virtual instruments and support related R&D.
	10/20/2021			\$65	\$2,200	<ul style="list-style-type: none"> Animoca, a mobile game developer supporting digital property rights via NFTs, secured a \$65mm fundraise. The new capital will be used to fund strategic M&A, product development, and licenses for popular IPs.
	10/11/2021	HOMA GAMES	NORTHZONE	\$50	ND	<ul style="list-style-type: none"> Homa, a hypercasual mobile game developer, has secured a \$50mm Series A led by Northzone. Homa has released over 40 games and has recently announced 500mm downloads.
Q3	9/24/2021			\$35	ND	<ul style="list-style-type: none"> Misfits Gaming Group has raised \$35mm in funding in a round led by The E.W. Scripps Company. Scripps itself will invest \$10mm into Misfits’s esports organization, which includes its two esports franchises.
	9/23/2021	NTWRK		\$50	ND	<ul style="list-style-type: none"> NTWRK, a livestream video shopping app, raised \$50mm led by Goldman Sachs Asset Management & Kering. NTWRK and the investors are looking to capitalize on the growing video shopping market spurred by COVID.






























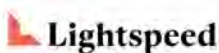
Source: LUMA, PitchBook, Company Announcements, BizJournals, BlockWorks, Bloomberg, BusinessWire, ClearWater, dot.LA, FinsMes, Forbes, Reuters, TechCrunch, The Wrap, VentureBeat, Yahoo. | Note: All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

Digital Content – 2021 Key Financings (3 / 6)

Announcement Date	Company	Selected / Key Investor(s)	Capital Raised in Transaction	Valuation	Commentary
9/22/2021	Dapper	COATUE	\$250	\$7,600	<ul style="list-style-type: none"> Dapper Labs, the NFT startup behind NBA Top Shot, has secured \$250mm in new funding led by Coatue. Dapper Labs' products have 1mm+ users, and this new funding will be used to improve UX.
9/21/2021	sorare	SoftBank	\$680	\$4,300	<ul style="list-style-type: none"> Sorare, an NFT-based fantasy soccer platform, has raised a \$680mm Series B round led by Softbank. Sorare plans to expand to new sports, open a U.S. office, hire more people and invest in marketing campaigns.
9/16/2021	elodie	andreesen.horowitz GALAXY	\$33	ND	<ul style="list-style-type: none"> Games studio Elodie raised a \$32.5mm Series A led by Andreessen Horowitz and Galaxy Interactive. Founded by two Riot Games industry veterans, the Company has high expectations for its first game.
9/16/2021	sleeper	andreesen.horowitz	\$40	ND	<ul style="list-style-type: none"> Sleeper, a fantasy sports app with 3mm active users, raised a \$40mm Series C led by Andreessen Horowitz. Sleeper plans to expand the platform's game offerings and further bolster its payment systems.
9/14/2021	IMMUTABLE	BITKRAFT KING RIVER	\$60	ND	<ul style="list-style-type: none"> Blockchain gaming outfit Immutable has raised \$60 million for its NFT platform Immutable X. The investment was led by Bitkraft Ventures and King River Capital and will be used for engineering and sales.
9/15/2021	MPL MOBILE PREMIER LEAGUE	COMPOSITE CAPITAL	\$150	\$2,300	<ul style="list-style-type: none"> Mobile Premier League, a mobile eSports platform, raised \$95mm in a Series D round led by Composite Capital. The unicorn company looks to expand internationally with the new funding.
9/10/2021	JAMCITY	KABAM netmarble FORTRESS	\$85	ND	<ul style="list-style-type: none"> Post the scuttled \$1.2bn SPAC-merger, Jam City raised \$350mm in a combination of equity and debt financing. Jam City leveraged the new funding in the closing of its \$165mm acquisition of mobile game publisher Ludia.
8/31/2021	VICE media group	LUPA SYSTEMS SIXTH STREET PARTNERS	\$85	ND	<ul style="list-style-type: none"> After a failed merger with the 7GC & Co. sponsored SPAC, Vice Media raised \$135mm from existing investors. It will fund new growth vectors such as DTC offerings and content licensing in an attempt to achieve profitability.
8/31/2021	NIFTY GAMES	VULCAN Capital	\$38	ND	<ul style="list-style-type: none"> Nifty Games, a mobile game developer, raised \$38mm in an investment led by Vulcan Capital. Nifty Games has partnered with the NBA and NFL to publish officially licensed titles NBA Clash and NFL Clash.
8/28/2021	Picsart	SoftBank	\$130	\$1,230	<ul style="list-style-type: none"> Picsart, a mobile photo-editing app, has secured \$130mm in funding at a \$1.2bn valuation from SoftBank. The company has surpassed \$100mm ARR this year, after hitting the \$50mm ARR mark earlier in the year.
8/12/2021	reddit	Fidelity INVESTMENTS	\$410	\$10,000	<ul style="list-style-type: none"> Fidelity Investments has invested funds in Reddit, a forum / discussion-based news & social media platform. Reddit will invest in improved UI & UX for new users and will help build out its self-service ad system for SMBs.
8/2/2021	EXIT GAMES	skillz	\$50	ND	<ul style="list-style-type: none"> Skillz invested \$50mm to take a minority stake in Exit Games, a multiplayer gaming technology firm. Skillz will have access to the Exit Games's multiplayer technology to exclusively power its platform.



















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Digital Content – 2021 Key Financings (4 / 6)

	Announcement Date	Company	Selected / Key Investor(s)	Capital Raised in Transaction	Valuation	Commentary
Q3	7/20/2021	 TILTINGPOINT RAISE YOUR GAME	 GENERAL ATLANTIC	\$235	ND	<ul style="list-style-type: none"> Tilting Point, a free-to-play games publisher, has raised \$235 million in the company's first-ever equity financing. The funding, led by General Atlantic, will be used to accelerate its live and co-developing publishing models.
	7/20/2021	 OpenSea	 andreesen.horowitz	\$100	\$1,500	<ul style="list-style-type: none"> OpenSea, an NFT marketplace, has secured a \$100mm financing led by Andreessen Horowitz. The funding will go towards international expansion and hiring engineering talent.
	7/19/2021	 SCOPELY	 tag games  OMNIDROME  PIXEL TOYS	\$50	ND	<ul style="list-style-type: none"> Scopely has invested over \$50mm across three game studios: Omnidrome, Pixel Toys, and Tag Games. These game studio partners are working with Scopely on games across multiple genres.
	7/15/2021	 genvid	 VALOR EQUITY PARTNERS  ATREIDES MANAGEMENT	\$113	ND	<ul style="list-style-type: none"> Genvid Holdings has raised \$113mm in a Series B round led by Galaxy Interactive. The company organizes "massive interactive live events" (MILEs) such as the upcoming Project Raven.
Q2	7/1/2021	 animoca BRANDS	 BLUE POOL CAPITAL  coinbase Ventures  G O B I PARTNERS	\$50	\$1,050	<ul style="list-style-type: none"> Animoca Brands raised \$50mm in the second tranche of a \$138mm investment from multiple investors. It will fund strategic acquisitions, product development, and licenses for popular intellectual properties.
	6/24/2021	 JWPLAYER	 LLR Partners	\$100	ND	<ul style="list-style-type: none"> JW Player, an online video hosting technology, received funding from LLR Partners. The company intends to build out monetization technology following the COVID-19 streaming boom.
	6/22/2021	 Sporttrade	 JumpCapital	\$46	ND	<ul style="list-style-type: none"> Jump Capital has led a financing round for Sporttrade, a fintech-based sports betting company. Funding will be put towards customer acquisition, expansion into additional states, and increasing headcount.
	6/22/2021	 G2	 P E R M I R A	\$157	\$1,100	<ul style="list-style-type: none"> G2, provider of an online software review and information database, raised a Series D led by Permira Growth. The funding will go towards expanding the product and community and increase headcount.
	6/7/2021	 federation entertainment	 Montefiore	\$61	\$203	<ul style="list-style-type: none"> Montefiore invested in Federation, a production company with 65 shows both in France and internationally. Federation is set to explore acquisitions in Belgium with this new capital.
	4/22/2021	 ONE MORE MULTIVERSE	 ANTHOS 	\$18	\$76	<ul style="list-style-type: none"> Anthos Capital led a Series A for Multiverse, a digital tabletop RPG game developer. The raised capital will go toward the recently unveiled <i>One More Multiverse</i>, a community gaming platform.
	4/13/2021	 EPIC GAMES	 SONY	\$1,000	\$28,700	<ul style="list-style-type: none"> Game developer Epic Games received investments from multiple firms including a \$200M investment from Sony. This investment will help expand all of Epic's arms, including a tech development strategic partnership with Sony.
	4/9/2021	 triple dot	 Lightspeed	\$78	ND	<ul style="list-style-type: none"> TripleDot Studios, a mobile game developer, raised a \$78mm Series A round led by Lightspeed. This first institutional round will be used to acquire other game studios and developer talent.




Source: LUMA, PitchBook, Company Announcements, BizJournals, BlockWorks, Bloomberg, BusinessWire, ClearWater, dot.LA, FinsMes, Forbes, Reuters, TechCrunch, The Wrap, VentureBeat, Yahoo. | Note: All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

Digital Content – 2021 Key Financings (5 / 6)

	Announcement Date	Company	Selected / Key Investor(s)	Capital Raised in Transaction	Valuation	Commentary
Q1	3/24/2021		SEQUOIA Index Ventures	\$100	\$1,250	<ul style="list-style-type: none"> Index & Sequoia led a \$100mm Series D of Rec Room, an integrated gaming and game-creation platform. Rec Room announced they surpassed 15mm lifetime users and achieved 566% YoY revenue growth.
	3/16/2021		INSIGHT PARTNERS	\$75	\$212	<ul style="list-style-type: none"> Overwolf, a platform to develop and monetize games, has secured a \$75mm Series D, led by Insight Partners. Overwolf announced 18mm monthly users and 300% YoY revenue growth.
	3/4/2021		RAINE	\$50	ND	<ul style="list-style-type: none"> JackPocket, a third-party app providing a secure to buy state lottery tickets, raised a \$50mm Series C. The Company recently won regulatory approval in NY and NJ after reported 4x revenue growth in 2020.
	3/4/2021			\$38	ND	<ul style="list-style-type: none"> Game studio company Theorycraft raised \$38mm in a financing round led by NetEase Games. The capital will be used to recruit talent to develop a community-driven, peer vs. peer game.
	3/2/2021		  基石资本	\$37	ND	<ul style="list-style-type: none"> Pico Interactive, provider of interactive and VR enterprise solutions, raised \$37mm from multiple investors. Pico said the funding will support western markets expansion, as well as increasing its presence in Asia.
	2/23/2021		Undisclosed	\$367	\$6,000	<ul style="list-style-type: none"> Online discussion forum Reddit raised a \$367mm Series E from undisclosed new and existing investors. SEC filings reflect that Reddit is aiming to raise up to \$500 million in this round.
	1/28/2021		RAINE	\$20	ND	<ul style="list-style-type: none"> No-code game engine company AppOnboard raised \$20mm in a funding round led by Raine Ventures. Proceeds will be used to expand the workforce across product, engineering, marketing, and other functions.
	1/25/2021		Oberndorf Enterprises T.RowePrice®	\$300	~\$6,000	<ul style="list-style-type: none"> Vimeo, a digital video platform, raised \$300mm from T. Rowe Price and Oberndorf Enterprises. IAC plans to spin-off Vimeo into an independent, separately-traded public company.
	1/25/2021		 	\$35	ND	<ul style="list-style-type: none"> IMVU has relaunched as Together Labs and raised \$35mm from Structural Capital, NetEase, and others. The investment will fund product development, including IMVU, WithMe, and other initiatives.
	1/13/2021		Accel 	\$140	~\$2,100	<ul style="list-style-type: none"> Webflow, a no-code website platform, raised a \$140mm Series B led by Accel and Silversmith. Proceeds will be used on product development and building out its support team, among other purposes.
1/7/2021		FP FRANCISCO PARTNERS	\$115	ND	<ul style="list-style-type: none"> News app News Break raised \$115mm in a financing round led by Francisco Partners. Proceeds will allow News Break to significantly increase its investments in the local-content ecosystem. 	
1/6/2021		Goldman Sachs	\$50	ND	<ul style="list-style-type: none"> Perfect Corp., developer of a virtual beauty app, raised \$50mm a Series C round led by Goldman Sachs. Company will invest funds into AI beauty technologies across multichannel retail and to drive expansion. 	

Source: LUMA, PitchBook, Company Announcements, BizJournals, BlockWorks, Bloomberg, BusinessWire, ClearWater, dot.LA, FinsMes, Forbes, Reuters, TechCrunch, The Wrap, VentureBeat, Yahoo. | Note: All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

Digital Content – 2021 Key Financings (6 / 6)

	Announcement Date	Company	Selected / Key Investor(s)	Capital Raised in Transaction	Valuation	Commentary
Q1	1/6/2021		 	\$520	\$29,500	<ul style="list-style-type: none"> ■ Online gaming platform Roblox raised a \$520mm round led by Altimeter Capital and Dragoneer. ■ Roblox went on to complete its direct listing in March, two months after the financing round was announced.

Source: LUMA, PitchBook, Company Announcements, BizJournals, BlockWorks, Bloomberg, BusinessWire, ClearWater, dot.LA, FinsMes, Forbes, Reuters, TechCrunch, The Wrap, VentureBeat, Yahoo. | Note: All figures in USD millions unless noted otherwise. Deals shown reflect those announced during the year ending December 31, 2021.

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Appendix A: Net Revenue Methodology & Definitions

Company	Ticker	Net Revenue		EBITDA		EBITDA Margin %	
		Definition / Metric Used	Source	Definition / Metric Used	Source	Definition	Source
Acuity Ads*	ATY	Gross Profit	FactSet	<i>"EBITDA" as defined and forecasted by Brokers⁽⁶⁾</i>	FactSet	EBITDA ÷ Gross Profit	Calculation
Affle ⁽¹⁾	542752	<i>See footnote (1)</i>	Filings		FactSet	<i>Not calculated</i>	NA
AppLovin	APP	Reported Revenue	FactSet		FactSet	EBITDA ÷ Reported Revenue	Calculation
Cardlytics*	CDLX	Gross Profit	FactSet		FactSet	EBITDA ÷ Gross Profit	Calculation
Criteo [†]	CRTO	Revenue ex-TAC	FactSet / Filings		FactSet	EBITDA ÷ Revenue ex-TAC	Calculation
Digital Turbine ^{(2)‡}	APPS	Gross Profit	<i>See footnote (2)</i>		FactSet	EBITDA ÷ Gross Profit	<i>See footnote (2)</i>
DoubleVerify	DV	Reported Revenue	FactSet		FactSet	EBITDA ÷ Reported Revenue	Calculation
Innovid ⁽³⁾	CTV	Reported Revenue	Filings		Filings	EBITDA ÷ Reported Revenue	Company Proj.
Integral Ad Science	IAS	Reported Revenue	FactSet		FactSet	EBITDA ÷ Reported Revenue	Calculation
ironSource	IS	Reported Revenue	FactSet		FactSet	EBITDA ÷ Reported Revenue	Calculation
LiveRamp	RAMP	Reported Revenue	FactSet		FactSet	EBITDA ÷ Reported Revenue	Calculation
Roku	ROKU	Reported Revenue	FactSet		FactSet	EBITDA ÷ Reported Revenue	Calculation
Magnite ^{(4)‡}	MGNI	Reported Revenue	<i>See footnote (4)</i>		FactSet	EBITDA ÷ Reported Revenue	<i>See footnote (3)</i>
MediaAlpha*	MAX	Gross Profit	FactSet		FactSet	<i>Not calculated</i>	NA
Mobvista	1860	Reported Revenue	FactSet		FactSet	EBITDA ÷ Reported Revenue	Calculation
Outbrain ⁽⁵⁾	OB	Gross Profit ex-TAC	<i>See footnote (5)</i>		FactSet	EBITDA ÷ Gross Profit ex-TAC	Calculation
Perion Network [†]	PERI	Revenue ex-TAC	Filings		FactSet	EBITDA ÷ Revenue ex-TAC	Calculation
PubMatic	PUBM	Reported Revenue	FactSet		FactSet	EBITDA ÷ Reported Revenue	Calculation
Taboola ⁽⁶⁾	TBLA	Gross Profit ex-TAC	<i>See footnote (6)</i>		FactSet	EBITDA ÷ Gross Profit ex-TAC	Calculation
The Trade Desk	TTD	Reported Revenue	FactSet		FactSet	EBITDA ÷ Reported Revenue	Calculation
Tremor International	TRMR	Reported Revenue	FactSet	FactSet	EBITDA ÷ Reported Revenue	Calculation	
Unity Software	U	Reported Revenue	FactSet	FactSet	EBITDA ÷ Reported Revenue	Calculation	
Viant [†]	DSP	Revenue ex-TAC	Filings	FactSet	EBITDA ÷ Revenue ex-TAC	Calculation	

Source: FactSet (market data as of 12/31/2021), Company Filings. **Note:** Figures correspond to calendar years, or closest equivalent period. See Appendices A and B for company-specific details and methodologies. Forward estimates excluded for companies whose relevant metrics are not available on a forward basis (i.e., excluded if brokers do not forecast the specific metric such as "Ex-TAC Gross Profit" or similar such top-line metric) * Denotes usage of Gross Profit as proxy for Net Revenue † Denotes usage of Revenue ex-TAC as proxy for Net Revenue. ‡ Denotes figures presented on estimated pro forma basis. EBITDA multiples less than zero or greater than 75.0x are considered not meaningful ("NM"). (1) Affle figures contemplate Revenue less Inventory and Data Costs (2) Digital Turbine figures presented on an estimated pro forma basis inclusive of estimates for recent material acquisitions (Fyber, AdColony) for CY2021; consensus figures contemplated thereafter (due to the fact such figures are projected on a combined basis). Source data for analysis compiled by LUMA from public filings and equity research reports of the respective target companies. See Appendix B for further details on methodology. (3) Innovid forward projections per Company's June 2021 Investor Presentation. (4) For Magnite, CY 2021 figures are presented on an estimated pro forma basis inclusive of estimates for Telaria and SpotX acquisitions for all presented periods. Pro forma figures are estimated by adjusting initial pro forma forecast published by Craig Hallum (as of May 3rd, 2021) with figures derived from (i) interim reported financial performance versus prior consensus estimates (e.g., Q2/Q3 actuals versus consensus for corresponding periods), and (ii) revisions to consensus estimates of future performance. Current estimates for Magnite contemplate Craig Hallum equity research as of November 17, 2021. See Appendix B for further details on methodology. (5) Outbrain forward projections per Jefferies Equity Research as of November 12, 2021. (6) Taboola forward Net Revenue projections per Keybank Research as of December 5, 2021. (7) Tremor International's share price contemplates ordinary share price that represent approximately half of the NASDAQ-listed ADS share price.

Appendix B: Selected Other Public Company Notes (1 / 2)

Ad Tech Public Companies - Selected Notes

Company	Ticker	Exchange	Notes
AppLovin	APP	NASDAQ	Market Capitalization contemplates FDSO net of eliminations from “ <i>Exercises and vesting of early exercised Class A common [sic] stock equity grants.</i> ” Basic Shares count contemplates sum of Class A shares and Class B shares disclosed in Prospectus dated December 6, 2021.
Affle	AFFLE	NSE	Market Capitalization contemplates ordinary shares outstanding; net diluted shares outstanding could not be located in public disclosures. Figures correspond to the clo
ironSource	IS	NYSE	FDSO figures used to calculate market capitalization contemplate diluted shares outstanding as of June 30, 2021 as disclosed in Company Prospectus dated Oct 5, 2021.
Magnite	MGNI	NASDAQ	CY 2021 figures are presented on an estimated pro forma basis inclusive of estimates for Telaria and SpotX acquisitions for all presented periods. Pro forma figures are estimated by adjusting initial pro forma forecast published by Craig Hallum (as of May 3 rd , 2021) with figures derived from (i) interim reported financial performance versus prior consensus estimates (e.g., Q2/Q3 actuals versus consensus for corresponding periods), and (ii) revisions to consensus estimates of future performance. Current estimates for Magnite contemplate Craig Hallum equity research as of November 17, 2021.
Mobvista	1860	HKG	Market Capitalization contemplates ordinary shares outstanding; net diluted shares outstanding could not be located in public disclosures.
Tremor Int'l	TRMR	LSE; NASDAQ	Market Capitalization contemplates the product of (i) FDSO and (ii) Tremor’s local U.K. share price denominated in GBP. Market Capitalization is converted to USD at the daily spot rate.
Digital Turbine	APPS	NASDAQ	CY 2021 figures are presented on an estimated pro forma basis contemplating figures from a compilation of publicly-available information obtained via equity research reports and company guidance at the time of deal announcements for recent material acquisitions of AdColony and Fyber. The estimates for CY 2021 are adjusted to account for (i) interim reported performance versus prior consensus estimates (e.g., Q2/Q3 actuals versus consensus for corresponding periods), and (ii) revisions to consensus estimates of future performance. Growth rates calculated relative to CY 2021 are therefore stated on a pro forma basis, fully inclusive of recent acquisitions (on an estimated basis).

Source: FactSet (market data as of 12/31/2021), Company Filings.

Appendix B: Selected Other Public Company Notes (2 / 2)

MarTech Public Companies - Selected Notes

Company	Ticker	Exchange	Notes
Appier	4180	TYO	Market Capitalization contemplates ordinary shares outstanding; inputs for net diluted shares outstanding could not be located in public disclosures.
Braze	BRZE	NASDAQ	CY figures contemplates the closest period based on an October 31 st FYE.
BigCommerce	BIGC	NASDAQ	Market Capitalization contemplates ordinary shares outstanding; stock option exercise prices could not be located in public disclosures.
Coveo	CVO	TSX	Market Capitalization contemplates ordinary shares outstanding of 103.2mm as disclosed in Company Prospectus dated Nov 17, 2021 (based on over-allotment exercise scenario described).
HubSpot	HUBS	NYSE	Market Capitalization contemplates ordinary shares outstanding net of RSUs, and the 2014 "Stock Incentive Plan"; "Long Term Incentive Plan" could not be located within disclosures.
Salesforce	CRM	NYSE	CY figures contemplates the closest period based on a January 31 st FYE.
Sprinklr	CXM	NYSE	CY figures contemplates the closest period based on a January 31 st FYE.
Squarespace	SQSP	NYSE	Market Capitalization contemplates shares outstanding inclusive of RSUs; stock option exercise prices could not be located in public disclosures.
Yext	YEXT	NYSE	CY figures contemplates the closest period based on a January 31 st FYE.

Source: FactSet (market data as of 12/31/2021), Company Filings.

LUMA's Recent Deals



December 2021

Secondary Offering
\$622,000,000

LUMA Securities, a wholly-owned broker-dealer of the undersigned, acted as underwriting co-manager to AppLovin Corporation.

October 2021

has agreed to acquire

a wholly owned subsidiary of

The undersigned acted as exclusive financial advisor to AppLovin Corporation.

September 2021

has been acquired by

The undersigned acted as a financial advisor to Reflektion, Inc.

August 2021

has been acquired by

The undersigned acted as the exclusive financial advisor to Publica LLC.

July 2021

has been acquired by

The undersigned acted as the exclusive financial advisor to JetFuel, Inc.

July 2021

Initial Public Offering
\$160,000,000

LUMA Securities, a wholly-owned broker-dealer of the undersigned, acted as underwriting co-manager to Outbrain, Inc.

June 2021

has agreed to sell an equity interest to

The undersigned acted as financial advisor to Simplifi Holdings, Inc.

May 2021

has agreed to be acquired by

The undersigned acted as financial advisor to Chartboost, Inc.

April 2021

Initial Public Offering
\$2,000,000,000

LUMA Securities, a wholly-owned broker-dealer of the undersigned, acted as underwriting co-manager to AppLovin Corporation.

March 2021

majority investment in

The undersigned acted as exclusive financial advisor to Blackstone.

March 2021

has acquired

The undersigned acted as exclusive financial advisor to Vungle, Inc.

February 2021

A Wholly-Owned Business Unit of

has been acquired by

The undersigned acted as exclusive financial advisor to AdColony.

February 2021

has been acquired by

a division of

The undersigned acted as exclusive financial advisor to Parse.ly, Inc.

February 2021

has acquired

The undersigned acted as financial advisor to Magnite, Inc.

January 2021

has received a majority investment by

The undersigned acted as exclusive financial advisor to Alphonso Inc.

January 2021

has been acquired by

The undersigned acted as exclusive financial advisor to BeeswaxQ, Inc.



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