2022

Annual Report

Dear Shareholder:

2022 was a challenging year for us, along with the rest of the industry. The macroeconomic headwinds that hit from multiple directions – rising inflation rates, the war in Ukraine, supply-chain challenges, etc – have caused the demand (or - advertiser) side of our business to perform more erratically than any year in the past decade+ of running our business.

While the macro conditions are not our fault, they are certainly our problem. And while we cannot control the macro future, we have certainly been busy over the last year building products and technology that are designed to help us better navigate our ship through such macro storms. Before we look forward, a few words on this past year.

In our Q2 2022 earnings call, we spoke about how we grow our long-term business, and how we think of our 2-sided marketplace using the Bed&Blanket metaphor: The "Bed" symbolizes our supply partnerships, while the Blanket symbolizes the advertising budgets we bring in to cover the Bed. In "normal times", the Blanket and the Bed are well matched, resulting in strong yield for us and for our partners.

We typically grow our Bed in bigger, longer-term step changes, by signing new multi-year partnerships. We then over time enlarge our Blanket by adding more advertisers, optimizing their spend on the new supply and, over time, expanding their budgets.

While the macro headwinds made the Blanket side harder than usual to predict in 2022, we actually had one of our best years ever in growing our long-term Bed. We shared a few tremendous new partnerships during the year:

- **FOX News** switched over its entire recommendation business to Outbrain after working with other competitors in recent years. With that, Outbrain now powers 4 of the top-5 news publishers in the US.
- **Daily Mail**'s recommendations are now powered exclusively by Outbrain
- **Axel Springer**, one of the largest publishers in Europe and the world with titles such as **Bild** and **Welt**, is an exclusive Outbrain partner
- **Sankei News** in Japan
- **GEDI** in Italy

Overall, we've seen the size of our Bed has grown YoY 12% in terms of ad impressions we served.

The results of these tremendous new partnerships might not be readily apparent in our 2022 results. But we are excited with the potential this presents for us when the demand side – the Blanket – springs back from the macro slump.

Our metaphorical Bed grew in 2022 not only through the business choice of some of the world's greatest publishers, but also through technology breakthroughs. One of the biggest long-term levers in our business

is the growth of engagement with our users through the improvement of our algorithms (and the data set the algorithms learn from). Last year our R&D team released into production several algorithmic and AI breakthroughs, which according to our A/B testing have improved our click-through-rate (CTR) potential and resulting yield potential by 9.5%. Again, due to the unique macro trends of the past year, these improvements are not yet apparent in the results we reported. However - they are "spring loaded" within our platform and are anticipated to deliver value to us and our partners when advertising demand rebounds from the macro slump.

The macro demand slump of 2022 was frustrating in another way. One important measure of our business is our Net Revenue Retention (NRR) which is essentially the equivalent of "same store sales" - How have we grown the revenue we generate with our existing partners YoY? Our aspiration is always to keep the NRR at triple digits, meaning 100% or above, which means we've grown the value we deliver to our long-term partners.

In the majority of our previous reported quarters, we've indeed reported a triple-digit NRR growth. In 2022 we have not achieved that aspiration, and reported a 86% NRR. But here too the macro demand slump is apparent: While NRR itself contracted YoY, the net *impression* retention rate with our existing partners has actually remained level at 100% YoY. This means that our long-term partners continue having faith in Outbrain's value proposition and many have been actually growing the business they do with us on a "same store sales" basis in terms of inventory this past year. Again - we believe that both Outbrain and our partners should benefit from this growth once the macro demand slump ends.

In our 2021 S-1 we included a Founders' Letter. In it we said: "We like to manage our business conservatively and humbly, to ensure that Outbrain's business is sustainable for many years to come." In that spirit, during the go-go years of 2020 and 2021 we managed our expenses conservatively and grew our team carefully in places where we had confidence that we could create good returns-on-investment for our shareholders. Similarly, as soon as we noticed the telltale signs of headwinds starting in Q1 2022, we moved quickly to cut costs and headcount, and reduce our planned operating expense budget by more than $50mm vs our original plan for the year.

This is how we plan to continue managing our business into the future: Deploy our resources with great care and discipline in both good times and challenging ones, and try to respond quickly and swiftly to macro headwinds as soon as we notice them. We're committed to taking all steps to run the company profitably. As shareholders ourselves, we think first and foremost as owners of the business.

Another example of how we think and operate as owners is our decision on the two share buybacks we announced during 2022. Matters of dilution and share counts are as important to us as they are to you. We measure and report to you quarterly on metrics like EBITDA, but we're also well aware that a lot of undisciplined dilution to shareholders can be masked by too great a focus on EBITDA. As owners, we're committed to stay aligned with you on balancing profitability and growth with dilution.

With the challenging 2022 in the rear-view mirror, we're excited with some of these dynamics going forward:

- **Spring-loaded supply**: As we outlined at the beginning of this letter, in 2022 we added remarkable supply partnerships that we believe will serve us well for future growth. And we've compounded that with algorithmic improvements that are waiting for advertising demand to recover.

- **Keystone & Publisher revenue diversification**: In last year's shareholder letter, we mentioned a trend that was taking hold amongst many of the biggest publishers of the world - a drive towards revenue diversification. Advertising is the core business pillar for most publishers, and will likely remain their core pillar for many years to come. But many of them understand that they need to complement that pillar with new revenue sources such as subscriptions, ecommerce, newsletters, etc. But while publishers' advertising stack provides deep technological capabilities for optimization and personalization, their new diversified business suffers from a dearth of technology. In Q3 we announced a new business called Keystone which takes the best of the personalization/optimization technologies we've built at Outbrain for the past ~15 years, and builds upon them a platform designed to enable publishers to grow the entirety of their businesses via technology. Initial market feedback from publishers has been very enthusiastic.

- **Flight to quality**: As publishers focus on more diversified revenue sources, including reader revenue, we expect there will be a flight to quality. Publishers will expect higher quality ad experiences. In parallel, we expect the best advertisers in the world will seek to associate with higher quality publishers (as we can already see with many cutting spend on social networks). We view Outbrain as the high-quality player in the field, which we believe is evidenced by the type of publishers who choose Outbrain as their partner. And in 2023 we plan to further that focus on quality, by increasing the relevance of our offerings for the most premium brand advertisers in the world who are looking to prove the ROI on the spend of their brand dollars. Outbrain is positioned to combine the most premium open web supply with engagement and attention metrics that CMOs and agencies are looking for.

- **New types of media**: We're often asked if the Open Web has anywhere to expand for us, as it seems like all publishers are settled with a news feed from either Outbrain or from one of our competitors. In 2022, we continued deepening our supply partnerships with Platforms such as mobile carriers and browsers. We're likely scratching the surface of opportunity there and continue growing that category.

- **Change, change, change** – Lastly, our space is in one of the most dynamic periods it has ever been in. Whether it's changes like those to cookies and privacy policies, or the rush of new and exciting AI technologies, or the DoJ seeking to break up old monopolies. In a dynamic space, we love being in the "goldilocks zone" of both being big enough to be important players for publishers and advertisers, yet nimble enough and founder-led to be able to capitalize on the opportunities arising from these changes. We believe that the entrepreneurial innovators stand to benefit in dynamic times like these, and at Outbrain we have a strong track record of being the entrepreneurial innovators.

To wrap –

In the past we told you that we've built Outbrain on the values of integrity, trust and transparency with our various constituencies. We recognize the headwinds we've been helming our ship through this past year, but hope you recognize that we always stand by these core integrity values with you, our shareholder. We appreciate your continued trust and confidence in the Outbrain team. We do not take this confidence you put in us lightly, and can assure you that we will continue working hard, with unwavering integrity and discipline, to create great long term shareholder value.

Yaron Galai & Ori Lahav
Co-Founders of Outbrain Inc.
David Kostman
Co-CEO of Outbrain Inc.

Note About Forward-Looking Statements

This letter contains forward-looking statements within the meaning of the federal securities laws, which statements involve substantial risks and uncertainties. Forward-looking statements generally relate to possible or assumed future results of our business, financial condition, results of operations, liquidity, plans and objectives. You can generally identify forward-looking statements because they contain words such as “may,” “will,” “should,” “expects,” “plans,” “anticipates,” “could,” “intends,” “guidance,” “outlook,” “target,” “projects,” “contemplates,” “believes,” “estimates,” “predicts,” „foresee,” “potential” or “continue” or the negative of these terms or other similar expressions that concern our expectations, strategy, plans or intentions. We have based these forward-looking statements largely on our current expectations and projections regarding future events and trends that we believe may affect our business, financial condition and results of operations. The outcome of the events described in these forward-looking statements is subject to risks, uncertainties and other factors, including but not limited to: risks and uncertainties associated with the SVB closure; overall advertising demand and traffic generated by our media partners; factors that affect advertising demand and spending, such as the continuation or worsening of unfavorable economic or business conditions or downturns, instability or volatility in financial markets, and other events or factors outside of our control, such as U.S. and global recession concerns, geopolitical concerns, including the ongoing conflict between Russia and Ukraine, supply chain issues, inflationary pressures, labor market volatility, and the pace of recovery or any resurgences of the COVID-19 pandemic; our ability to continue to innovate, and adoption by our advertisers and media partners of our expanding solutions; the success of our sales and marketing investments, which may require significant investments and may involve long sales cycles; our ability to grow our business and manage growth effectively; our ability to compete effectively against current and future competitors; the loss of one or more of our large media partners, and our ability to expand our advertiser and media partner relationships; our ability to maintain our revenues or profitability despite quarterly fluctuations in our results, whether due to seasonality, large cyclical events, or other causes; the risk that our research and development efforts may not meet the demands of a rapidly evolving technology market; any failure of our recommendation engine to accurately predict user engagement, any deterioration in the quality of our recommendations or failure to present interesting content to users or other factors which may cause us to experience a decline in user engagement or loss of media partners; limits on our ability to collect, use and disclose data to deliver advertisements; our ability to extend our reach into evolving digital media platforms; our ability to maintain and scale our technology platform; our ability to meet demands on our infrastructure and resources due to future growth or otherwise; significant fluctuations in currency exchange rates; failures or loss of the hardware, software and infrastructure on which we rely, or security breaches; political and regulatory risks in the various markets in which we operate; the challenges of compliance with differing and changing regulatory requirements; the risks described in the section entitled “Risk Factors” and elsewhere in the Annual Report on Form 10-K filed for the year ended December 31, 2022 and in subsequent reports filed with the SEC. Accordingly, you should not rely upon forward-looking statements as predictions of future events. We cannot assure you that the results, events and circumstances reflected in the forward-looking statements will be achieved or occur, and actual results, events or circumstances could differ materially from those projected in the forward-looking statements. We undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events. We do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2022

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from ____ to _______

Commission file number 001-40643

OUTBRAIN INC.

(Exact name of registrant as specified in its charter)

Delaware	**20-5391629**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

111 West 19th Street
New York, NY 10011
(646) 867-0149
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, par value $0.001 per share	OB	The Nasdaq Stock Market LLC

Securities registered pursuant to section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐	Smaller reporting company	☒
		Emerging growth company	☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the closing price of the shares of the registrant's common stock on the Nasdaq Global Select Market on June 30, 2022, the last business day of the registrant's most recently completed second fiscal quarter, was approximately $212.1 million.

As of February 28, 2023, Outbrain Inc. had 51,163,304 shares of common stock outstanding, $0.001 par value per share.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's proxy statement for its 2023 annual meeting of stockholders are incorporated herein by reference in Part III of this Annual Report on Form 10-K to the extent stated herein. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days of the registrant's fiscal year ended December 31, 2022.

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Note About Forward-Looking Statements

This Annual Report on Form 10-K (this “Report”) contains forward-looking statements within the meaning of the federal securities laws, which statements involve substantial risks and uncertainties. Forward-looking statements may include, without limitation, statements generally relating to possible or assumed future results of our business, financial condition, results of operations, liquidity, plans and objectives. You can generally identify forward-looking statements because they contain words such as “may,” “will,” “should,” “expects,” “plans,” “anticipates,” “could,” “intends,” “target,” “projects,” “contemplates,” “believes,” “estimates,” “predicts,” “foresee,” “potential” or “continue” or the negative of these terms or other similar expressions that concern our expectations, strategy, plans or intentions or are not statements of historical fact. We have based these forward-looking statements largely on our expectations and projections regarding future events and trends that we believe may affect our business, financial condition and results of operations. The outcome of the events described in these forward-looking statements is subject to risks, uncertainties and other factors including, but not limited to:

- overall advertising demand and traffic generated by our media partners;
- factors that affect advertising demand and spending, such as the continuation or worsening of unfavorable economic or business conditions or downturns, instability or volatility in financial markets, and other events or factors outside of our control, such as U.S. and global recession concerns, geopolitical concerns, including the ongoing conflict between Russia and Ukraine, supply chain issues, inflationary pressures, labor market volatility, and the pace of recovery or any resurgences of the COVID-19 pandemic;
- risks and uncertainties related to the recent closure of Silicon Valley Bank (“SVB”) and other banks;
- our ability to continue to innovate, and adoption by our advertisers and media partners of our expanding solutions;
- the success of our sales and marketing investments, which may require significant investments and may involve long sales cycles;
- our ability to grow our business and manage growth effectively;
- our ability to compete effectively against current and future competitors;
- the loss of one or more of our large media partners, and our ability to expand our advertiser and media partner relationships;
- our ability to maintain our revenues or profitability despite quarterly fluctuations in our results, whether due to seasonality, large cyclical events, or other causes;
- significant fluctuations in currency exchange rates;
- the risk that our research and development efforts may not meet the demands of a rapidly evolving technology market;
- any failure of our recommendation engine to accurately predict user engagement, any deterioration in the quality of our recommendations or failure to present interesting content to users or other factors which may cause us to experience a decline in user engagement or loss of media partners;
- limits on our ability to collect, use and disclose data to deliver advertisements;
- our ability to extend our reach into evolving digital media platforms;
- our ability to maintain and scale our technology platform;
- our ability to meet demands on our infrastructure and resources due to future growth or otherwise;
- outages or disruptions that impact us or our service providers, resulting from cyber incidents, or failures or loss of our infrastructure, could adversely affect our business;
- political and regulatory risks in the various markets in which we operate; the challenges of compliance with differing and changing regulatory requirements; and
- the risks described in the section entitled “Risk Factors” and elsewhere in this Report.

Accordingly, you should not rely upon forward-looking statements as an indication of future performance. We cannot assure you that the results, events and circumstances reflected in the forward-looking statements will be achieved or will occur, and actual results, events or circumstances could differ materially from those projected in the forward-looking statements. The forward-looking statements made in this Report relate only to events as of the date on which the statements are made. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. We undertake no obligation and do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or circumstances after the date on which the statements are made or to reflect the occurrence of unanticipated events or otherwise, except as required by law.

PART I

Item 1. Business

Outbrain Inc., together with our subsidiaries, ("Outbrain," the "Company," "we," "our" or "us") was incorporated in August 2006 in Delaware. The Company is headquartered in New York, New York with various wholly-owned subsidiaries, including in Israel, Europe and Asia.

On July 22, 2021, our registration statement on Form S-1 (File No. 333-257525), filed on June 29, 2021, as amended, was declared effective by the U.S. Securities and Exchange Commission (the "SEC") in connection with our initial public offering ("IPO") of our common stock, and our common stock began trading on The Nasdaq Stock Market LLC ("Nasdaq") on July 23, 2021. On July 27, 2021, we closed our IPO and issued 8,000,000 shares of our common stock at an initial offering price of 20.00 per share, receiving aggregate net proceeds of $145.1 million, after deducting underwriting discounts, commissions and other offering costs.

Our mission is to help people discover content, products and services.

Outbrain is a leading recommendation platform for advertisers and digital media owners, reaching over a billion unique users around the world. Outbrain's technology provides personalization, engagement and monetization solutions to thousands of digital media properties, including many of the world's most prestigious publishers. For tens of thousands of advertisers around the world, Outbrain helps attract new customers and grow their businesses, driving measurable results and return on investment.

Over the past decade, consumers have become increasingly accustomed to seeing highly curated digital content and ads that align with their unique interests. Similar to the way in which social media and search have simplified discovery by synthesizing billions of consumer data points to offer personalized experiences, we provide digital media owners with a platform that encompasses data at scale as well as prediction and recommendation capabilities, helping them deliver both editorial content and paid advertising based on context and each user's interests and preferences. Additionally, as a result of increased regulatory scrutiny and consumer privacy advocacy, technologies such as ours, that rely primarily on context and first party data, have a unique advantage in building the future of online advertising.

Consumption of content continues to shift online, with over five billion consumers accessing the Internet, primarily through mobile devices, where scrolling through a feed experience is habitually expected by consumers on every page. According to the 2022 Digital News Report by Reuters Institute for the Study of Journalism at Oxford University, 77% of people access news through side-doors, not through the homepages of publications. We believe this means discovering content on article pages, on which we deliver user experiences, is more important than ever to help users navigate what to read, watch, or buy next.

Our platform is built for user engagement and, as a mobile-first company, is designed to be highly effective on mobile devices. Outbrain's technology is deployed on the mobile apps and mobile websites of most of our media partners, generating 72% of our revenue in 2022.

Outbrain operates a two-sided marketplace, which means we usually have exclusive control over all aspects of the user experience, allowing us to quickly test and deploy new formats for our advertisers and media owners. Since inception, we have been guided by the same core principles pertaining to our three constituents: users, media partners, and advertisers.

Users. We believe that by focusing on improving the user experience and ad format innovation, we are able to cultivate user behavior patterns that compound engagement over time, delivering superior long-term monetization for ourselves and for our media partners, as well as better return on ad spend for our advertisers.

Media Partners. We are committed to the long-term success of our media partners. Consistent with this philosophy, we focus on establishing a true win-win partnership. We strive to develop trusted, transparent, multi-year relationships with media partners through contracts which are typically exclusive with us. Our media partners include both traditional publishers and companies in new and rapidly evolving categories such as mobile device manufacturers and web browsers.

Advertisers. We offer a unique advertising solution across the entire advertising funnel, serving tens of thousands of advertisers and brands - from small businesses to large, Fortune 500 enterprise brands and the agencies that support them. Outbrain's value proposition to advertisers is to deliver performance, or measurable engagement, that drives business outcomes - not limited to impressions, views, and reach. Our success in delivering user engagement stems from long-developed artificial intelligence ("AI") and prediction capabilities that allow us to improve advertisers' return on ad spend ("ROAS") thus unlocking more advertising spend and attracting more advertisers. In turn, this enables us to better match ads to users and further grow user engagement and overall monetization. Additionally, our predictive algorithms can increasingly be leveraged to drive brand awareness and engagement objectives, especially with video and other high-impact formats.

We have delivered approximately $4.5 billion in direct revenue to our media partners since inception. We partner with thousands of the world's most trusted digital media owners for which we believe we are an important technology and monetization partner. Some key media partners with which we have long-standing relationships across our various regions include Asahi Shimbun, CNN, Der Spiegel, Le Monde, MSN, Sky News and Sky Sports, and The Washington Post. In addition to these long-standing relationships, Axel Springer, Daily Mail and Fox News joined our platform on an exclusive basis in 2022. The average tenure of our top 20 media partners, based on our 2022 revenue, is over seven years.

Through our direct, usually exclusive integrations with media partners, we have become one of the largest online advertising platforms on the open web. In 2022, we provided personalized recommendations and ads to over a billion monthly unique users, delivering on average nearly 12 billion recommendations to content, services and products per day, with over 30,000 advertisers directly using our platform.

Our platform is user engagement focused. We create and deliver highly engaging formats for our advertisers across native, display and video channels. In addition, a significant proportion of the engagement created by our platform is with the content of the media partner for which we are providing the platform, which we refer to as 'organic recommendations.' Outbrain is trusted to power organic recommendations across all publisher media types, including written editorial, video and audio content. This provides the user with a personalized content experience, while increasing time spent and engagement on the media partner's digital properties. We believe this is crucial to increasing long-term loyalty and retention of users for media partners, while increasing the depth and value of user visits in the short term. Powering both organic recommendations and targeted ads creates significant proprietary, first-party data that enables us to continuously refine our prediction algorithms, supporting our efforts to further increase engagement.

Data and AI-based algorithms are fundamental to everything we do. We process billions of data signals per minute, powering more than 500 million Click Through Rate ("CTR") predictions and over 100,000 recommendations per second. This drives our ability to deliver more than 40 million engagements per day. Our ability to collect and synthesize large data sets into our real-time decisioning engine powers our recommendations and our ad targeting, helping us optimize user engagement and monetization. As our platform grows, we are able to leverage our data scale in order to enhance our algorithms, enabling us to improve the efficacy of our platform. This, in turn, drives additional user engagement and thus more monetization for our partners and ourselves, which helps us further grow our business and scale our data. We refer to this phenomenon as our data flywheel. Engagements with our recommendations include user clicks on one of our recommendation links and views of a video that we recommended. We believe engagements are an indicator of the value users find in our recommendations and the value we create for our media partners through increased monetization.

We are targeting a large, fragmented and growing market. eMarketer states that approximately $567 billion was spent on global digital advertising in 2022, and by 2024, this figure is expected to increase to $696 billion. According to Statista, nearly 40% of the world's population has yet to gain access to the Internet. As the migration to online takes place, there remains significant future growth potential in e-commerce, given that just 14.8% of total retail sales in the United States in 2022 occurred online, according to Statista. Online retail sales are both growing and fragmenting. We believe this represents an opportunity as the broader ecosystem of retailers seek advertising and technology partners to support their continued online growth. Advertisers increasingly expect measurable impact from their digital advertising investment, with spending on marketing analytics hitting an all-time high in 2022 and predicted to grow by 63% over the next three years, according to the 2022 CMO Survey. Given our ability to deliver high impact and measurable performance to our advertisers, as well as our significant reach and unique inventory, we believe that we are well positioned to capture a significant share of this growing market.

Our Industry

Advertising is the primary business model for digital media on the open web. In addition, advertising is also increasingly used as a key revenue driver for other Internet based businesses, such as mobile gaming and e-commerce retailers. As a result, digital advertising not only subsidizes media consumption for billions of consumers globally, but also finances the creation of journalism, news, and entertainment, while lowering the costs to consumers of various products and services.

We believe that the following industry trends are relevant to our business:

Proliferation of digital media and digital advertising, particularly across mobile environments. As mentioned above, the consumption of content continues to shift to digital and primarily to mobile devices. In order to address this change, most media providers have shifted their focus from traditional means of content delivery to digital ones, with new 'digital-native' providers increasingly gaining attention. Advertising spend follows time spent and engagement, and mobile ad spend is expected to increase at a faster pace than digital ad spend in total. According to eMarketer, in 2022 global digital ad spend grew to $567 billion, an 8.6% year over year increase, and mobile ad spend grew to approximately $424 billion, a 12.1% year over year increase. According to Statista, the percentage of worldwide media ad spending in digital is estimated at 66.9% in 2022 and is projected to be 68.5% in 2023, growing to 73% by 2027.

Consumer habits and expectations are changing. Consumers have grown accustomed to consuming engaging content that is personalized and curated across multiple digital formats, including social, entertainment, gaming and audio. In mobile environments, consumers habitually scroll through apps, mobile browsers and news feeds, such as those found on social media, providing continuous opportunities to deliver personalized advertising experiences. As a result, we believe that personalized and engaging digital content experiences, supported by non-intrusive ads, have become the expectation of media owners, rather than a consumer luxury.

Trusted editorial content is becoming increasingly important. The massive scale of content creation and distribution across social media has made it difficult to curb the creation and proliferation of factually inaccurate news and misinformation, leading to a growing distrust of user-generated social media content. A study by The Reuters Institute for the Study of Journalism, published in September 2022, found that levels of trust in news on social media are consistently lower than audience trust in information in the news media more generally. We believe that this trend will continue. At the same time, advertisers are increasingly growing concerned about having their messages shown alongside unsavory user-generated content. As a result, advertisers have become increasingly cognizant of where they spend ad dollars, seeking media environments that prioritize quality, transparency and brand safety.

Performance and ROAS are important to advertisers. Following challenging global macroeconomic trends, advertisers across the advertising funnel are increasingly focused on high ROI campaigns that deliver on measurable performance objectives. As advertising spend becomes more accountable to key business metrics, technology platforms that deliver on engagement and performance are more relevant than ever. Furthermore, the ability to target advertising based on specific user interests and context, in real-time, has become increasingly important to advertisers, as it contributes to more efficient campaigns and improved ROAS. This creates demand for solutions that can adjust in real-time while measuring and optimizing for specific price and performance thresholds. As tools for targeting and tracking become more sophisticated and effective, advertisers are increasingly relying on performance centric pricing models to drive more measurable ROAS, for example, paying for a click (cost-per-click), lead, acquisition, download, install, or sale, instead of paying to simply display an ad which may or may not create value. Many advertisers, including the largest brands, leverage third-party software and predictive data-driven models to meet their performance goals. In parallel, increasingly user friendly and engagement-focused formats of digital advertising have evolved to better serve advertisers seeking performance and ROAS. In particular, video is a fast-growing segment of online advertising spend that has the potential to combine high impact formats and creative experiences with the more measurable engagement and business outcomes for advertisers.

Data-driven decisioning delivers better experiences and outcomes. Advances in AI models, software and hardware, along with the growing use of the Internet have made it possible to collect and rapidly process massive amounts of real-time data signals related to content, context and performance, and incorporate those signals into prediction algorithms like ours. Leveraging data at scale, advertising technology providers can dynamically serve content or ads that integrate seamlessly into user environments to deliver tailored, impactful experiences. The decisioning intelligence developed by leading technology providers and large Internet platforms has made advertising more engaging for users and more effective for advertisers. As a result, advertisers are increasingly focused on data-driven decisioning, making these capabilities critical for media partners, as they seek to deliver quality experiences to their users while maintaining their relevance with advertisers.

The Challenge for Digital Media Owners

As the pace of online content creation and consumption continues to accelerate, and competition for user attention intensifies, digital media owners must focus on their core strength: creating relevant, interesting, quality content. However, their success also depends on sustainably attracting, engaging, retaining and monetizing audiences while competing with the major social and aggregation platforms, known as the ‘walled gardens.’ These platforms, driven by the nature of their services and their scale, have significant resources to invest in technology and have amassed large volumes of coveted user data, enabling them to deliver highly targeted and thus effective ads alongside user generated or third-party content, helping them achieve an outsized share of the advertising market.

As a result, we believe that digital media owners, whose properties are often referred to as the ‘open web,’ face challenges in the following key areas:

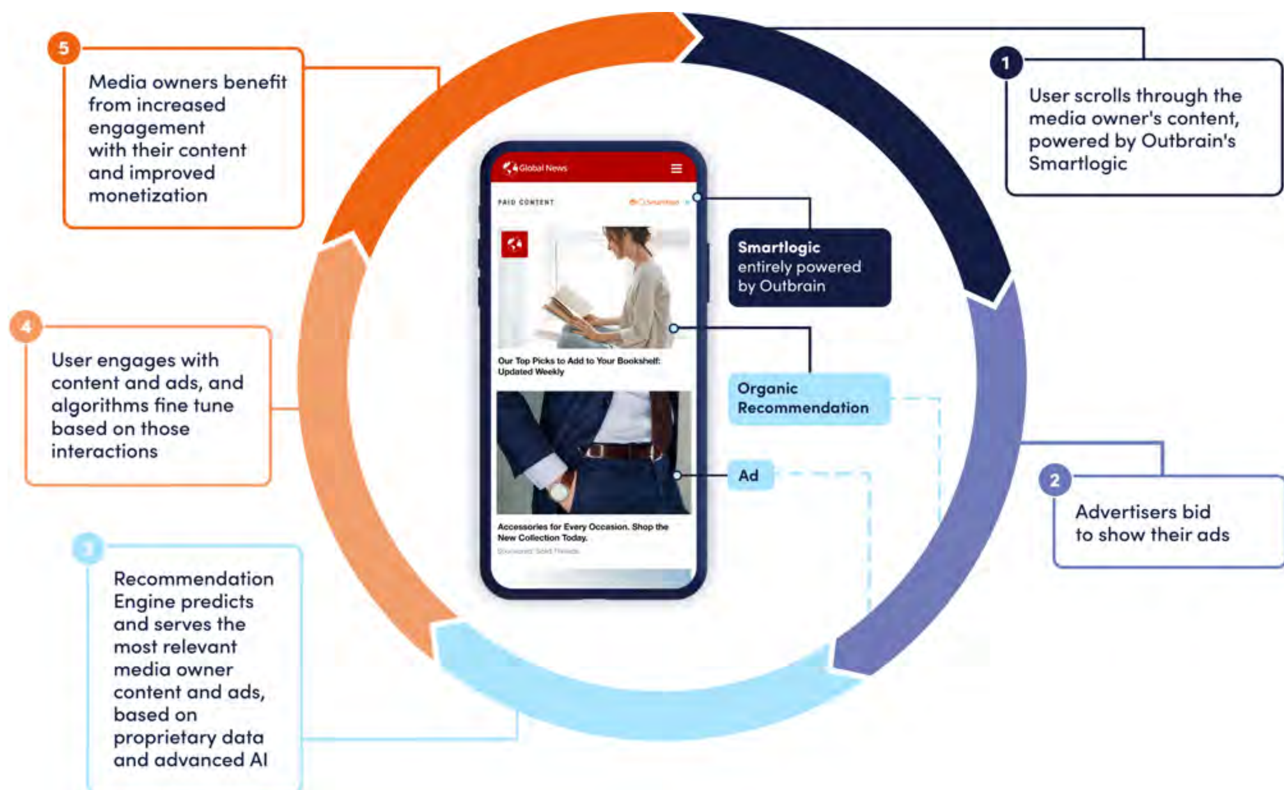
User experience. In today’s dynamic, mobile-first environment, providing a high-quality user experience that addresses consumer habits and expectations is critical to attracting, engaging and retaining audiences. For example, over the past few years, consumers have grown accustomed to receiving personalized content recommendations, which are now common within the walled gardens. In addition, infinite scrolling feeds of content have also become popular, especially on mobile devices. Keeping pace with these changes, as well as other emerging products and features, represents a significant challenge to many digital media owners who lack the scale and resources required to compete.

Monetization. The fragmented ecosystem of digital advertising technology intermediaries, constantly evolving landscape of ad formats and the growing sophistication of advertisers seeking measurable ROAS makes it difficult for digital media owners to develop and maintain the technology required to optimize their monetization. In addition, digital media owners often lack access to a large and diverse advertiser base. As a result, they may not benefit from the variety of ads that are necessary in order to optimize consumer engagement and thus overall monetization. New technologies such as Keystone by Outbrain™ seek to optimize revenue for media owners across not just advertising, but subscription revenue, e-commerce revenue, and other sources of revenue with one holistic optimization algorithm.

Our Solution

We enable digital media owners to provide their users with an experience that is relevant to their interests while generating incremental revenue through highly engaging content recommendations and relevant advertisements. Our platform is informed by large, proprietary data sets. Our recommendation engine relies on advanced artificial intelligence technology and machine learning algorithms. We leverage our scale, gained through a large number of media partners and advertisers, to continuously grow and enhance our unique data and our technology.

By delivering relevant recommendations, alongside targeted ads, our platform increases and monetizes user engagement. Our technology platform forms the underlying "operating system" of our media partners' content feeds and other placements, optimizing the user journey and helping them manage and grow their business.



We focus on the long-term

- ***Our goal is to delight the user.*** We believe in the compounding value that is generated by increasing user engagement. As a result, we aim to delight users by recommending relevant content in order to deliver superior long-term monetization for our media partners and ourselves. In so doing, we strive to deliver a unique advertising product that drives actual engagement and business results through better, more relevant ads.

- ***Quality is fundamental.*** We partner with prestigious and trusted digital media owners around the world. Through our commitment to working with the most credible sources of digital media and content creators, we have created an ecosystem trusted by media owners, advertisers and users alike.

- ***Deep integrations are key.*** Our technology is deeply integrated with our partners' systems, enabling us to roll out new products and features with speed. As a result, our partners gain the flexibility to capitalize on new forms of content engagement and advertising, as well as shifting consumer preferences, empowering them to achieve their growth and monetization objectives.

- ***Transparency builds trust and alignment.*** By maintaining transparency on pricing, data collection and efficacy, we align our incentives with those of our partners and work to ensure their objectives are achieved, driving the long-term success of our business.

Our Offering for Media Partners

We provide media partners with an "operating system" that helps them optimize their users' journey and manage and grow their businesses. Our platform and products provide the data, scale, and technology capabilities to personalize the content experience, grow audiences, maximize user engagement and monetize content. We empower media partners, enabling them to innovate their user experience by continuously introducing new features, formats, capabilities and technologies that help optimize content delivery through personalized recommendations. We aggregate advertiser demand on behalf of media partners, providing them with critical monetization. Media partners benefit from the combined scale of technology, data and users, which we derive from the large volume of partners and advertisers that use our platform.

Our product suites for media partners, Outbrain Engage and Keystone by Outbrain, encompasses multiple key technologies, enabling media partners to:

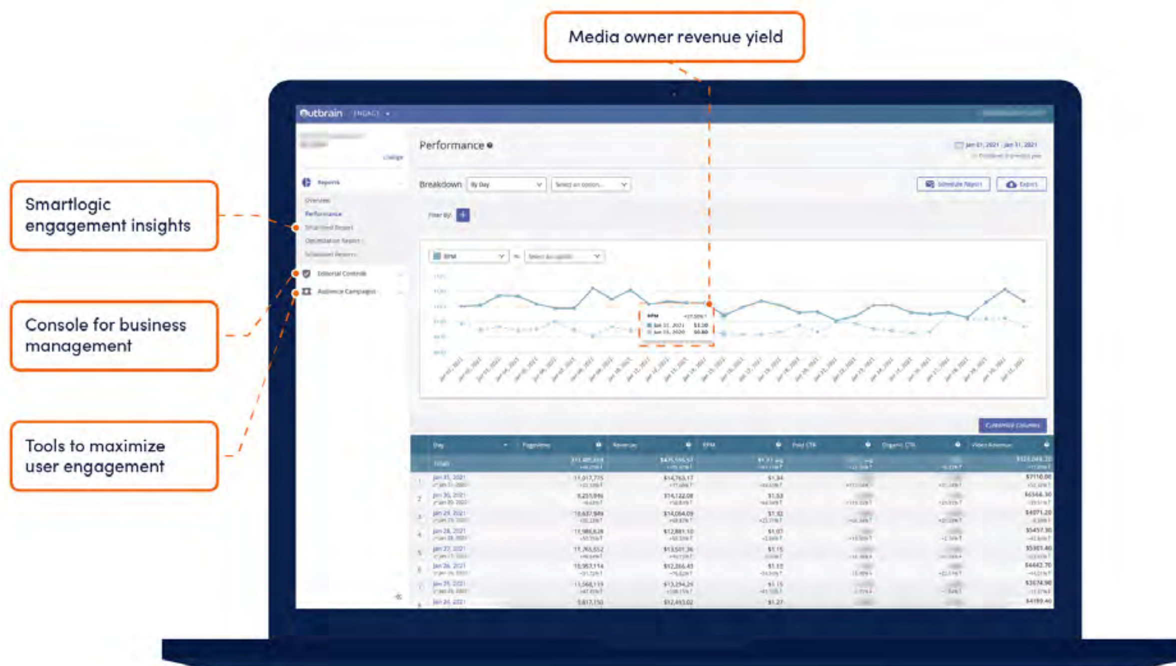
- ***Delight users through data-driven recommendations.*** Our platform synthesizes billions of data points using our Smartlogic solution to dynamically manage the arrangement, formats and composition of content delivered to a user depending on the user's context, interests and preferences.

- ***Monetize content through customized, data-driven advertising.*** We deliver critical revenue that media partners depend on to operate their business. Our platform and partner integrations support a wide range of ad formats that leverage unique data insights in order to maximize revenue. Our algorithms balance revenue yields with overall user experience and can be harnessed to support additional revenue initiatives, such as subscriptions and e-commerce. Outbrain typically provides media partners with close to a 100% fill rate of the ad inventory managed by Outbrain; we believe that Outbrain's role as an end-to-end solution, working directly with both media owners and advertisers, provides an economic advantage for our partners.

- ***Maximize user engagement.*** Our solution enables media partners to engage and retain their audience, helping them achieve multiple business outcomes such as time spent with their content, growth of digital subscriptions, app downloads, and more. In addition, Smartlogic optimization engine is an always-on testing and optimization solution that continuously enhances page layouts for maximum engagement and value.

- ***Manage their business.*** Our solution includes a dashboard enabling media partners to manage and control certain aspects of our platform including the content, formats, sources, frequency and categories of ads delivered on their properties, while simultaneously considering our media partner key performance indicators ("KPIs"). In addition, we provide precise advertiser and creative classification and filtering tools while strictly enforcing rigorous ad and content quality requirements by the media partner. We operate at great scale, with hundreds of thousands of new ads uploaded to our platform daily. We have processes and technology to review ads, either through our automated processes or manually, in a process designed to ensure compliance with our content guidelines (which are available publicly on our website). Our extensive ad processes and automated monitoring tools provide a further layer of quality control for our media partners.

  With the launch of Keystone by Outbrain in 2022, media owners can now use Outbrain's technology to optimize across all of their digital media properties and across all their business goals, not just advertising revenues and editorial recommendations. This platform enables them to maximize revenue from growing sources of revenues such as subscriptions, e-commerce, events, and any other revenue-generating activity that is relevant to their business. By optimizing the user journey and internal campaigns, Keystone by Outbrain enables a more holistic management of overall revenue initiatives for media owners that are increasingly focused on revenue diversification.



We have thousands of media partner arrangements. We document most of our media partner arrangements using standard contract terms, which are comprised of a partner enrollment form, completed by media partners seeking our services, that hyperlinks to our publicly available standard partner distribution terms. The partner enrollment form contains the commercial terms of our arrangements: term length (initial, auto-renewal and notice period), the specified percentage of the revenue earned from implementing our technology on the media partner pages, the payment terms, as well as any additional terms agreed upon by the parties. The hyperlinked standard partner distribution terms include terms related to the license and use of the platform and technology, limitations on use of similar technologies, and customary terms and conditions.

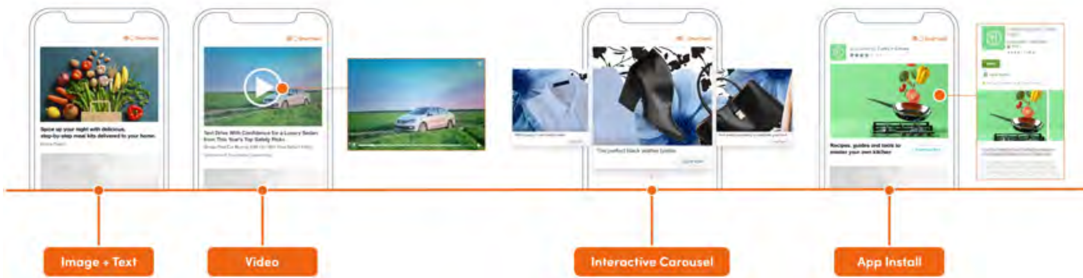
In addition, certain media partner arrangements include additional commercial terms such as variable revenue percentages based on page view volume or revenue, or a guaranteed minimum rate of payment if the media partner meets certain additional criteria, including the implementation of advertisement spaces in defined placements across the media partner sites. We also have arrangements with media partners on a programmatic basis such that the contract defines the mechanics to participate in the media partner's real-time auction for access to the media partner's inventory, with neither party committing to provide or bid on inventory. The type of commercial terms, such as revenue percentages, tiering of such percentages, guaranteed minimum rates of payment or programmatic are all factors, among others such as geography and size of the media partners, that contribute to our revenue mix.

Our Offering for Advertisers

Our platform enables advertisers to have one-on-one interactions with consumers, at scale. We provide advertisers with a powerful platform with significant reach and exclusive inventory on the open web, helping them connect with audiences on premium digital properties around the world. Our platform enables advertisers to launch and run campaigns on a self-service basis or as a fully managed service offering for larger enterprise brands and the agencies that support them, via our own campaign management and demand side solution or via a third party demand side platform.

Outbrain provides advertisers with:

- ***Seamless and non-intrusive ad formats***. We provide advertisers with access to ad inventory that benefits from high user attention by delivering ads that are native to the user experience and are personalized based on our unique data and understanding of each user's context and interests. We support a variety of formats, including text and image native ads, outstream video, pre-roll video ads, interactive carousel, app install ads and other forms of display and rich-media ads.

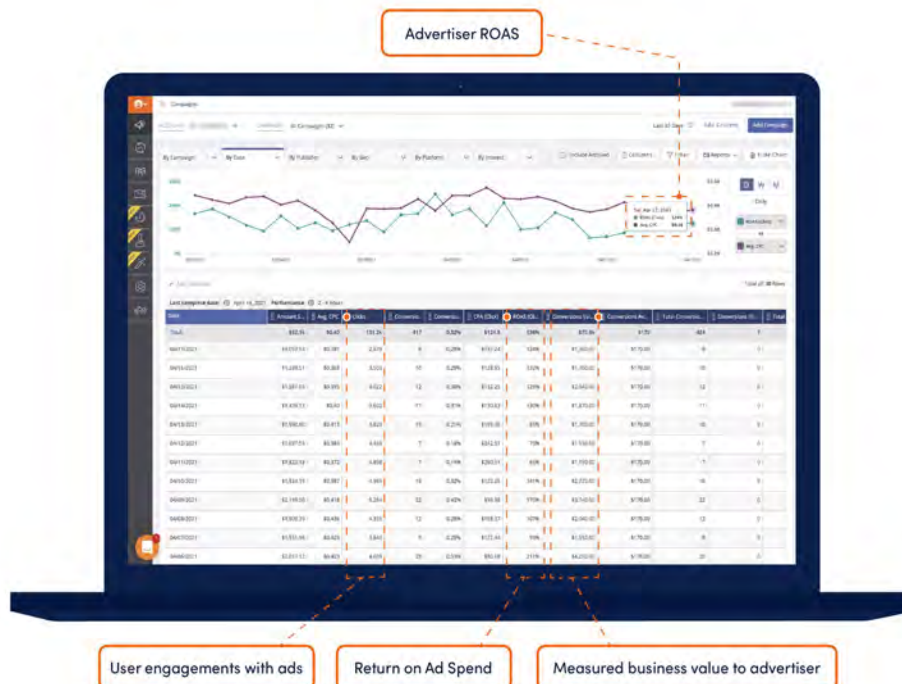


- ***Ads optimized for engagement.*** Our deep and direct integration across the digital properties of thousands of media partners provides us with a wealth of proprietary data pertaining to user engagement and content consumption patterns. This enables us to deliver ads based on our proprietary user graph, as well as other unique data-driven tools and technologies. We believe that our direct integrations and exclusive partnerships are a differentiator when compared to most other online advertising solutions. Unlike other solutions, which often connect an advertiser to an available ad opportunity in a non-exclusive manner, typically mediated by other third-party platforms and technologies, our platform benefits from direct visibility into users' overall engagement.

- ***Results—optimize and pay for performance.*** Our platform enables advertisers to optimize to specific campaign goals, and buy on a Cost-per-Click basis, guaranteeing engagement and delivering other measurable business outcomes. Advertisers are able to view progress, manage ongoing campaigns and maximize ROAS. Our AI-based autopilot feature enables advertisers to set their varied goals and KPIs, such as conversion goals, and the platform automatically optimizes bid prices and budget allocations to hit these goals.

- ***Programmatic Access.*** We provide a full suite of programmatic buying capabilities for advertisers and agencies. We offer advertisers an engagement focused programmatic demand side platform (DSP) Zemanta, and in addition we integrate with most of the leading third-party DSPs to provide access to our marketplace. We are continually investing in partnerships with programmatic technologies to better deploy, measure, and optimize programmatic campaigns.

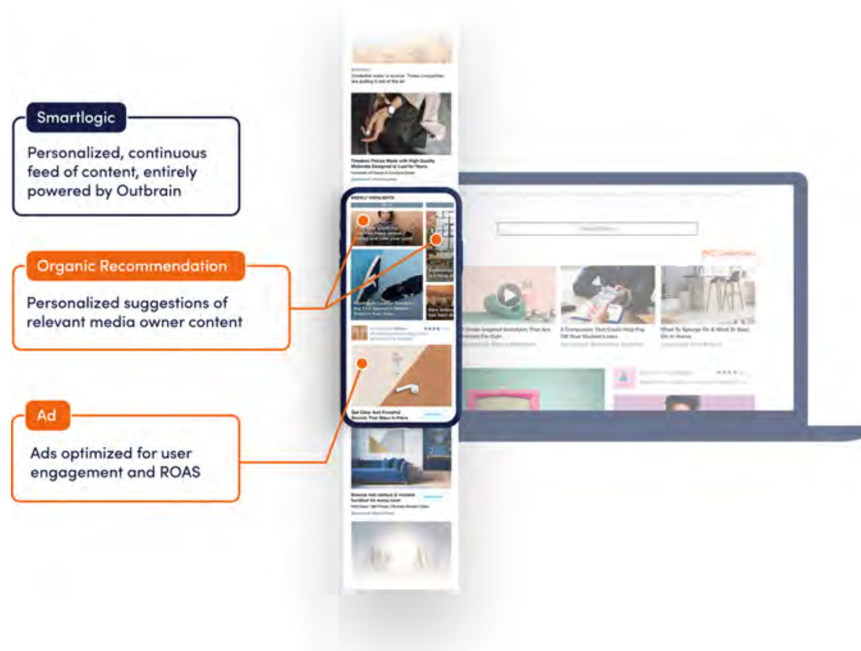
- ***Quality.*** We work with established media partners, employing rigorous selection criteria, onboarding standards, controls, processes, and ongoing monitoring. As a result, our platform provides predominantly exclusive access to engaged users in high quality content environments across many of the world's most trusted media properties.



Our Personalized Experience for Users

Our Smartlogic product dynamically adjusts both the arrangement and the formats of content delivered to a user, depending on the user's preferences and our media partner's KPIs, ensuring a more personalized and engaging experience while providing a balance of editorial engagement and monetization. It leverages machine learning to personalize not just the content, but the entire user experience, including the format of ads, ordering and more.

Our recommendation solution drives deeper discovery of content, products and services, longer sessions, and better user engagement. We power the content feeds of thousands of digital media owners, combining highly engaging multimedia formats, such as text and image, or video, with a diverse range of experiences and dynamic optimizations, continuously improving a personalized user experience.



Our Strengths

- ***Mission-critical partner for digital media owners.*** We provide digital media partners with mission-critical technology, an "operating system," that is designed to increase user engagement and content monetization. The capabilities and revenue we provide enable many of our partners to sustain their businesses and deliver quality journalism, in some cases as they continue a long-term transition away from historic reliance on offline ad revenue.

- ***Unique, at-scale end-to-end platform for advertisers.*** Through our vast and predominantly exclusive relationships with media partners, we provide advertisers with access to over a billion monthly unique users. The breadth of our audience reach enables advertisers to deliver at-scale campaigns and to optimize the performance of their advertising spend.

- ***Unique proprietary data and algorithms driving a virtuous cycle.*** Our direct integrations across our partners' properties provide us with a large volume of proprietary first-party engagement data, including context, user interest and behavioral signals. Leveraging our data, we continuously optimize our algorithms to improve user engagement and advertiser ROAS. By delivering better results to advertisers, we are able to grow our business and our platform, which, in turn, helps us collect more data and further enhance our algorithms, driving better results for our partners, helping us further grow our platform and our business.

- ***Well positioned for a privacy-centric world.*** By integrating directly with our media partners' properties, we generate proprietary first-party data and are able to collect and infer valuable user related data and insights. With the upcoming discontinuation of third-party cookies and confusion about the efficacy of any new approaches, marketers are looking for more enduring ways to understand their customers. Our ability to extract and leverage unique contextual signals enables us to deliver strong user engagement and advertiser ROAS without the need to rely solely on cookie-based targeting that may not be available in the future.

- ***History of successful innovation.*** We pioneered our category and have been focused on innovation since our founding. To ensure seamless product innovation we operate as a continuous deployment engineering organization, releasing an average of over 300 code deployments daily. We plan to continue investing in our technology stack, platform and its capabilities.

- ***Scaled, profitable and diversified business.*** We have grown our business while achieving profitability, demonstrating the power and scalability of our technology, the strength of our partner and advertiser relationships and the inherent operating leverage of our model. Our business is well diversified. In 2022 our top twenty digital media partners accounted for approximately 50% of our revenue, with the largest accounting for 10% of our revenue. During the same year, our top twenty advertisers accounted for approximately 20% of our revenue, with the largest accounting for approximately 2% of our revenue.

- ***Team and culture.*** Companies cannot effect the change they aspire to achieve without passionate, innovative employees. We rely on a global and diverse team of highly capable employees to collaborate, innovate, and execute our vision—to empower high quality journalism and content creation. Outbrain routinely conducts anonymous employee engagement surveys; according to the survey in August 2022, which had a 91% employee participation rate, 82% of our employees responded that they would recommend Outbrain as a great place to work.

Our Growth Strategies

We believe that we are well positioned to capitalize on the continued growth of digital content consumption and digital advertising. We intend to continue investing in technology and innovation to improve our recommendation engine and product offering, support our efforts to grow relationships with existing and new media partners, and expand our advertiser footprint and share of wallet. We plan to pursue the following growth strategies:

- ***Continuously improve user engagement.*** Improving the quality of our recommendation engine has been an important driver of past growth and we expect it to remain a key driver of future growth. We believe that a great user experience drives engagement that compounds over time. Continued investment in our technology, artificial intelligence and machine learning capabilities drives a better user experience, resulting in better CTR predictions and, in turn, higher monetization yield and revenue. We believe that we can significantly grow our business solely by improving user engagement.

- ***Grow our ad inventory.*** We have an extensive history of growing ad inventory by expanding our media partnerships and forming new ones with an emphasis on premium, top 20 media owners in the markets where we operate.

  Existing partners. We have a strong track record of growth through the continuous expansion of existing media partnerships, as we launched products, features and formats that improved user engagement and retention, grew audiences, and improved monetization. We plan to continue innovating as we seek to grow our ad inventory by implementing optimizations, creating new ad formats, seeking additional high impact ad placements, and pursuing opportunities to manage a larger proportion of our media partners' digital properties through both direct integrations and programmatic relationships. In addition, we plan to expand our partnerships with original equipment manufacturers (OEMs), enabling us to offer personalized content feeds and advertising solutions for different platforms such as browsers and mobile operating systems.

  New partners. We plan to pursue new partnerships with media owners as well as integrations with programmatic platforms that will expand our reach to additional user segments, helping us grow our business.

- ***Grow advertiser spend.*** We plan to grow spend from existing, as well as new advertisers by pursuing the following initiatives:

  - *Further invest in our advertiser product suite.* In the past, improvements to our advertiser solutions have been a meaningful driver of growth for our business. We plan to continue investing in our media buying platforms, Amplify and Zemanta engagement DSP, as well as optimize our existing programmatic integrations to third party DSPs, in order to deliver better tools and technologies for advertisers on our platform.

  - *Continuously improve ROAS.* We aim to deliver better results for advertisers through improved CTR, as well as automation in pricing and conversion optimization through our autopilot AI-based solution, helping us grow the existing and new advertisers' share of wallet.

- *Grow brand spend with high impact ad formats*. With the introduction of our brand studio and the acquisition of the vi video advertising platform in 2022, we are able to expand our existing suite of solutions aimed at brand advertisers looking to drive high-impact and highly engaging experiences. The addition of pre-roll video ads to our platform presents a significant growth opportunity in video. From 2018 to 2022, we grew video revenues from approximately 2% to approximately 10% of our annual revenue, with significant remaining headroom for growth into a higher yielding business.

  We believe that we will be able to capture significant spend from new and existing brand advertisers by providing, amongst others, new capabilities, such as additional exclusive ad placements, creative brands studio, new optimization solutions, and unique ad formats delivering measurable outcomes.

- *Attract new types of advertisers.* In addition to investments in our advertiser product and technology, we plan to invest in sales and marketing initiatives aimed at attracting new types of advertisers to our platform. Our focus on premium media partnerships and display and video formats enable us to form new business relationships with advertisers who traditionally have not spent with Outbrain. We believe that Zemanta's programmatic offerings will gain adoption amongst leading agencies and brands looking for an alternative DSP that delivers on engagement goals, and that new programmatic demand partners will enable us to continue to expand our brand advertiser footprint.

- *Deepen strategic value to media partners.* With the launch of Keystone by Outbrain in 2022, media owners can now use Outbrain's technology to optimize across all of their business goals, not just advertising and editorial recommendations. This enables them to maximize revenue from growing sources such as subscriptions, e-commerce, events, and any other revenue-generating activity that is relevant to their business. While our core product remains focused on maximizing advertising revenue and editorial engagement, Keystone by Outbrain enables a more holistic management of overall revenue for media owners increasingly focused on revenue diversification.

- *Acquisitions and strategic partnerships.* We have a track record of successfully executing a number of acquisitions and partnerships, helping us efficiently expand our offerings, grow our business and grow our talent. In 2017, we acquired Zemanta, providing us with advanced programmatic capabilities. In 2018, we acquired AdNgin, an advanced user interface optimization platform. In 2019, we acquired Ligatus, a German-based native advertising company. In January 2022, we acquired video intelligence AG, providing us with an expanded video offering for advertisers and media owners. We intend to continue pursuing partnership and acquisition opportunities that will enhance our technology or market presence and deliver more value to our partners and advertisers.

Our Competition

The digital advertising industry is highly competitive and fragmented. We compete for advertising dollars and media owner partnerships with advertising technology platforms such as Criteo, Magnite, PubMatic, RevContent, Taboola, Teads, The Trade Desk, and others, as well as large consumer-facing digital platforms with advertising technology capabilities, such as Amazon, Facebook, Instagram, Google and Twitter. The key factors that enable us to compete effectively for inventory from digital media owners include: the ability to deliver competitive monetization and engagement on media partner properties; trust, transparency and long-term alignment; and differentiated feed technology. The key factors that enable us to compete effectively for advertising dollars include: delivering high ROAS through our ability to identify and engage relevant users; massive audience reach; quality of inventory; and comprehensive range of inventory types, advertising formats and campaign tools.

Our Technology

We have designed our platform to process real-time content and advertising transactions quickly and efficiently at a massive scale. Our platform delivers on average nearly 12 billion recommendations daily, in 20 languages. We designed our platform using a microservices-based architecture, which enables the rapid deployment of new features with high availability, reliability, and redundancy.

Our platform consists of the following key technology components:

- ***Infrastructure.*** To support our business needs, we operate our own proprietary cloud infrastructure, and also utilize other public clouds. Our proprietary infrastructure includes over 7,000 servers, with storage capacity exceeding several petabytes. Our servers are primarily located in three third-party data centers, on a co-location basis, in Secaucus, NJ, Sacramento, CA, and Chicago, IL. Each of our data centers is operated by a different vendor, in order to minimize the impact of any outage on our platform. While all three data centers actively serve recommendations to users, we are able to serve all of our traffic from two of the three data centers if needed. We utilize a global content delivery network (CDN), and dynamic acceleration, for additional performance optimization and redundancy. In 2022, we also started serving recommendations from a public cloud based in the Netherlands to countries in Europe. We use similar architecture as our primary third-party data centers and deploy over two availability zones for high availability.

  Our infrastructure is designed such that we do not have any known single point of failure at any level. Within each data center, we have load-balanced servers on each layer of the system, so that a failure in one server or component will not impact performance or availability. Some of these clusters are dedicated to handling incoming traffic and delivering content, including web servers, caches and real-time database applications. Other clusters are devoted to the data analytics and algorithm modeling involved in creating content recommendations. The design also includes load balancers, firewalls and routers that connect the components and provide connections to the Internet. In particular, we use software specifically designed for processing large data sets to provide real-time data analysis, the results of which are then fed back to refresh and improve our recommendation algorithms.

  We monitor our system using several tools, both internal and external, to gauge our uptime and performance. We also use multiple layered security controls to protect our recommendation engine and our data assets, including software-based access controls for our source code and production systems, segregated networks for different components of our production systems and centralized production systems management. We believe that the failure of any individual component will not affect the overall availability of our platform, having maintained an uptime of 99.9% from 2018 to 2022.

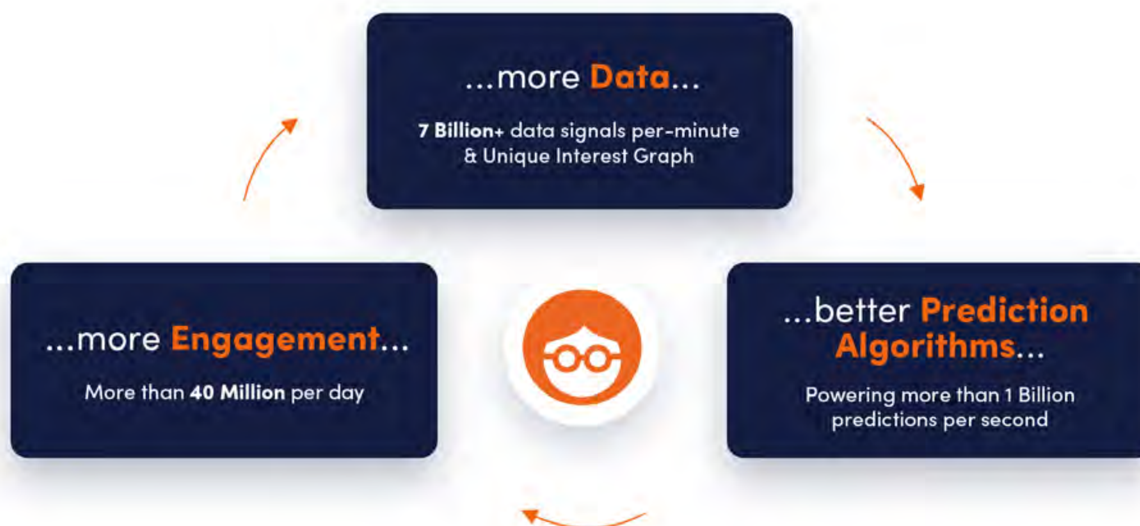
- ***Data.*** One of the key benefits of our platform is the management, analysis, and structuring of valuable user engagement and advertising data.

  - *Our data scale:* We gather billions of data events per minute delivering nearly 12 billion recommendations per day. On average, we collect in excess of 80 terabytes of data per day consisting of contextual signals, advertiser data, and user engagement data (typically clicks on recommendations). We leverage our data to improve our algorithms and prediction capabilities.

  - *Our automated content index:* To operate our platform, we have created our automated content index, comprising over 5 billion content elements. Our technology automatically classifies and analyzes content at a rate of over 1.5 million pages a day in 20 different languages. We index content through RSS feeds and JavaScript triggers to continuously identify new content and changes to existing content. Our automated index deconstructs content into base elements including titles, images and topics in order to recombine the elements into targeting data and formatted recommendations and ads.

- ***Artificial Intelligence and Machine Learning.*** Our proprietary artificial intelligence and machine learning capabilities enable us to harness the vast volume of data we collect in order to effectively match users to relevant content and ads based on our content index. Our algorithms make over 1,000 click and conversion rate predictions, on average, before selecting which recommendations to present on each page view.

Our Data Flywheel



Sales and Marketing

We focus our sales and marketing efforts on supporting, advising, and training our partners and advertisers, helping them optimize their use of our platform. We employ in-market sales teams across our markets, helping us attract premium digital media owners and advertisers to our platform. In addition, we have developed and currently utilize online acquisition channels to attract new advertisers, who we are able to onboard and serve in an automated manner, using self-serve tools and technologies.

Our sales teams educate prospective media owners, partners, and advertisers on the use, technical capabilities, and benefits of our platform. Our dedicated teams work with potential customers through the entire sale cycle, from initial contact to contract execution and implementation. Throughout the process, our teams provide guidance as to how our platform can optimize the value of a media partner's audience or how an advertiser can reach relevant users. Additionally, following contract execution and implementation, our account management teams guide media partners on how additional platform deployment and optimizations can deliver incremental monetization. We engage advertisers and their agencies in order to educate them on how to increase reach and ROAS using our solutions.

Our marketing team is focused on delivering strategies that drive efficient new partner and advertiser acquisition, enhancing our position as key industry thought leaders, supporting our sales teams, and increasing awareness of our brand.

Human Capital Resources

Much of our success can be directly attributed to our global team of technology, business, and data science experts who work out of our 17 locations worldwide. Outbrain comprises a diverse, intelligent and driven group of individuals who are passionate and excited to be leading the way in which users discover things online.

Our culture and team are the most important assets in building and expanding our business. Our team identifies new problems to solve, builds solutions, optimizes and extends our infrastructure, and acquires and serves customers. We believe that strong and diverse teams deepen customer relationships, promote innovation, and increase productivity. Our Culture Manifesto, available publicly on the Outbrain website, is one of many important expressions of the values and principles that reflect how we behave, collectively and individually.

Our people strategy revolves around creating employee experiences. We strive to foster deep employee engagement built upon personal development and achievement that is supported by continuous feedback, learning, and team building. As we continue growing our team, and become more diverse culturally and geographically, we want to make sure we retain a shared mission among the people that become part of our company. In particular, there are certain characteristics that we seek out in our employees:

- **Intelligent and productive.** There are many great attributes companies can seek in the candidates they hire—academic degrees, deep industry expertise, hands-on work experience, etc. While these attributes are an important part of our screening process, we seek, above all else, a combination of smarts and a "get stuff done" attitude.
- **Collaborative.** We love hiring and nurturing professionals who are great at their craft. At the same time, we are cognizant that we are ultimately playing a team sport and we therefore look for people who strive to be amazing team players. A self-described "Superstar" or "Ninja" focused on personal status is not likely to fit our team, even if they might be very good at their profession.
- **Passionate.** People who have a passion for something typically have that spark in their eyes when they engage in the work they love. They bring their best self to work, possess the desire to improve and learn, and focus on opportunities rather than obstacles. Through their passion, they set the tone for the rest of the team and become excellent examples for everyone to follow.

We also strive to make Outbrain diverse at all levels of the Company, and in all types of jobs. Our priority is to always hire and promote people based on qualifications and merit, and we believe that this approach does not conflict with the objectives of inclusion and empowerment. Our team consists of people from many different nationalities and cultures with different perspectives, opinions and ideas which we believe is undeniably powerful and ultimately drives shareholder value. We support employee-led employee resource groups ("ERGs"), which foster a diverse and inclusive workplace. We currently have four ERGs: OB Good, OB Green, OB WE and OB-4-Equality, focusing on social responsibility, environmental sustainability, women's empowerment, and diversity equity and inclusion, respectively, all of which are open to people of all backgrounds.

As of December 31, 2022, we had 1,076 employees and contractors. Based on where data is available, approximately 51% were male and approximately 47% were female. Approximately 41% of our workforce is located in Israel, 13% is located in the United States, 11% is located in Slovenia, and the remaining 35% is located in our other global offices. In March 2020, we transitioned to remote work, with selective offices returning on a hybrid basis where conditions related to COVID-19 permitted. In 2022, we returned to our offices using a hybrid model, with employees working from both our office locations and their homes.

Intellectual Property

The protection of our technology and intellectual property is an important component of our success. We protect our intellectual property rights by relying on federal and state statutory and common law rights, foreign laws where applicable, and contractual restrictions. We seek to control access to our proprietary technology by entering into non-disclosure agreements with third parties and disclosure and invention assignment agreements with our employees and contractors.

We consider our trademarks, patents, copyrights, trade secrets, and other intellectual property rights to be, in the aggregate, material to our business. In addition to our intellectual property rights, we also consider the skills and ingenuity of our employees and the functionality and frequent enhancements to our solutions to be contributors to our success. We believe our platform would be difficult, time consuming, and costly to replicate. We protect our competitive technology position through innovation and by continually developing new intellectual property.

Outbrain has built an extensive intellectual property portfolio to date. This portfolio includes 18 granted U.S. utility patents, 35 granted U.S. design patents and 15 European registered community designs.

Regulatory Environment

We are subject to a variety of laws and regulations in the United States and abroad that involve matters central to our business, many of which are still evolving and being tested in courts, and could be interpreted or enforced in ways that could harm our business. These laws and regulations involve matters including privacy, data use, data protection and personal information, content, intellectual property, advertising, marketing, distribution, data security, data retention and deletion, data localization and storage, data disclosure, competition, protection of minors, consumer protection, accessibility, taxation, and economic or other trade controls including sanctions, and securities law compliance. Foreign laws and regulations can impose different obligations, or penalties or fines for non-compliance, or be more restrictive than those in the United States. For example, the Digital Services Act (DSA) in the European Union, which will apply to our business as early as June 2023, may impose new restrictions and requirements for our products and services that could significantly increase our compliance costs. The DSA also includes significant penalties for non-compliance. More generally, the application, interpretation, and enforcement of applicable laws and regulations are often uncertain, particularly in the new and rapidly evolving industry in which we operate, and may be interpreted and applied inconsistently from jurisdiction to jurisdiction and inconsistently with our current policies and practices.

Orders issued by, or inquiries or enforcement actions initiated by, government or regulatory authorities have caused us, and in the future will continue to cause us, to incur substantial costs and expose us to civil and criminal liability (including liability for our personnel) or penalties (including substantial monetary remedies). Such orders, inquiries or enforcement actions could be materially adverse to our business, result in negative publicity and reputational harm, divert resources and the time and attention of management from our business, or subject us to other structural or behavioral remedies that adversely affect our business.

We have been subject to significant legislative and regulatory developments in the past, and proposed or new legislation and regulations could significantly affect our business in the future. For example, we implemented a number of changes and controls as a result of requirements under the General Data Protection Regulation ((EU) 2016/679) (GDPR), and may implement additional changes in the future. The GDPR also requires submission of personal data breach notifications to our lead European Union privacy regulator, and includes significant penalties for non-compliance with the notification obligation as well as other requirements of the regulation. The interpretation of the GDPR is still evolving and draft decisions of regulators are subject to review by other European privacy regulators as part of the GDPR's consistency mechanism, which may lead to significant changes in the final outcome of such investigations. As a result, the interpretation and enforcement of the GDPR, as well as the imposition and amount of penalties for non-compliance, are subject to significant uncertainty. In addition, the United Kingdom, Brazil, Japan and Singapore and other countries have enacted similar data protection regulations imposing data privacy-related requirements on products and services offered to users in their respective jurisdictions that could increase the cost and complexity of delivering our services, cause us to cease the offering of our products and services in certain countries, or result in fines or other penalties. The California Consumer Privacy Act, as amended by the California Privacy Rights Act, and similar laws recently enacted by other states also establish certain transparency rules and create certain data privacy rights for users. In addition, the European Union's ePrivacy Directive and national implementation laws impose additional limitations. Changes to our products or business practices as a result of these or similar developments have in the past adversely affected, and may in the future adversely affect, our business. The enactment of new proposed laws is gaining momentum and adds additional complexity to our and our partners' compliance programs.

We are also subject to evolving laws and regulations that dictate whether, how, and under what circumstances we can transfer, process and/or receive certain data that is critical to our operations, including the collection of data and the data shared between countries or regions in which we operate. If we are unable to collect data and/or transfer data between and among countries and regions in which we operate, it could affect our ability to provide our services, the manner in which we provide our services or our ability to target ads, which could adversely affect our financial results. For example, the Privacy Shield, a transfer framework we relied upon for data transferred from the European Union to the United States, was invalidated in July 2020 by the Court of Justice of the European Union and the other bases upon which we rely to transfer such data, such as Standard Contractual Clauses (SCCs), have been subjected to regulatory and judicial scrutiny. If no alternative adequacy decision, such as E.U.-U.S. Data Privacy Framework, is adopted by the European Commission, or we are unable to continue to rely on SCCs, this would materially and adversely affect our business, financial condition, and results of operations.

Interest-based advertising specifically, or the use of data to draw inferences about a consumer's interests and deliver relevant advertising to that consumer, is under increasing scrutiny by legislative bodies, regulatory bodies, self-regulatory bodies, privacy advocates, academics, and the press in the United States and abroad. In particular, much of this scrutiny has focused on the use of cookies and other tracking technologies that collect or aggregate information regarding consumers' online browsing and mobile app activity. Our Company, our media partners and advertisers rely upon large volumes of such data collected primarily through cookies and other tracking technologies. It is essential that we monitor legal requirements and other developments in this area, both domestically and globally, maintain a robust privacy and security compliance program, anticipate the evolution of regulations applicable to us and engage in responsible privacy practices, including providing consumers with notice of the types of data we collect, how we collect it, with whom we share it, how we use that data to provide our solutions and how consumers can exercise their rights and personalization choices. We typically collect IP addresses and device identifiers that are considered to be personal data or personal information under the privacy laws of some jurisdictions or otherwise may be the subject of current or future data privacy legislation or regulation. The definition of personally identifiable information, personal information, or personal data varies by jurisdiction and continues to evolve in ways that may require us to adapt our practices to comply with laws and regulations related to the collection, storage, use, and sharing of consumer data. As a result, our technology platform and business practices must be assessed regularly against a continuously evolving legal, regulatory, and technology landscape.

Beyond laws and regulations, we are also members of self-regulatory bodies that impose additional requirements related to the collection, use, and disclosure of consumer data. We are members in good standing of the Network Advertising Initiative (NAI), an association dedicated to responsible data collection and its use for digital advertising. We adhere to the NAI Code of Conduct, along with the IAB Self-Regulatory Principles for Online Behavioral Advertising, and the IAB Europe OBA Framework. We are also Trustworthy Accountability Group (TAG) Brand Safety Certified. We are participants in the Digital Advertising Alliance and the European Interactive Digital Advertising Alliance and adhere to the Self-Regulatory Principles set forth by these organizations. Some of these self-regulatory bodies have the ability to review or sanction members or participants, which could result in penalties and cause reputational harm. Additionally, some of these bodies might refer violations of their requirements to the Federal Trade Commission or other regulators.

For additional information regarding the current regulatory environment and how it may impact us, see Item 1A. “Risk Factors” under “Risks Relating to Legal or Regulatory Matters” included in this Report.

Security

Being a trusted partner is a key value for us and, as such, cyber security is an ongoing commitment. Our dedicated cyber security team has implemented industry best practices and standards including, but not limited to, ISO 27001, ISO 27017, ISO 27032, Cloud Security Alliance Star level 1, and PCI-DSS SAQ A-EP, SOC 2 data centers. In addition to our certifications, we (i) conduct routine employee training sessions and onboarding security training, including phishing simulation, to increase awareness of phishing and other cyber threats; (ii) require multi-factor authentication access methods for all employees into our network; (iii) operate general monitoring and service protections that are subject to continuous enhancements to detect and mitigate various threats, including performing ongoing manual and automatic vulnerability assessment tests; and (iv) manage an ongoing cyber risk-management framework to assess internal technological changes, as well as external systems and services as part of supply chain risk.

Our products are designed with security and privacy at the forefront. We maintain tight controls over the personal data we collect, encrypting it where necessary, and retaining it in our databases with strictly limited and controlled access rights, to ensure it is secure while utilizing advanced monitoring over our environment. All traffic to and between our data centers is encrypted, along with all sensitive configurations, while our users and customers have their passwords hashed.

Secure advertising is a building block of user trust. In order to provide secure ads, we integrated an advanced industry leading third-party technology to scan live ads looking for potential security violations either in the ads themselves or on the pages to which they directly link. Combined with internally developed capabilities and our content review process we are tackling both malicious ads and the bad actors behind them.

We constantly strive to understand what we have yet to discover by running an exhaustive security testing framework, including scanning all internal and external assets for vulnerabilities, utilizing multiple third-party security testing teams every year, and running a bug bounty program with more than 300 security researchers.

Providing a clean, non-fraudulent premium network for publishers, advertisers and consumers is a top priority at Outbrain. Our dedicated anti-fraud team monitors our platform to identify and investigate unusual web traffic patterns. We detect, block and prevent fraudulent web traffic by using both internal and external third-party TAG Anti-Fraud certified solutions. We have been a TAG-verified member since 2018. We are also adopting the Media Rating Council Invalid Traffic Detection and Filtration Standards in our internal fraud detection technological ecosystem.

Item 1A. Risk Factors

An investment in our shares of common stock involves a high degree of risk. You should consider carefully the risks described below and all other information contained in this Report, including in the "Note About Forward-Looking Statements," the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" ("MD&A"), and our audited consolidated financial statements and the accompanying notes included elsewhere in this Report. If any of the following risks actually occur, our business, financial condition and results of operations could be materially and adversely affected. In that event, the trading price of our shares of common stock would likely decline and you might lose all or part of your investment.

Risk Factor Summary

The following is a summary of some of the principal risks we face:

- Our revenue and results of operations are highly dependent on overall advertising demand and spending and traffic generated by our media partners;
- The impact on advertising demand and spend of factors such as the continuation or worsening of unfavorable economic or business conditions or downturns and instability in the financial markets;
- A failure to grow or to manage growth effectively may cause the quality of our platform and solutions to suffer, and may adversely affect our business, results of operations, and financial condition;
- Our sales and marketing efforts may require significant investments and, in certain cases, involve long sales cycles;
- Our research and development efforts may not meet the demands of a rapidly evolving technology market;
- The digital advertising industry is intensely competitive, and if we do not effectively compete against current and future competitors, our business, results of operations, and financial condition could be adversely affected;
- Loss of media partners could have a significant impact on our revenue and results of operations;
- Growth in our business may place demands on our infrastructure and resources;
- The failure of our recommendation engine to accurately predict user engagement may adversely affect our business, results of operations, and financial condition;
- If the quality of our recommendations deteriorates, or if we fail to present interesting content to our users, we may experience a decline in user engagement, which could result in the loss of media partners;
- Limitations on our ability to collect, use, and disclose data to deliver advertisements;
- Outages or disruptions that impact us or our service providers, resulting from cyber incidents, or failures or loss of our infrastructure, could adversely affect our business; and
- Political and regulatory risks in the various markets in which we operate and the challenges of compliance with differing and changing regulatory requirements.

Risks Related to Outbrain and Outbrain's Industry

Our revenue and results of operations are highly dependent on overall advertising demand and spending in the markets in which we operate. Factors that affect the amount of advertising spending, such as economic downturns and unexpected events, can make it difficult to predict our revenue and could adversely affect our business, results of operations, and financial condition.

Our business depends on the overall advertising demand and spending in the markets in which we operate and on the business trends of our current and prospective media partners and advertisers. Macroeconomic factors in the U.S. and foreign markets, including instability in political or market conditions, as well as adverse economic conditions and general uncertainty about economic recovery or growth, particularly in North America, EMEA (Europe, Middle East and Africa), and Asia, where we conduct most of our business, could result in, and have resulted in, conservative approaches by advertisers and media owners when allocating budgets and ad inventory, respectively, and reductions in advertising demand and spend.

The current volatile macro environment, with variables such as the impact of the closure of SVB and other banks, global supply chain disruptions, labor shortages and stoppages, inflation and rising U.S. interest rates resulting from the pandemic and now events such as the Russia-Ukraine conflict, has impacted certain categories of our advertisers. These conditions have adversely impacted us and could, if they continue or worsen, adversely impact us in the future, including if our advertisers were to reduce or further reduce their advertising spending as a result of any of these factors.

We continue to monitor our operations, and the operations of those in our ecosystem (including media partners, advertisers and agencies). However, these conditions, whether resulting from the factors described above or due to the occurrence of other unanticipated events, make it difficult for us, our media partners, advertisers and agencies to accurately forecast and plan future business activities and could cause a reduction or delay, or further reduction or delay, in overall advertising demand and spending. The occurrence of unforeseen events, like the COVID-19 pandemic, the Russia-Ukraine conflict and other macroeconomic factors that affect advertising demand may have a disproportionate impact on our revenues and profitability in certain periods and could adversely affect our business, results of operations, and financial condition.

We maintain operating cash accounts at SVB, and as a result of SVB's closure, our ability to collect payments from our customers has been impacted and will continue to be impacted in the near-term if we are unable to establish alternate operating accounts in a timely manner. We have a revolving credit facility with SVB, and SVB is also the counterparty to our forward foreign currency hedge contracts, both of which have been impacted by SVB's closure and may need to be replaced.

We maintain operating cash accounts at SVB, and as a result of SVB's closure, our ability to collect payments from our customers has been impacted and will continue to be impacted in the near-term. We are in the process of establishing an alternate operating account to which our customers can remit payments; however, if we are unable to establish an alternate account in the near-term, our cash flow may be negatively impacted, including with respect to the impact of timing of collections and disbursements on our first quarter 2023 results, as well as any difficulty we may encounter in collecting unremitted past payments or any impact of the delay on our customers' ability to make such payments.

We also have a revolving credit facility with SVB, which has not been drawn and under which no amounts are outstanding. While we are currently unable to make borrowings under the credit facility, we do not foresee any near-term needs to draw upon this facility. See our risk factor below in this Item 1A under "*Our credit facility with SVB is currently not available for funding and may not be available for funding in the future. If our credit facility remains in effect, which remains uncertain, and we are able at any point to draw down on it, the terms of our facility subject us to operating restrictions and financial covenants that impose risk of default and may restrict our business and financing activities*" and our liquidity discussion below in the MD&A.

SVB is also the counterparty to our forward foreign currency hedge contracts, and we do not anticipate that SVB will perform on these obligations. We expect minimal exposure as a result of non-performance and plan to seek a new hedging program with one or more financial institutions in the near-term.

In order to meet our growth objectives, we will need to continue to innovate, seek to have advertisers and media partners adopt our expanding solutions, and extend our reach into evolving digital media platforms. If we fail to grow, or fail to manage our growth effectively, the quality of our platform and solutions may suffer, and our business, results of operations, and financial condition may be adversely affected.

Our growth plans depend upon our ability to innovate, attract advertisers and digital media owners to our solutions to buy and sell new inventory, and expand the use of our solutions by advertisers and media partners utilizing other digital media platforms and video. Our business model may not translate well into emerging forms of advertising due to market resistance or other factors, such as evolving regulatory restrictions, and we may not be able to innovate successfully enough to compete effectively.

The advertising technology market is dynamic, and our success depends upon our ability to develop innovative new technologies and solutions for the evolving needs of sellers of digital advertising, including websites, applications and other media partners, and buyers of digital advertising. We also need to grow significantly to develop the market reach and scale necessary to compete effectively with large competitors. This growth depends to a significant degree upon the quality of our strategic vision and planning. The advertising market is evolving rapidly, and if we make strategic errors, there is a significant risk that we will lose our competitive position and be unable to achieve our objectives. The growth we are pursuing may itself strain the organization, harming our ability to continue that growth, and to maintain the quality of our operations. If we are not able to innovate and grow successfully, our business, results of operations, financial condition and the value of our company may be adversely affected.

Growth in our business may place demands on our infrastructure and our operational, managerial, administrative, and financial resources.

Our success will depend on our ability to manage growth effectively. Among other things, this will require us at various times to:

- strategically invest in the development and enhancement of our platform and data center infrastructure;
- manage multiple relationships with various media partners, advertisers, and other third parties;
- extend our operating, administrative, legal, financial, and accounting systems and controls;
- increase coordination among our engineering, product, operations, go-to-market and other support organizations; and
- recruit, hire, train, and retain personnel.

If we do not manage growth well, the efficacy and performance of our platform may suffer, which may harm our reputation and reduce demand for our platform and solutions. Failure to manage growth effectively may have an adverse effect on our business, results of operations, and financial condition.

Our sales and marketing efforts may require significant investments and, in certain cases, involve long sales cycles, and may not yield the results we seek. Even if our sales and marketing efforts are successful, there can be no assurance that our media partners will be able to generate sufficient traffic.

Our sales and marketing teams educate prospective media partners and advertisers about the use, technical capabilities, and benefits of our platform. Our sales cycle (with both media partners as well as with certain advertisers and agencies) can take significant time from initial contact to contract execution and implementation. We may not succeed in attracting new media partners despite our significant investment in business development and sales and marketing, and it is complex to predict the extent of the revenue that will be generated with a media partner. We may not succeed in expanding relationships with existing media partners and advertisers, despite our significant investment in sales, account management, marketing, and research and development and it is difficult to predict when additional products will generate revenue through our platform, and the extent of that revenue. Programmatic partners tend to have a longer sales cycle with distinct technical and integration requirements, as well as a separate ongoing partner management process. If we are unsuccessful in our sales and marketing efforts, our results of operations and prospects will be adversely affected.

Even if our sales and marketing efforts are successful, there can be no assurance that the properties of our media partners will be able to generate sufficient user interest, traffic or engagement. The ability of our media partners to maintain or grow their digital properties is often outside of our control and may result in stagnant or declining ad inventory availability, which could negatively impact our results of operations and prospects.

Our research and development efforts may not meet the demands of a rapidly evolving technology market resulting in a loss of customers, revenue, and/or market share.

We expect to continue to dedicate significant financial and other resources to our research and development efforts in order to maintain or improve our competitive position. However, investing in research and development personnel, developing new solutions and enhancing existing solutions is expensive and time consuming. Our research and development activities may be directed at maintaining or increasing the performance of our recommendations, developing tools that improve productivity or efficiency, or introducing new solutions. However, there is no assurance that such activities will result in significant new marketable solutions, enhancements to our current solutions, design improvements, additional revenue or other expected benefits. Furthermore, there is no assurance that our efforts to promote new or enhanced solutions, like video solutions or new advertiser tools, will be successful. If we are unable to generate an adequate return on our investment with respect to our research and development efforts, our business, results of operations, and financial condition may be adversely affected.

The digital advertising industry is intensely competitive, and if we do not effectively compete against current and future competitors, our business, results of operations, and financial condition could be adversely affected.

The digital advertising ecosystem is competitive and complex. Some of our competitors have longer operating histories, greater name recognition, and greater financial, technical, sales, and marketing resources than we have. In addition, some competitors may have greater flexibility than we do to compete aggressively on the basis of their scale, price and other contract terms, or to compete with us by including in their product offerings services that we may not provide. The market is fragmented and we also face competition from many smaller companies, many of which may be willing to offer their services on prices or terms that are not profitable for us. Some competitors are able or willing to agree to contract terms that expose them to risks and in order to compete effectively we might need to accommodate similar risks that could be difficult to manage or insure against.

Media partners are investing in capabilities that enable them to connect more effectively and directly with advertisers. Our business may suffer to the extent that media partners and advertisers sell and purchase advertising inventory directly from one another or through intermediaries other than us, reducing the amount of advertising spend on our platform. If we are unable to compete effectively for media partners' inventory and/or advertisers' advertising spend, we may experience less demand, which could adversely affect our business, results of operations, and financial condition.

There has also been rapid evolution and consolidation in digital advertising, and we expect these trends to continue, thereby increasing the capabilities and competitive positioning of larger companies, particularly those that are already dominant. There is a finite number of large digital media owners and advertisers in our target markets, and any consolidation of media partners or advertisers may give the resulting enterprises greater bargaining power or result in the loss of media partners and advertisers that use our platform, reducing our potential base of media partners and advertisers, each of which would potentially erode our revenue.

With the introduction of new technologies and the influx of new entrants to the market, we expect competition to persist and intensify in the future, which could harm our ability to increase sales and maintain our profitability. In addition, we and our media partners compete indirectly for user engagement with larger search and social media companies, such as Meta Platforms, Inc., Google Inc., LinkedIn Corp. and Twitter Inc. We also broadly compete for advertiser budgets with other forms of traditional and online marketing, including keyword advertising, social media marketing and display advertising.

Loss of existing or future market share to new competitors and advertisers allocating finite budgets to competitors could substantially harm our business, results of operations, and financial condition.

Loss of large media partners could have a significant impact on our revenue and results of operations.

A significant portion of our recommendations are placed on web pages and mobile applications of a small number of our media partners. Certain partners may reduce or terminate their business with us at any time for any reason, including as a result of changes in their financial condition or other business circumstances, such as a change in strategy or model by which they monetize their properties. Our largest media partner accounted for approximately 10% and 11% of our revenues in 2022 and 2021, respectively, and two of our largest media partners each accounted for approximately 10% of our revenues in 2020. If a large media partner reduces or terminates its relationship with us, or if several small or medium-sized media partners terminate their relationships with us, we may not have access to sufficient media partners to satisfy demand from advertisers resulting in lower revenues. In addition, losing key media partners may lead advertisers to seek alternate advertising solutions, which could slow our growth. A media partner may terminate its relationship with us and enter into a relationship with a competitor, and to the extent that becomes a long-term relationship, reestablishing our relationship with that media partner may prove difficult. As discussed above, establishing relationships with media partners may involve long sales cycles. As a result, the loss of a significant media partner relationship or of several small or medium-sized media partner relationships could have a material adverse impact on our business, results of operations and financial condition.

Our revenue growth and future prospects will be adversely affected if we fail to expand our advertiser relationships.

Our revenue growth depends on our success in expanding and deepening our relationships with existing advertisers. Our growth strategy is premised in part on increasing spend from existing advertisers. In order to do so, we must be able to demonstrate better results for our advertisers with increased user engagement and ROAS, among other things. We do not have long-term commitments from our advertisers. We seek to increase the number of advertisers and to reach new advertisers. Attracting new advertisers and expanding existing relationships with our advertisers requires substantial effort and expense. In particular, large advertisers with well-established brands may require us to spend significant time educating them about our platform and solutions. It may be difficult and time consuming to identify, sell and market to potential advertisers who already allocate their budgets to large competitors and who expect to see a similar return on investment before diversifying or allocating a portion of their advertising budgets to us.

As new advertisers spend in our network or as advertisers allocate greater budgets to our platform, our credit loss exposure may increase over time and may exceed reserves for such contingencies. As we expand the application of our solutions, we increasingly depend on media agencies to assist advertisers in planning and purchasing advertising for brand marketing objectives, such as preference shift and brand awareness. We typically experience slow payment cycles by advertising agencies, as is common in our industry, and in some instances, if the advertiser does not pay the agency, the agency is not liable to us, and we must seek payment solely from the advertiser. If we are unsuccessful in developing new advertiser and agency relationships and maintaining and expanding our existing relationships, our results of operations and prospects will be adversely affected.

The failure of our recommendation engine to accurately predict user engagement may adversely affect our business, results of operations, and financial condition.

The success of our recommendation engine depends on the ability of our proprietary algorithms to predict the likelihood users will engage with our recommendations and on the quality of our data assets. We need to continuously deliver satisfactory results for users, media partners and advertisers in order to maintain revenue, which, in turn, depends in part on the optimal functioning of our platform and solutions. Therefore, a failure of our recommendation engine to accurately predict user engagement could negatively affect our results of operations and revenue.

If the quality of our recommendations deteriorates, or if we fail to present interesting content to our users, we may experience a decline in user engagement, which could result in the loss of media partners.

Our technology selects the recommendations that are displayed to users on the online properties of our media partners. Our success depends on our ability to make valuable recommendations, which, in turn, depends on the quality of recommendations in our index and our ability to predict engagement by an individual user within a specific context. We believe that one of our key competitive advantages is our recommendation technology. Subject to our advertiser guidelines, we offer our media partners a degree of flexibility with respect to the type of recommendation that they believe will appeal to their audience based on the editorial tone of their properties. If the quality of our recommendations suffers, whether due to our actions or decisions made by our media partners, or we are otherwise unable to provide users with valuable and relevant recommendations, user engagement may decline or perceptions of our recommendations may be adversely impacted. If we experience a decline in users or user engagement, for example, because users begin to ignore our platform or direct their attention to other elements on the online properties of our media partners, our media partners and advertisers may in turn not view our solutions as attractive, which could harm our business, results of operations, and financial condition.

The content of advertisements could damage our reputation and brand, or harm our ability to expand our base of users, advertisers and media partners, and negatively impact our business, results of operations, and financial condition.

Our reputation and brand may be negatively affected by ads that are deemed to be hostile, infringing, offensive or inappropriate by users and media partners. From time to time, we make changes in our advertiser guidelines that can result in the inclusion or exclusion of certain types of ads. We cannot predict with certainty the impact that such changes might have on user engagement or perceptions of our recommendations. We have adopted policies regarding unacceptable advertisements and retain authority to remove ads that violate these policies; however, advertisers could nonetheless provide such content and occasionally circumvent our policies. If any of those ads lead to hostile, infringing, offensive or inappropriate content, our reputation could suffer by association. The safeguards we have in place may not be sufficient to avoid harm to our reputation and brand. This could adversely affect existing relationships with media partners and advertisers, as well as our ability to expand our user and media partner base, and harm our business, results of operations, and financial condition.

Conditions in Israel could materially and adversely affect our business.

Many of our employees, including certain members of our management team, operate from our offices in Israel. In addition, a number of our officers and directors are residents of Israel. Accordingly, political, economic and military conditions in Israel and the surrounding region may directly affect our business and operations. In recent years, Israel has been engaged in sporadic armed conflicts with Hamas, an Islamist terrorist group that controls the Gaza Strip, with Hezbollah, an Islamist terrorist group that controls large portions of southern Lebanon, and with Iranian-backed military forces in Syria. In addition, Iran has threatened to attack Israel and may be developing nuclear weapons. Some of these hostilities were accompanied by missiles being fired from the Gaza Strip, Lebanon and Syria against civilian targets in various parts of Israel, including areas in which our employees are located, which negatively affected business conditions in Israel. Any hostilities involving Israel or the interruption or curtailment of trade between Israel and its trading partners could adversely affect our operations, results of operations and financial condition.

Our commercial insurance does not cover losses that may occur as a result of events associated with war and terrorism. Although the Israeli government currently covers the reinstatement value of property damage and certain direct and indirect damages that are caused by terrorist attacks or acts of war, such coverage would likely be limited, may not be applicable to our business (either due to the geographic location of our offices or the type of business that we operate) and may not reinstate our loss of revenue or economic losses more generally. Furthermore, we cannot assure you that this government coverage will be maintained or that it will sufficiently cover our potential damages. Any losses or damages incurred by us could have a material adverse effect on our business. Any armed conflicts or political instability in the region would likely negatively affect business conditions and could harm our results of operations.

The Israeli government is currently pursuing extensive changes to Israel's judicial system. In response to the foregoing developments, individuals, organizations and institutions, both within and outside of Israel, have voiced concerns that the proposed changes may negatively impact the business environment in Israel including due to reluctance of foreign investors to invest or transact business in Israel, as well as to increased currency fluctuations, downgrades in credit rating, increased interest rates, increased volatility in security markets, and other changes in macroeconomic conditions. Such proposed changes may also adversely affect the labor market in Israel or lead to political instability or civil unrest. To the extent that any of these negative developments do occur, they may have an adverse effect on our business, results of operations and financial condition.

Further, in the past, the State of Israel and Israeli companies have been subjected to economic boycotts. Several countries still restrict business with the State of Israel and with Israeli companies. These restrictive laws and policies may have an adverse impact on the expansion of our business, financial condition and/or our results of operations. In addition, a campaign of boycotts, divestment and sanctions has been undertaken against Israel, which could also adversely impact our business.

Also, many Israeli citizens are obligated to perform several days, and in some cases more, of annual military reserve duty each year until they reach the age of 40 (or older, for reservists who are military officers or who have certain occupations) and, in the event of a military conflict, may be called to active duty. In response to increases in terrorist activity, there have been periods of significant call-ups of military reservists. It is possible that there will be military reserve duty call-ups in the future. Our operations could be disrupted by such call-ups, particularly if such call-ups include the call-up of members of our management. Such disruption could materially adversely affect our business, financial condition and results of operations.

Our current business model depends on media partners maintaining open access digital properties, monetizing through advertising and attracting users to their digital properties, and could be impacted by continued pressure on the publishing industry.

Our platform depends on users being able to consume content freely on media partners' properties. Some media partners, typically those that participate in both print and digital publishing, charge their users a subscription fee for online access by implementing a paywall. Our business may be negatively impacted by media partners shifting from open access to paywalls or generating less user interest because it may decrease our access to users and advertising inventory. If media partners shift their revenue models to a subscription-based service, they may decrease their reliance on other forms of revenue generation, including our recommendations and ads, which could negatively affect our business, results of operations, and financial condition.

Our results of operations may fluctuate significantly from period to period and may not meet our expectations or those of securities analysts and investors.

Our results of operations have fluctuated in the past, and future results of operations are likely to fluctuate as well. In addition, because our business continues to evolve, you should not place undue reliance on our historical results of operations in assessing our future prospects. Factors that can cause our results of operations to fluctuate include:

- changes in demand and competition for ad inventory sold on our platform;
- changes in our access to valuable ad inventory of media partners;
- the addition or loss of media partners on our platform, and/or loss of ad inventory from a media partner;
- costs associated with adding or attempting to retain media partners;
- the continuation or worsening of unfavorable economic or business conditions or downturns or instability in financial markets;
- seasonality of our business;
- changes in consumer usage of devices and channels to access media and digital content;
- changes in the structure of the buying and selling of digital ad inventory;
- changes in the pricing policies of media partners and competitors;
- changes in third-party service costs;
- changes and uncertainty in our legislative, regulatory, and industry environment, particularly in the areas of data protection and consumer privacy;
- introduction of new technologies or solutions;
- unilateral actions taken by demand side platforms, agencies, advertisers, media partners, and supply side platforms;

- changes in our capital expenditures as we acquire hardware, technologies, and other assets for our business; and
- changes to the cost of retaining and adding highly specialized personnel.

Any one or more of the factors above may result in significant fluctuations in our results of operations.

Our profitability has been and may continue to be adversely impacted, or may fluctuate on a quarterly basis, due to guarantees that we have provided to some of our media partners.

In order to secure favorable terms, such as exclusivity and longer-term agreements, we may offer media partners contracts with guaranteed minimum rates of payments. These guarantees require us to pay the media owner for the ad impressions we receive, regardless of whether the consumer engages with the ad or we are paid by the advertiser. If the level of user engagement on a media partner property or overall advertiser demand falls, the payments to our media partners with guaranteed minimum rates of payment may adversely impact our Ex-TAC Gross Profit and our margins. This includes the possibility of paying a media partner an amount in excess of the revenue that we generated from ads served on that media partner property. The revenue from ads served on a media partner property or overall advertiser demand could drop for reasons outside of our control. It is also possible that we will agree to a rate of payment that is more difficult to profitably recoup than we originally believed. In addition, many of our contracts that contain guarantee arrangements set a single rate of payment and do not account for seasonal revenue fluctuations. As a result, our gross profit margins may fluctuate with the seasonality of the business. Additionally, these guarantees may adversely impact our traffic acquisition costs in absolute dollar terms and as a percentage of revenue, as well as overall profitability. The provision of guaranteed minimum rates to additional media partners or to existing media partners upon contract renewal, or the provision of such guarantees in contracts that contemplate a large number of page views, such as some of the contracts we have entered into with large media partners, may increase the risk that our gross profit and/or margins may be adversely impacted for the reasons we describe above.

Seasonal fluctuations in advertising activity and large cyclical events could have a material impact on our revenue, cash flow and operating results.

Our revenue, cash flow, operating results and other key operating and performance metrics may vary from quarter to quarter due to the seasonal nature of our advertisers' spending. For example, advertisers tend to devote more of their advertising budgets to the fourth calendar quarter to coincide with user holiday spending. Moreover, advertising inventory in the fourth quarter may be more expensive due to increased demand. Other large cyclical events that attract advertisers, such as elections, the Olympics and other sporting events, the Oscars, or other large entertainment events, also could cause our revenue to increase during certain periods and decrease in other periods.

If currency exchange rates fluctuate substantially in the future, our results of operations, which are reported in U.S. dollars, could be adversely affected.

We are exposed to the effects of fluctuations in currency exchange rates. A significant percentage of our international revenue is from advertisers who pay us in currencies other than the U.S. dollar. We also incur operating expenses in local currencies, including with respect to employee compensation, at our offices outside of the United States and, most significantly, in Israel, the United Kingdom and Euro-based countries where we operate. Fluctuations in the exchange rates between the U.S. dollar and those other currencies could result in the U.S. dollar equivalent of such foreign-denominated revenue being lower than would be the case if exchange rates were stable and the U.S. dollar equivalent of such expenses being higher. This could have a negative impact on our reported operating results. We evaluate periodically the various currencies to which we are exposed and take hedging measures to reduce the potential adverse impact from the appreciation or the depreciation of our non-U.S.-dollar-denominated operations, as appropriate. Any such strategies, such as forward contracts, options and foreign exchange swaps related to transaction exposures that we may implement to mitigate this risk may not fully eliminate our exposure to foreign exchange fluctuations, including our forward foreign currency hedge contracts with SVB, under which we do not anticipate that SVB will perform its obligations.

Our business depends on our ability to collect, use and disclose data to deliver advertisements. Any limitation imposed on our collection, use or disclosure of this data could significantly diminish the value of our solution.

We use "cookies," or small text files placed on consumer devices when an Internet browser is used, as well as mobile device identifiers, to gather data that enables our platform to be more effective. We collect this data through various means, including code that media partners and advertisers implement on their pages, software development kits installed in mobile applications, our own cookies, and other tracking technologies. Our advertisers, directly or through third-party data providers, may choose to further target their campaigns within our platform.

The data we collect improves our algorithms and helps us deliver relevant recommendations with greater user engagement. Our ability to collect and use data is critical to the value of our platform. Without cookies, mobile device IDs, and other tracking technology data, our recommendations would be informed by less information about user interests and advertisers may have less visibility into their return on ad spend. If our ability to use cookies, mobile device IDs or other tracking technologies is limited, we may be required to develop or obtain additional applications and technologies to compensate for the lack of cookies, mobile device IDs and other tracking technology data, which could be time consuming or costly to develop, less effective, and subject to additional regulation. As described in more detail below in this Item 1A under "*User growth and engagement depends upon effective interoperation with devices, platforms and standards set by third parties that we do not control,*" prominent technology companies also have discontinued, or announced intentions to discontinue, the use of certain cookies, and to develop alternative methods and mechanisms for tracking users.

Additionally, we are subject to laws and regulations related to data privacy, data protection, information security, and consumer protection across different markets where we conduct our business, which could potentially impact our ability to collect, use, and disclose data as described in this Item 1A under "*We are subject to laws and regulations related to online privacy, data protection, and information security, and consumer protection across different markets where we conduct our business, including in the United States and Europe. Such laws, regulations, and industry requirements are constantly evolving and changing and could potentially impact data collection and data usage for advertising and recommendations. Our actual or perceived failure to comply with such obligations could have an adverse effect on our business, results of operations, and financial condition.*"

There are many technical challenges relating to our ability to collect, aggregate and associate the data, and we cannot assure you that we will be able to do so effectively, which would adversely affect our business, results of operations, and financial condition.

User growth and engagement depends upon effective interoperation with devices, platforms and standards set by third parties that we do not control.

Our recommendations are currently accessed through desktops, laptops and mobile devices, and are adaptable across many digital environments, including web pages, mobile applications, email and video players. In the future, our recommendations may be accessed through other new devices and media platforms. As a result, we depend on the interoperability of our solutions with popular devices, platforms and standards that we do not control. For example, because many users access our platform through mobile devices, we depend on the interoperability of our solutions with mobile devices and operating systems such as Android and iOS. Any changes in, or restrictions imposed by, such devices, platforms or standards that impair the functionality of our current or proposed solutions or give preferential treatment to competitive products or services could adversely affect usage of our platform.

Some users also download free or paid "ad blocking" software on their computers or mobile devices, not only for privacy reasons, but also to counteract the adverse effect advertisements can have on the user experience, including increased load times, data consumption, and screen overcrowding. If more users adopt these measures, our business, results of operations, and financial condition could be adversely affected. Many applications and other devices allow users to avoid receiving advertisements by paying for subscriptions or other downloads. Prominent media technology companies, including Google, are also limiting what advertisements may be rendered through their browsers in the name of user experience and load times. Ad-blocking technologies could have an adverse effect on our business, results of operations, and financial condition if they reduce the volume or effectiveness and value of advertising.

Prominent technology companies also have discontinued, or announced intentions to discontinue, the use of certain cookies, and to develop alternative methods and mechanisms for tracking users. The most commonly used Internet browsers allow users to modify their browser settings to block first-party cookies (placed directly by the media partner or website owner that the user intends to interact with) or third-party cookies, and some browsers block third-party cookies by default. For example, Apple already prohibits the use of third-party cookies and moved to "opt-in" privacy models with iOS requiring users to voluntarily choose (opt-in) to permit app developers to track them across applications and websites and therefore receive targeted ads. In January 2020, Google announced its intention to limit the use of third-party cookies in its Chrome web browser by the end of 2023. In February 2022, Google announced that its Android operating system will include privacy restrictions, similar to Apple's, that will prevent tracking across applications. As a consequence of these upcoming changes, fewer of our cookies or media partners' cookies may be set in browsers or be accessible in mobile devices, which adversely affects our business.

As companies replace cookies, it is possible that such companies may rely on proprietary algorithms or statistical methods to track users without cookies, or may utilize log-in credentials entered by users into other web properties owned by these companies, such as their email services, to track web usage, including usage across multiple devices. Alternatively, such companies may build different and potentially proprietary user tracking methods into their widely-used web browsers. Although we believe we are well positioned to adapt and continue to provide key data insights to our media partners without cookies, this transition could be more disruptive, slower, or more expensive than we currently anticipate, and could materially affect the accuracy of our recommendations and ads and thus our ability to serve our advertisers, adversely affecting our business, results of operations, and financial condition.

If we fail to detect and prevent click fraud or other invalid engagements with the advertisements we serve, we could lose the confidence of our advertisers, which would cause our business to suffer and negatively impact our financial results.

Our success relies on delivering measurable business value to our advertisers. We are exposed to the risk of fraudulent and otherwise invalid engagements that advertisers may perceive as undesirable. A major source of invalid engagements is click fraud in which a user, automated script or computer program intentionally engages with ads for reasons other than accessing the underlying content. If we are unable to detect and prevent such fraudulent or malicious activity, or other invalid engagements or if we choose to manage traffic quality in a way that advertisers find unsatisfactory, the affected advertisers may experience or perceive a reduced return on their investment in our platform, which could lead to dissatisfaction with our solutions, refusals to pay, refund demands or withdrawal of future business. This could damage our brand and lead to a financial loss or to a loss of advertisers which would adversely affect our business, results of operations, and financial condition.

Our business depends on our ability to maintain and scale our technology platform. Real or perceived errors, disruptions or outages in our platform, including due to cyberattacks or our failure to maintain adequate security and supporting infrastructure, could adversely affect our operating results and growth prospects.

We depend upon the sustained and uninterrupted operation of our platform to generate recommendations, serve ads, manage our content index, continually improve and analyze our data assets and optimize performance in real time. If our platform cannot scale to meet demand, or if there are errors, bugs, or other performance failures, including any related to our third-party service providers, in our execution of any of these functions on our platform, then our business may be harmed. Undetected bugs, defects, errors and other performance failures may occur, especially when we are implementing new solutions or features. Despite testing by us, such performance failures in our platform may occur, which could result in negative publicity, damage to our brand and reputation, loss of or delay in market acceptance of our solutions, increased costs or loss of revenue, loss of competitive position or claims by advertisers or media partners for losses sustained by them.

We also face risks of disruptions of service from third-party interference with our platform. Cyberattack techniques are constantly evolving and becoming increasingly diverse and sophisticated. We have experienced and expect to continue to experience actual and attempted cyberattacks such as through phishing scams and malware, while ransomware and other malicious Internet-based activity continue to increase generally. Our platform is designed with degradation features that enable us to turn off our recommendations and ads without producing white space on the media partner's properties for the vast majority of our media partners. While we have robust systems in place to counter breaches and attacks, such as DoS (a technique used by hackers to take an Internet service offline by overloading its servers), attacks have occurred and we cannot guarantee that future attacks may not have dire consequences, including impacting what may be displayed on the properties of our media partners and advertisers. Disruptions to our platform and our servers could interrupt our ability to provide our solutions and materially affect our reputation, relationships with media partners and advertisers, business and results of operations. There can be no assurance that any limitation of liability provisions in our contracts would be enforceable or adequate or would otherwise protect us from any such liabilities or damages with respect to any particular claim arising from a cyber incident. We also cannot be sure that our existing insurance coverage will continue to be available on acceptable terms, will be available in sufficient amounts to cover one or more large claims, or that insurers will not deny coverage as to any future claim. Moreover, anticipating cyberattacks or alleviating problems resulting from errors or disruptions in our platform could require significant resources, which would adversely impact our financial position, and results of operations.

Failures or loss of our infrastructure, including hardware and software, with respect to us and other service providers on which we rely, could adversely affect our business.

We rely on owned and leased servers and other third-party hardware and infrastructure to support our operations. To support our business needs, we operate our own proprietary cloud infrastructure using third party data centers co-located in three geographically separate locations managed by three different vendors in the United States. In addition, we also serve recommendations from a public cloud based in Europe. We do not have control over the operations of these facilities or technology of our cloud and service providers, including any third-party vendors that collect, process and store personal data on our behalf. Our systems, servers and platforms and those of our service providers may be vulnerable to computer viruses, physical or electronic break-ins, sabotage, intentional acts of vandalism and other misconduct that our security measures or the security measures of these service providers may not detect. Individuals able to circumvent such security measures may disrupt our operations, damage our hardware and infrastructure, misappropriate confidential or proprietary information or otherwise impair our reputation and business. Additionally, to the extent that our cloud and other service providers, experience security breaches that result in the unauthorized or improper use of confidential data, employee data or personal data, we may not be indemnified for losses resulting from such breaches. There can be no assurance that we or our third-party providers will be successful in preventing security breaches, including as a result of cyber attacks, or successfully mitigating their effects.

Further, our servers and data centers are vulnerable to damage or interruption from fires, natural disasters, terrorist attacks, power loss, telecommunications failures or similar catastrophic events. If a data center goes offline, an alternate data center would take over our serving and data storage needs, but our service may be slowed or degraded as a result until full data center operations are restored. We cannot assure you that future outages may not have material adverse consequences to our business. Moreover, if for any reason our arrangement with one or more of the providers of the servers that we use is terminated, we could incur additional expenses in establishing new facilities and support.

We depend on highly skilled personnel to grow and operate our business, and if we are unable to hire, retain and motivate our personnel, we may not be able to grow effectively.

Our future success depends upon contributions from our employees, in particular our senior management team. We do not maintain key person life insurance for any employee. From time to time, there may be changes in our senior management team, and such changes may be disruptive to our business.

Our growth strategy also depends on our ability to expand and retain our organization with highly skilled personnel. Identifying, recruiting, training and integrating qualified individuals will require significant time, expense and attention. In addition to hiring new employees, we must continue to focus on retaining our best employees. Competition for highly skilled personnel in our industry is challenging across all our locations, particularly in New York City, where our headquarters are located, and in Israel and Slovenia, where we conduct the majority of our research and development activities. We may need to invest significant amounts of cash and equity and, therefore, may be impacted by our share performance, to attract and retain employees and we may not realize returns on these investments. If we are not able to effectively add and retain employees, our ability to achieve our strategic objectives could be adversely impacted, and our business could be harmed.

Our corporate culture has contributed to our success, and if we cannot maintain it as a result of our hybrid work model or otherwise, we could lose the innovation, creativity, and teamwork fostered by our culture, and our business may be harmed.

We believe our corporate culture has been a critical component of our success as we believe it fosters innovation, creativity, and teamwork across our business, helping to drive our success. We cannot ensure we can effectively maintain our corporate culture as we continue to grow and maintain the hybrid work model we established as a result of COVID-19. As we expand and change, in particular across multiple geographies, following acquisitions, or in a more remote environment, it may be difficult to preserve our corporate culture, which could reduce our ability to innovate, create, and operate effectively. Over time, factors such as expansion and remote operations may also decrease the cohesiveness of our teams, which is critical to our corporate culture. The failure to preserve our culture could adversely affect our business, results of operations, and financial condition by negatively affecting our ability to attract, recruit, integrate and retain employees, continue to perform at current levels, and effectively execute our business strategy.

Our credit facility with SVB is currently not available for funding and may not be available for funding in the future. If our credit facility remains in effect, which remains uncertain, and we are able at any point to draw down on it, the terms of our facility subject us to operating restrictions and financial covenants that impose risk of default and may restrict our business and financing activities.

On November 2, 2021, we entered into the Second Amended and Restated Loan and Security Agreement with SVB that provides a senior secured revolving credit facility in the aggregate principal amount of up to $75 million. On March 10, 2023, SVB was closed by the California regulators and the Federal Deposit Insurance Corporation ("FDIC") was appointed as receiver. As a result, we are currently unable to make borrowings under the credit facility, and it is uncertain whether SVB or any successor entity will be in a position to fund its commitments to us under the credit facility in the future.

In addition, in the event SVB or any successor entity is able to fund its commitments under the credit facility, any borrowings thereunder would be secured by substantially all of the assets of our parent entity and certain domestic subsidiary co-borrowers, including all accounts receivable and proceeds from sales of our intellectual property, and would be subject to a negative pledge on our intellectual property in favor of SVB. The credit facility contains representations and warranties, including, without limitation, with respect to collateral; accounts receivable; financials; litigation, indictment and compliance with laws; disclosure and no material adverse effect, each of which is a condition to funding. The credit facility also includes events of default and is also subject to certain financial and other covenants, including, without limitation, restrictions on liens, indebtedness, investments, fundamental changes, dispositions, restricted payments and prepayment of the 2.95% Convertible Senior Notes due 2026 and of junior indebtedness. The credit facility contains a financial covenant that requires, in the event that credit extensions under the facility equal or exceed 85% of the available commitments under the facility or upon the occurrence of an event of default, the Company and its subsidiaries to maintain a minimum consolidated monthly fixed charge coverage ratio of 1.00. Any inability on our part to make the required representations and warranties (which would need to be revisited along with other terms and conditions if the facility were to remain in effect), including with respect to collateral, accounts receivable, financials, litigation, indictment and compliance with laws, disclosures and no material adverse effect, may limit our ability to borrow and/or the covenants may restrict our ability to finance our operations and to pursue our business activities and strategies under the credit facility, assuming for such purpose that such credit facility were to be available to us. Our ability to make these representations and warranties, and/or comply with these covenants may be affected by events beyond our control.

We are currently evaluating our options with respect to potential alternate credit facilities, and we cannot guarantee that we will be able to obtain such alternate financing on favorable terms or in the desired timeframe. Our ability to replace the existing facility may be limited due to various factors, including the status of our business, results of operations, financial position and prospects; global credit market conditions; and perceptions of our business or industry by sources of financing. In addition, if credit is available, lenders may seek more restrictive covenants and higher interest rates that may reduce our borrowing capacity, increase our costs, and reduce our operating flexibility.

We may engage in strategic transactions, which may not yield a positive financial outcome. Further, such activity may result in the company operating in businesses beyond its current core business with risk factors beyond those which are identified here.

From time to time, we may evaluate potential mergers and acquisitions or investment opportunities. We have made a number of acquisitions in the past. Any transactions that we enter into could be material to our financial condition and results of operations. The process of integrating an acquired company, business or technology could create unforeseen operating difficulties and expenditures. Acquisitions and investments carry with them a number of risks, including the following:

- diversion of management time and focus from operating our business;
- implementation or remediation of controls, procedures and policies of the acquired company;
- integration of financial systems;
- coordination of product, engineering and selling and marketing functions;
- retention of employees from the acquired company;
- unforeseen liabilities;
- litigation or other claims arising in connection with the acquired company; and
- in the case of foreign acquisitions, the need to integrate operations across different cultures and languages and to address the particular economic, currency, political and regulatory risks associated with specific countries.

Our failure to address these or other risks encountered in connection with acquisitions could cause us to fail to realize the anticipated benefits of such acquisitions, resulting in unanticipated liabilities and harming our business, results of operations and financial condition.

Risks Relating to Legal or Regulatory Matters

Our business is subject to political and regulatory risks in the various markets in which we operate; compliance with differing and changing regulatory requirements poses compliance challenges.

Our business is subject to regulation, which is rapidly evolving, and the business and regulatory environment in each of the international markets in which we operate may differ. For example, regulations relating to our business, including our employees, our arrangements with media partners and advertisers, stricter rules relating to content running through our network, and privacy related regulations affect how we conduct our business. The following are some of the political and regulatory risks and challenges we face across jurisdictions:

- greater difficulty in enforcing contracts;
- higher costs of doing business internationally, including costs incurred in establishing and maintaining office space and equipment for our international operations;
- risks associated with trade restrictions and foreign legal requirements, including any certification and localization of our platform that may be required in foreign countries;
- greater risk of unexpected changes in regulatory practices, tariffs, and tax laws and treaties;
- compliance with anti-bribery laws, including, without limitation, compliance with the U.S. Foreign Corrupt Practices Act and the UK Bribery Act;
- compliance with data protection and privacy law regimes of various countries, especially as our business relates to consumer online privacy and interested-based advertising;
- heightened risk of unfair or corrupt business practices in certain geographies and of improper or fraudulent sales arrangements that may impact financial results and result in restatements of, or irregularities in, financial statements;
- the uncertainty of protection for intellectual property rights in some countries;
- general economic and political conditions in these foreign markets, including political and economic instability in some countries;
- the potential for heightened regulation relating to content curation or discovery as a result of concerns relating to the spread of disinformation through technology platforms; and
- double taxation of our international earnings and potentially adverse tax consequences due to changes in the tax laws of the United States or the foreign jurisdictions in which we operate.

We are subject to laws and regulations related to online privacy, data protection, information security, content and consumer protection across different markets where we conduct our business, including in the United States and Europe. Such laws, regulations, and industry requirements are constantly evolving and changing and could potentially impact data collection and data usage for advertising and recommendations. Our actual or perceived failure to comply with such obligations could have an adverse effect on our business, results of operations, and financial condition.

We receive, store, and process data about or related to users in addition to our media partners, advertisers, services providers and employees. Our handling of this data is subject to a variety of federal, state, and foreign laws and regulations and is subject to regulation by various government authorities. Our data handling is also subject to contractual obligations and industry standards.

The U.S. federal and various state and foreign governments have adopted or proposed limitations on the collection, distribution, use, and storage of data relating to individuals, including the use of contact information and online identifiers, advertising and other communications with individuals and businesses. In the United States, various laws and regulations apply to the collection, processing, disclosure, and security of certain types of data. Additionally, the Federal Trade Commission and many state attorneys general are interpreting federal and state consumer protection laws as imposing standards for the online collection, use, dissemination, and security of data and issuing separate guidance in this area. If we fail to comply with any such laws or regulations, we may be subject to enforcement actions that may not only expose us to litigation, fines, and civil and/or criminal penalties, but also require us to change our business practices as well as have an adverse effect on our business, results of operations, and financial condition.

The regulatory framework for online privacy issues worldwide is continuously evolving and is likely to receive scrutiny for the foreseeable future. The occurrence of unanticipated events often rapidly drives the adoption of legislation or regulation affecting the use, collection, or other processing of data and manners in which we conduct our business. Restrictions could be placed upon the collection, management, aggregation, and use of information, which could result in a material increase in the cost of collecting or otherwise obtaining certain kinds of data and could limit the ways in which we may use or disclose information. In particular, interest-based advertising, or the use of data to draw inferences about a user's interests and deliver relevant advertising to that user, and similar or related practices (sometimes referred to as interest-based advertising, behavioral advertising or personalized advertising), such as cross-device data collection and aggregation, steps taken to de-identify personal data, and to use and distribute the resulting data, including for purposes of personalization and the targeting of advertisements, have come under increasing scrutiny by legislative, regulatory, and self-regulatory bodies in the United States and abroad that focus on consumer protection or online privacy (and also by device manufacturers, media platforms and industry standards, as discussed above). Much of this scrutiny has focused on the use of cookies and other technologies to collect information about Internet users' online browsing activity on web browsers, mobile devices, and other devices, to associate such data with user or device identifiers or de-identified identities across devices and channels. Because we rely upon large volumes of such data collected primarily through cookies and similar technologies, it is possible that these efforts may have a substantial impact on our ability to collect and use data from Internet users, and it is essential that we monitor developments in this area domestically and globally, and engage in responsible privacy practices, including providing users with notice of the types of data we collect and how we use that data to provide our services, with which third parties that data is shared with, and complying with users' expressed privacy choices.

In the United States, the U.S. Congress and state legislatures, along with federal regulatory authorities have recently increased their attention on matters concerning the collection and use of consumer data. In the United States, non-sensitive consumer data generally may be used under current rules and regulations, subject to certain restrictions, so long as the person does not affirmatively "opt-out" of the collection or use of such data. If an "opt-in" model or other more restrictive regulations were to be widely adopted in the United States, less data would be available, and could adversely affect our business.

California enacted legislation, the California Consumer Privacy Act, along with related regulations (together, the "CCPA"), which became effective in 2020 and updated by the Consumer Privacy Rights Act effective in 2023. The CCPA creates individual privacy rights for California residents and increases the privacy and security obligations of businesses handling personal data. The CCPA is enforceable by the California Attorney General and there is also a private right of action relating to certain data security incidents. The CCPA generally requires covered businesses to, among other things, provide disclosures to California consumers and afford California consumers abilities to opt-out of the sharing of personal data between parties, a concept that is defined broadly, with behavioral advertising triggering such requirements under the CCPA. The CCPA or subsequent guidance may require us to further modify our data processing practices and policies and to incur substantial costs and expenses in an effort to comply. Decreased availability and increased costs of information could adversely affect our ability to meet our advertisers' requirements and could have an adverse effect on our business, results of operations, and financial condition.

Other states across the country have been implementing similar privacy laws, such as Virginia and Colorado, Connecticut and Utah. A Federal bill, the American Data Privacy and Protection Act, was introduced in 2022 and gained more political traction than previous attempts at federal regulation. Additional legislation, including potential disparity between federal and state laws, may add additional complexity, variation in requirements, restrictions, and potential legal risk, require additional investment in resources to compliance programs, and could impact strategies and availability of previously useful data and could result in increased compliance costs and/or changes in business practices and policies.

In Europe, the General Data Protection Regulation (EU) 2016/679 ("GDPR") took effect on May 25, 2018 and applies to products and services that we provide in Europe, as well as the processing of personal data of European Economic Area ("EEA") residents, wherever that processing occurs. The GDPR includes operational requirements for companies that receive or process personal data of residents of the EEA that are different from those that were in place in the EEA prior to the GDPR. Failure to comply with GDPR, or its implementation in the United Kingdom through the Data Protection Act 2018 ("UK GDPR"), may result in significant penalties for non-compliance ranging from €10 million to €20 million or 2% to 4% of an enterprise's global annual revenue, whichever is greater in the case of the GDPR or the greater of £17.5 million or 4% of the total worldwide turnover in the preceding financial year in the case of the United Kingdom. In addition to the foregoing, a breach of the GDPR or the UK GDPR could result in regulatory investigations, reputational damage, orders to cease/change our processing of our data, enforcement notices, and/or assessment notices (for a compulsory audit). We may also face civil claims including representative actions and other class action type litigation (where individuals have suffered harm), potentially amounting to significant compensation or damages liabilities, as well as associated costs, diversion of internal resources, and reputational harm.

There is an increasing focus on compliance requirements with respect to the digital advertising ecosystem, including criticism that the Internet Advertising Bureau (“IAB”) Transparency & Consent Framework (“TCF”) is inherently incompatible with GDPR given the high velocity personal data trading. The Belgian Autorité de Protection des Données fined the IAB €250,000 in February 2022 because of alleged breaches of GDPR. The IAB has appealed the decision, which has been referred to the Court of Justice of the European Union (“CJEU”), however, the Belgian regulator started enforcing the action plan with the IAB to implement changes to the TCF by July 2024. Our publishers will likely need to implement changes to their consent management platforms in order for Outbrain to continue personalizing recommendations. Further, in light of this decision, the industry may lose confidence in the TCF and further challenges to the TCF may undermine the viability of the TCF such that there is no industry standard for requesting and obtaining consent, all of which could negatively affect our business, results of operations, and financial condition. In addition, the UK Information Commissioner’s Office, the Irish Data Protection Commission and the French Commission Nationale de l”Informatique et de Libertés (“CNIL”) are investigating the ad tech industry and the use of cookies.

Further, in the European Union, current national laws that implement the ePrivacy Directive (2002/58/EC) will be replaced by an EU Regulation, known as the ePrivacy Regulation, which will significantly increase fines for non-compliance and impose burdensome requirements around placing cookies. While the text of the ePrivacy Regulation is still under development, the CJEU Fashion ID, Planet 49 and Wirtschaftsakademie cases are driving increased attention to cookies and tracking technologies and impacting compliance requirements across the ecosystem. As regulators start to enforce a strict approach, beginning in Germany, where data protection authorities have initiated a probe into third-party cookies, there have been, and we expect further, system changes, limitations on the effectiveness of our advertising activities, and attention of our technology personnel, which may adversely affect our margins, increase costs, and subject us to additional liabilities.

Though GDPR intended to harmonize the privacy and data protection laws across the EEA, member state interpretations of the law continue to vary making compliance with an already detailed regulatory framework increasingly complex. For example, some countries in the EU, such as France and Germany, have adopted a strict approach to the dropping of any cookies without consent, even if cookies are used strictly for technical delivery and not for personalization. Countries in the EU or the UK may adopt similar interpretations regarding strictly technical cookies. Though we developed technical solutions to comply with such cookie limitations, evolving interpretations of required limitations may result in unintended consequences with respect to our operations, such as fraud identification or user experience.

Any failure to achieve required data protection standards may result in lawsuits, regulatory fines, or other actions or liability, all of which may harm our results of operations. It is possible that CCPA (and other U.S. privacy laws), GDPR, UK GDPR and the ePrivacy Regulation in Europe and related standards may be interpreted and applied in manners that are, or are asserted to be, inconsistent with our data management practices or the technological features of our solutions. The risk is further exacerbated because of the evolving interpretation and application of privacy and data protection laws.

In addition to government regulation, privacy advocacy and industry groups may propose new and different self-regulatory standards that either legally or contractually apply to us, our media partners or our advertisers, such as the IAB U.S. Global Privacy Platform and Multi-State Privacy Agreement. We are members of self-regulatory bodies that impose additional requirements related to the collection, use, and disclosure of consumer data, such as the right to opt out of the sharing or the sale of their personal information for interest-based advertising purposes. Under the requirements of these self-regulatory bodies, in addition to other compliance obligations, we are obligated to provide consumers with notice about our use of cookies and other technologies to collect consumer data, the use of such consumer data for certain purposes, and certain choices relating to the use of consumer data. Some of these self-regulatory bodies have the ability to discipline members or participants, which could result in fines, penalties, and/or public censure (which could in turn cause reputational harm). Additionally, some of these self-regulatory bodies might refer violations of their requirements to the Federal Trade Commission or other regulatory bodies. If we were to be found responsible for such a violation, it could adversely affect our reputation, as well as our business, results of operations, and financial condition.

In Europe, the Digital Services Act (EU) 2022/2065 (“DSA”) entered into force on November 16, 2022 and applies to digital services that connect consumers to goods, services, or content in the EEA. We may meet the threshold of “very large online platforms” under the DSA and therefore must provide the EU Commission with an annual risk assessment exercise for our online activities. The DSA also imposes stricter obligations on curbing harmful or unlawful content, such as implementing tools to automatically monitor, detect and take down illegal online content; implementing a mechanism for Users to easily flag content and to cooperate with ‘trusted flaggers' (such as NGOs); reinforcing traceability of our customers; implementing a mechanism for the public and businesses to challenge content moderation decisions and seek redress; providing access to vetted researchers to the key data and provision of access to NGOs to public data; increased transparency on the algorithms used for recommending content to users; implementing risk-based controls to prevent the misuse of our tools and independent audits of our risk management systems; implementing mechanisms to adapt swiftly and efficiently in reaction to crises affecting public security or public health; preventing children targeting and the use of sensitive personal data for targeted advertising (e.g. health). Sanctions under the DSA include fines of up to 6% of global turnover in the event of non-compliance and can lead to a

ban on operating in the EU in case of repeated serious breaches. A similar piece of legislation, the Online Safety Bill, is currently being discussed in the UK. In addition to the foregoing, a breach of the DSA could result in regulatory investigations, reputational damage, orders to cease/change our services, enforcement notices, and/or assessment notices (for a compulsory audit). We may also face civil claims including representative actions and other class action type litigation (where individuals have suffered harm), potentially amounting to significant compensation or damages liabilities, as well as associated costs, diversion of internal resources, and reputational harm.

In some instances, we may be required to indemnify media partners against such claims with respect to our advertisers. Our advertisers may not have the ability to satisfy their indemnification obligations to us, in whole, in part or at all, and pursuing any claims for indemnification may be costly or unsuccessful. As a result, we may be required to satisfy indemnification obligations to media partners, or claims against us, with our own assets.

If media partners, advertisers, and data providers do not obtain necessary and requisite consents from consumers for us to process their personal data, we could be subject to fines and liability.

Pursuant to GDPR, the UK GDPR and related ePrivacy laws, media partners and any downstream partners are required to obtain unambiguous consent from EEA data subjects to process their personal data, which the industry has addressed through the release and widespread adoption of the IAB TCF in April 2018 and subsequent 2.0 update in August 2020. Because we do not have direct relationships with users, we rely on media partners, advertisers, and data providers, as applicable, to implement notice or choice mechanisms required under applicable laws, and transmit notification of the consent (or no consent) of the user to us. Where applicable, we may only use user data to deliver interest-based advertisements where we have consent. If media partners, advertisers, or data providers do not follow the process (and in any event as the legal requirements in this area continue to evolve and develop), we could be subject to fines and liability. We may not have adequate insurance or contractual indemnity arrangements to protect us against any such claims and losses.

Rulings from the Court of Justice of the European Union invalidated the EU-U.S. Privacy Shield as a lawful means for transferring personal data from the EEA or the UK to the United States; this introduces increased uncertainty and may require us to change our EEA/UK data practices and/or rely on an alternative legally sufficient compliance measure.

The GDPR and the UK GDPR, generally prohibit the transfer of personal data of EEA/UK subjects outside of the EEA/UK, unless a lawful data transfer solution has been implemented or a data transfer derogation applies. On July 16, 2020, in a case known as Schrems II, the CJEU ruled on the validity of two of the primary data transfer solutions. The first method, EU-U.S. Privacy Shield operated by the U.S. Department of Commerce (the “Privacy Shield”), was declared invalid as a legal mechanism to transfer data from EEA/UK to the United States. As a result, despite the fact that we had certified our compliance to the Privacy Shield, we can no longer rely on this mechanism as a lawful means to transfer EEA/UK data to us in the United States. While the United States and the European Union are in discussions regarding a replacement to the Privacy Shield, the EU-U.S. Privacy Framework that could be approved by the EU Commission in 2023, we cannot predict if it will happen or if it does, what impact it will have on our business and industry.

The second mechanism, the UK and EEA Standard Contractual Clauses (“SCCs”), were upheld as a valid legal mechanism for transnational data transfer. However, the ruling requires that European organizations seeking to rely on the EU SCCs to export data out of the EEA ensure the data is protected to a standard that is “essentially equivalent” to that in the EEA including, where necessary, by taking “supplementary measures” to protect the data. Since the July 28, 2021 UK Adequacy Decision, we rely on such decision for the transfer of data from the EEA to the UK, and the UK SCCs transfers from the UK to the US, with supplementary measures as per the June 2021 European Data Protection Guidelines. Despite such decision, rulings in 2022 from the Austrian Datenschutzbehörde and the French Commission de l’Informatique et des Libertés (CNIL) stated that publishers using Google Analytics are breaching GDPR because the data is sent to the U.S. and Google does not have sufficient protective measures in place for such transfer. It remains unclear whether supplemental measures for the transfer of data outside of the UK and EEA will be deemed sufficient by media partners, regulatory bodies and courts. If such supplementary measures are found to be inadequate, this may adversely affect our business, results of operations and financial condition.

In the event that use of the SCCs or relying on the UK adequacy decision are invalidated as a solution for data transfers to the United States, or there are additional changes to the data protection regime in the EEA/UK resulting in any inability to transfer personal data from the EEA/UK to the United States in compliance with data protection laws, European media partners and advertisers may be more inclined to work with businesses that do not rely on such compliance mechanisms to ensure legal and regulatory compliance, such as EEA/UK-based companies or other competitors that do not need to transfer personal data to the United States in order to avoid the above-identified risks and legal issues. Such changes could cause us to incur penalties under GDPR or UK GDPR, could increase the cost and complexity of operating our business, or adversely impact our business, results of operations, and financial condition.

If the security of the confidential information or personal data of our media partners and the users of our media partner properties stored in our systems is breached or otherwise subjected to unauthorized access, our reputation may be harmed and we may be exposed to liability.

We believe that we take reasonable steps to protect the security, integrity and confidentiality of the information we collect and store, but there is no guarantee that inadvertent (e.g., software bugs or other technical malfunctions, employee error or malfeasance, or other factors) or unauthorized disclosure will not occur or that third parties will not gain unauthorized access to this information despite our efforts. Given that techniques used to obtain unauthorized access frequently evolve, we may be unable to anticipate these techniques or to implement adequate preventative measures. If our security measures are breached because of third-party action, employee error, malfeasance or otherwise, or if design flaws in our software are exposed and exploited, and, as a result, a third party obtains unauthorized access to any of our users' data, our relationships with our users may be damaged, and we could incur significant liability and reputational harm. In addition, some jurisdictions have enacted laws requiring companies to notify individuals of data security breaches involving certain types of personal data, and our agreements with certain partners require us to notify them in the event of a security incident. These mandatory disclosures regarding a security breach, sometimes lead to negative publicity and may cause our users, media partners or advertisers to lose confidence in the effectiveness of our data security measures. In the European Union/United Kingdom a data breach involving personal data will generally require notification of the relevant Supervisory Authority(ies) and, where the risk to individuals is high, notification of the affected individuals themselves. In the European Union/United Kingdom there is a possibility of significant fines being imposed in the event of a security breach. Any security breach or cyber incident, whether actual or perceived, may harm our reputation, and we could lose users or fail to acquire new users, media partners or advertisers, all of whom may, in addition, have claims against us as a result of such breach or incident. Users also may be able to bring a class action against us. In addition, security breaches and cyber incidents of our media partners, advertisers, vendors or other third parties working with us could also have a negative impact on our reputation and operations.

Any governmental investigations, legal proceedings, or claims against us could result in liability, harm our reputation and could be costly and time-consuming to defend.

From time to time, we may be subject to litigation claims, whether arising in connection with employment or commercial matters, including certain terms in our commercial agreements. We also may be exposed to potential claims brought by third parties against us, our media partners or our advertisers. Such claims may allege, for example, that our advertisers' recommendations (including the destination page reached) infringe the intellectual property or other rights of third parties, are false, deceptive, misleading or offensive, or that our advertisers' products are defective or harmful.

In addition, we may be involved in regulatory issues and government investigations, including, but not limited to, actions relating to competition law. For example, on April 29, 2021, we were notified that the Antitrust Division of the U.S. Department of Justice is conducting a criminal investigation into the hiring activities in our industry that includes us. We continue to cooperate with the Antitrust Division. While there can be no assurance regarding the ultimate resolution of this matter, we do not believe that our conduct violated applicable law.

Our reputation as a business with high standards of regulatory compliance depends in part on our media partners' and advertisers' adherence to laws and regulations of multiple jurisdictions concerning copyright, trademark and other intellectual property rights, unfair competition, privacy and data protection, and truth in-advertising, and their use of our platform in ways consistent with users' expectations. In general, we require our media partners and advertisers to comply with all applicable laws, including all applicable intellectual property, content, privacy and data protection regulations. We rely on contractual representations from media partners and advertisers that they will comply with all such applicable laws. We make reasonable efforts to enforce contractual notice requirements, but, due to the nature of our business, we are unable to audit fully our media partners' and advertisers' compliance with our recommended disclosures or with applicable laws and regulations. If our media partners or advertisers were to breach their contractual or other requirements in this regard, or a court or governmental agency were to determine that we, our media partners and/or our advertisers failed to comply with any applicable law, then we may be subject to potentially adverse publicity, damages and related possible investigation, litigation or other regulatory activity. In addition, any perception that we, our media partners and/or our advertisers fail to comply with current or future regulations and industry practices, may expose us to public criticism, collective redress actions, reputational harm or claims by regulators, which could disrupt our industry and/or operations and expose us to increased liability.

As a result of any of the above, we could become involved in litigation or governmental investigations, whether on our own, or involving or concerning our media partners or advertisers, including class action claims, and, as a result, may become subject to significant liability, including claims for damages and financial penalties. Claims may be expensive to defend, divert management's attention from our business operations, and affect the cost and availability of insurance, even if we ultimately prevail. If any of this occurs, it may have a material adverse effect on our reputation, business operations, financial position, competitive position and prospects.

We may be unable to obtain, maintain and protect our intellectual property rights and proprietary information or prevent third parties from making unauthorized use of our intellectual property.

Our intellectual property rights are important to our business. We rely on a combination of confidentiality clauses, trade secrets, copyrights, patents and trademarks to protect our intellectual property and know-how. However, the steps we take to protect our intellectual property may be inadequate. We will not be able to protect our intellectual property if we are unable to enforce our rights or if we do not detect unauthorized use of our intellectual property. Despite our precautions, it may be possible for unauthorized third parties, including our employees, consultants, service providers, media partners or advertisers, to copy our products and/or obtain and use information that we regard as proprietary to create solutions and services that compete with ours. We cannot assure you that the steps taken by us will prevent misappropriation of our trade secrets or technology or infringement of our intellectual property. In addition, the laws of some foreign countries where we operate do not protect our proprietary rights to as great an extent as the laws of the United States, and many foreign countries do not enforce these laws as diligently as government agencies and private parties in the United States.

Our policy is to enter into confidentiality and invention assignment agreements with our employees and consultants and enter into confidentiality agreements with the parties with whom we have strategic relationships and business alliances. No assurance can be given that these agreements will be effective in controlling access to our proprietary information and other intellectual property. Further, these agreements do not prevent our competitors from independently developing technologies that are substantially equivalent or superior to our solutions.

We may from time to time be subject to claims of prior use, opposition or similar proceedings with respect to applications for registrations of our intellectual property, including but not limited to our trademarks and patent applications. The process of seeking patent protection can be lengthy and expensive, and any of our pending or future patent or trademark applications, whether or not challenged, may not be issued with the scope of the claims we seek, if at all. We are unable to guarantee that patents or trademarks will issue from pending or future applications or that, if patents or trademarks issue, they will not be challenged, invalidated or circumvented, or that the rights granted under the patents will provide us with meaningful protection or any commercial advantage. We rely on our brand and trademarks to identify our solutions to our media partners and advertisers and to differentiate our solutions from those of our competitors. If we are unable to adequately protect our trademarks, third parties may use our brand names or trademarks similar to ours in a manner that may cause confusion to our users or confusion in the market, or dilute our brand names or trademarks, which could decrease the value of our brand.

From time to time, we may discover that third parties are infringing, misappropriating or otherwise violating our intellectual property rights. However, policing unauthorized use of our intellectual property and misappropriation of our technology is difficult and we may therefore not always be aware of such unauthorized use or misappropriation. Despite our efforts to protect our intellectual property rights, unauthorized third parties may attempt to use, copy or otherwise obtain and market or distribute our intellectual property rights or technology or otherwise develop solutions with the same or similar functionality as our solutions. If competitors infringe, misappropriate or otherwise misuse our intellectual property rights and we are not adequately protected, or if such competitors are able to develop solutions with the same or similar functionality as ours without infringing our intellectual property, our competitive position and results of operations could be harmed and our legal costs could increase.

We may be subject to intellectual property rights claims by third parties, which are costly to defend and could require us to pay significant damages and could limit our ability to use technology or intellectual property.

We operate in an industry with extensive intellectual property litigation. There is a risk that our business, platform, and services may infringe or be alleged to infringe the trademarks, copyrights, patents, and other intellectual property rights of third parties, including patents held by our competitors or by non-practicing entities. We may also face allegations that our employees have misappropriated or divulged the intellectual property of their former employers or other third parties. Regardless of whether claims that we are infringing patents or other intellectual property rights have any merit, the claims are time consuming, divert management attention and financial resources and are costly to evaluate and defend. Some of our competitors have substantially greater resources than we do and are able to sustain the cost of complex intellectual property litigation to a greater extent and for longer periods of time than we could. Results of these litigation matters are difficult to predict and may require us to stop offering some features, purchase licenses, which may not be available on favorable terms or at all, or modify our technology or our platform while we develop non-infringing substitutes, or incur significant settlement costs. Any of these events could adversely affect our business, results of operations, and financial condition.

Our platform relies on third-party open source software components. Failure to comply with the terms of the underlying open source software licenses could expose us to liabilities, and the combination of open source software with code that we develop could compromise the proprietary nature of our platform.

Our platform utilizes software licensed to us by third-party authors under "open source" licenses and we expect to continue to utilize open source software in the future. The use of open source software may entail greater risks than the use of third-party commercial software, as open source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. To the extent that our platform depends upon the successful operation of the open source software we use, any undetected errors or defects in this open source software could prevent the deployment or impair the functionality of our platform, delay new solutions introductions, result in a failure of our platform, and injure our reputation. For example, undetected errors or defects in open source software could render it vulnerable to breaches or security attacks, and, in conjunction, make our systems more vulnerable to data breaches. Furthermore, some open source licenses contain requirements that we make available source code for modifications or derivative works we create based upon the type of open source software we use. If we combine our proprietary software with open source software in a specific manner, we could, under some open source licenses, be required to release the source code of our proprietary software to the public. This would allow our competitors to create similar solutions with lower development effort and time and ultimately put us at a competitive disadvantage.

Although we monitor our use of open source software to avoid subjecting our platform to conditions we do not intend, we cannot assure you that our processes for controlling our use of open source software in our platform will be effective. If we are held to have breached the terms of an open source software license, we could be required to seek licenses from third parties to continue operating using our solution on terms that are not economically feasible, to re-engineer our solution or the supporting computational infrastructure to discontinue use of code, or to make generally available, in source code form, portions of our proprietary code.

We are required to comply with international advertising regulations in connection with the distribution of advertising, including potential regulation or oversight of native advertising disclosure standards. Failure to comply could negatively impact us, our media partners and/or our advertisers, which could have an adverse effect on our business, results of operations, and financial condition.

We are subject to complex and changing advertising regulations in many jurisdictions in which we operate, including regulatory and self-regulatory requirements to comply with native advertising regulations in connection with the advertising we distribute for our advertisers. For example, in the United States, the Federal Trade Commission requires that all online advertising meet certain principles, including the clear and conspicuous disclosure of advertisements. If we, or our advertisers, make mistakes in implementing this varied and evolving guidance, or our commitments with respect to these principles, we could be subject to negative publicity, government investigation, government or private litigation, or investigation by self-regulatory bodies or other accountability groups. Any such action against us could be costly and time-consuming and may require us to change our business practices, cause us to divert management's attention and our resources and be damaging to our reputation and our business. Moreover, additional or different disclosures may lead to a reduction in user engagement, which could have an adverse effect on our business, results of operations, and financial condition.

Environmental, social and governance ("ESG") risks could adversely affect the Company's reputation, business and performance and the trading price of its common stock.

Companies are facing increasing scrutiny from investors, customers, regulators and other stakeholders related to their ESG practices and disclosure. The nature, scope and complexity of matters that we must assess and report are expanding due to growing mandatory and voluntary reporting relating to the environment, climate change, diversity and inclusion, workplace conduct and human capital management. Significant expenditures and commitment of time by management, employees and consultants are involved in developing, implementing and overseeing policies, practices, additional disclosures and internal controls related to ESG risk and performance. An inability to implement such policies, practices, and internal controls and maintain compliance with laws and regulations, or a perception among stakeholders that our ESG disclosures and sustainability goals are insufficient or our goals are unattainable, could harm our reputation and have an adverse impact on our business, financial condition or results of operations. Investors, investor advocacy groups and investment funds are also increasingly focused on these practices, especially as they relate to the environment, climate change, diversity and inclusion, workplace conduct and human capital management. Failure to adapt to or comply with regulatory requirements or investor or stakeholder expectations and standards could negatively impact our reputation, our ability to do business with certain customers, vendors, suppliers or other third parties, and our stock price. Increased ESG-related compliance costs could result in increases to our overall operational costs which could impact our profitability. Any of the foregoing could have an adverse impact on our business, financial condition or results of operations.

Risks Related to Taxation

Our tax liabilities may be greater than anticipated.

The U.S. and non-U.S. tax laws applicable to our business activities are subject to interpretation and are changing. We are subject to audit by the U.S. Internal Revenue Service and by taxing authorities of the state, local and foreign jurisdictions in which we operate. Our tax obligations are based in part on our corporate operating structure, including the manner in which we develop, value, use and hold our intellectual property, the jurisdictions in which we operate, how tax authorities assess revenue-based taxes such as sales and use taxes, the scope of our international operations, and the value we ascribe to our intercompany transactions. Taxing authorities may challenge, and have challenged, our tax positions and methodologies for valuing developed technology or intercompany arrangements, positions regarding the collection of sales and use taxes, and the jurisdictions in which we are subject to taxes, which could expose us to additional taxes. Any adverse outcomes of such challenges to our tax positions could result in additional taxes for prior periods, interest and penalties, as well as higher future taxes.

In addition, our future tax expense could increase as a result of changes in tax laws, regulations or accounting principles, or as a result of earning income in jurisdictions that have higher tax rates. For example, the European Commission has proposed, and various jurisdictions have enacted or are considering enacting laws that impose separate taxes on specified digital services, which may increase our tax obligations in such jurisdictions. Digital services or other similar taxes could, among other things, increase our tax expense, create significant administrative burdens for us, discourage potential customers from subscribing to our platform due to the incremental cost of any such sales or other related taxes, or otherwise have a negative effect on our financial condition and results of operations. In addition, the Organization for Economic Cooperation and Development is progressing on a Base Erosion and Profit Shifting Project that, if implemented, would change various aspects of the existing framework under which our tax obligations are determined in many of the countries in which we do business. More than 140 countries tentatively signed on to a framework that imposes a minimum tax rate of 15%, among other provisions, and the European Union has adopted a Council Directive which requires these provisions to be transposed into member states' national laws. As this framework is subject to further negotiation and implementation by each member country, the timing and ultimate impact of any such changes on our tax obligations are uncertain.

Moreover, the determination of our provision for income taxes and other tax liabilities requires significant estimates and judgment by management, and the tax treatment of certain transactions is uncertain. The income tax benefit/expense we record may vary significantly in future periods based on factors outside of our control, such as the uncertainty with respect to the current macroeconomic environment on our operations and our stock price. For example, in periods in which our stock price varies from the grant price of the share-based compensation vesting in that period, we will recognize excess tax benefits or shortfalls that will impact our effective tax rate.

Any changes, ambiguity, or uncertainty in taxing jurisdictions' administrative interpretations, decisions, policies and positions, including the position of taxing authorities with respect to revenue generated by reference to certain digital services, could also materially impact our income tax liabilities. Although we believe that our estimates and judgments are reasonable, the ultimate outcome of any particular issue may differ from the amounts previously recorded in our financial statements and any such occurrence could adversely affect our business, results of operations, and financial condition.

Future events may impact our deferred tax asset position including deferred tax assets related to our utilization of net operating losses ("NOLs," each a "NOL") and U.S. deferred federal income taxes on undistributed earnings of international affiliates that are considered to be reinvested indefinitely.

We evaluate our ability to utilize deferred tax assets and our need for valuation allowances based on available evidence. This process involves significant management judgment regarding assumptions that are subject to change from period to period based on changes in tax laws or variances between future projected operating performance and actual results. We are required to establish a valuation allowance for deferred tax assets if we determine, based on available evidence at the time the determination is made, that it is more likely than not that some portion or all of the deferred tax assets will not be utilized. In making this determination, we evaluate all positive and negative evidence as of the end of each reporting period. Future adjustments (either increases or decreases), to a deferred tax asset valuation allowance are determined based upon changes in the expected realization of the net deferred tax assets. The utilization of our deferred tax assets ultimately depends on the existence of sufficient taxable income in carry-forward periods under the applicable tax law. Due to significant estimates used to establish a valuation allowance and the potential for changes in facts and circumstances, it is possible that we will be required to record adjustments to a valuation allowance in future reporting periods. Changes to a valuation allowance or the amount of deferred taxes could have a materially adverse effect on our business, financial condition and results of operations. Further, while we have no current intention to do so in the foreseeable future, should we change our assertion regarding the permanent reinvestment of the undistributed earnings of certain of our foreign subsidiaries, a deferred tax liability may need to be established.

The ability to fully utilize our NOL and tax credit carryforwards to offset future taxable income may be limited. Under Section 382 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an "ownership change," the corporation's ability to use its pre-change NOL carryforwards to offset its post-change income may be limited. In general, an "ownership change" will occur if there is a cumulative change in our ownership by 5% or greater stockholders that exceeds 50% over a rolling three-year period. Similar rules may apply under state tax laws. We may experience ownership changes in the future as a result of future transactions in our stock. As a result, if we earn net taxable income, our ability to use our pre-change NOL carryforwards or other pre-change tax attributes to offset United States federal and state taxable income may be subject to limitations. Any such limitations on the ability to use our NOL carryforwards and other tax assets could adversely impact our business, financial condition, and operating results.

Risks Related to the Securities Markets and Ownership of Our Common Stock

The trading price of the shares of our common stock is likely to be volatile, and purchasers of our common stock could incur substantial losses.

Technology stocks historically have experienced high levels of volatility. The trading price of our common stock has fluctuated and may continue to do so. These fluctuations could cause you to incur substantial losses, including all of your investment in our common stock. Factors that could cause fluctuations in the trading price of our common stock include the following:

- significant volatility in the market price and trading volume of technology companies in general and of companies in the digital advertising industry in particular;
- announcements of new solutions or technologies, commercial relationships, acquisitions, or other events by us or our competitors;
- price and volume fluctuations in the overall stock market from time to time;
- changes in how advertisers perceive the benefits of our platform and future offerings;
- the public's reaction to our press releases, other public announcements, and filings with the SEC;
- the trading of or conversion of our Convertible Notes;
- fluctuations in the trading volume of our shares or the size of our public float;
- sales of large blocks of our common stock;
- actual or anticipated changes or fluctuations in our results of operations;
- changes in actual or future expectations of investors or securities analysts;
- litigation involving us, our industry, or both;
- governmental or regulatory actions or audits;
- regulatory developments applicable to our business, including those related to privacy in the United States or globally;
- general economic conditions and trends;
- major catastrophic events in our domestic and foreign markets; and
- departures of key employees.

In addition, if the market for technology stocks, the stock of digital advertising companies or the stock market, in general, experiences a loss of investor confidence, the trading price of our common stock could decline for reasons unrelated to our business, results of operations, or financial condition. The trading price of our common stock might also decline in reaction to events that affect other companies in the digital advertising industry even if these events do not directly affect us. In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been brought against that company. If litigation is instituted against us, we could incur substantial costs and divert management's attention and resources. In addition, repurchases pursuant to our share repurchase program could affect our stock price and increase its volatility. The existence of a share repurchase program could also cause our stock price to be higher than it would be in the absence of such a program and could potentially reduce the market liquidity for our stock. There can be no assurance that any share repurchases will enhance stockholder value because the market price of our common stock may decline below the levels at which we repurchased shares of common stock. Although our share repurchase program is intended to enhance long-term stockholder value, short-term stock price fluctuations could reduce the program's effectiveness. Furthermore, the program does not obligate the Company to repurchase any dollar amount or number of shares of common stock, and may be commenced, suspended or discontinued at any time and any suspension or discontinuation could cause the market price of our stock to decline.

If securities or industry analysts do not publish research or publish unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our common stock depends, to some extent, on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. If one or more of the analysts who cover us should downgrade our shares, change their opinion of our business prospects or publish inaccurate or unfavorable research about our business, our share price may decline. If one or more of these analysts who cover us ceases coverage of our company or fails to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our share price or trading volume to decline.

We have broad discretion in the use of proceeds from our IPO and may invest or spend the proceeds in ways with which investors do not agree and in ways that may not yield a return.

We are using the net proceeds from our IPO for working capital and general corporate purposes, including research and development expenditures focused on product development and sales and marketing expenditures aimed at growing our business. We may also use the net proceeds to make acquisitions or investments in complementary companies or technologies. Consequently, our management has broad discretion over the specific use of these net proceeds and may use such proceeds in a way with which our investors disagree. The failure by our management to apply and invest these funds effectively may not yield a favorable return to our investors and may adversely affect our business, results of operations, and financial condition. Pending their use, we may invest the net proceeds from our IPO in a manner that does not produce income or that loses value. If we do not use the net IPO proceeds effectively, our business, results of operations, and financial condition could be adversely affected.

Sales of substantial amounts of our common stock in the public markets, or the perception that they may occur, could cause the market price of our common stock to decline.

The market price of our common stock could decline and may make it more difficult for you to sell your stock at a time and price that you deem appropriate, as a result of substantial sales of our common stock, particularly sales by our directors, executive officers and significant stockholders, a large number of shares of our common stock becoming available for sale or the perception in the market that holders of a large number of shares intend to sell their shares.

Our directors, executive officers and employees hold options and restricted stock units under our equity incentive plans, and the shares issuable upon the exercise of such options or vesting of such restricted stock units have been registered for public resale under the Securities Act. Accordingly, these shares will be able to be freely sold in the public market upon issuance subject to certain legal and contractual requirements.

Failure to design, implement and maintain effective internal controls may adversely affect investor confidence in our company and, as a result, the value of our common stock.

The Sarbanes-Oxley Act requires, among other things, that we maintain proper and effective internal control over financial reporting. We are required to disclose, on a quarterly basis, material changes made in our internal control over financial reporting. We are now also required, pursuant to Section 404 of the Sarbanes-Oxley Act, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting as of the end of the first complete fiscal year after our IPO. This assessment is required to include disclosure of any material weaknesses identified by our management in our internal control over financial reporting. However, our independent registered public accounting firm will not be required to attest to the effectiveness of our internal control over financial reporting pursuant to Section 404 until the later of the year following our first annual report required to be filed with the SEC, or the date we are no longer an "emerging growth company" as defined in the JOBS Act. At such time, our independent registered public accounting firm may issue a report that is adverse if it is not satisfied with the level at which our controls are documented, designed or operating.

As a newly public company, we have undertaken and continue to undertake a range of actions to augment our internal control over financial reporting. These include implementing new internal controls and procedures and hiring additional accounting and financial reporting staff and continuing to enhance our internal control over financial reporting. Any failure of our internal controls could result in a material misstatement in our financial statements. Furthermore, if we are unable to conclude that our internal control over financial reporting is effective at the time that we are required to make such assessment, we could lose investor confidence in the accuracy and completeness of our financial reports, which would cause the price of our common stock to decline, and we may be subject to investigation or sanctions by the SEC.

We are an emerging growth company subject to reduced disclosure requirements, and there is a risk that availing ourselves of such reduced disclosure requirements will make our common stock less attractive to investors.

We are an emerging growth company, and for as long as we continue to be an emerging growth company, we intend to take advantage of exemptions from various reporting requirements such as, but not limited to, not being required to obtain auditor attestation of our reporting on internal control over financial reporting, having reduced disclosure obligations about our executive compensation in our periodic reports and proxy statements, and not being required to hold advisory stockholder votes on executive compensation and stockholder approval of any golden parachute payments not previously approved. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock, and our stock price may be more volatile.

In addition, Section 107 of the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This provision allows an emerging growth company to delay the adoption of some accounting standards until those standards would otherwise apply to private companies. We have elected to use the extended transition period under the JOBS Act. Accordingly, our consolidated financial statements may not be comparable to the financial statements of public companies that comply with such new or revised accounting standards.

We will remain an emerging growth company until the earliest of: the end of the fiscal year in which the market value of the shares of our outstanding capital stock held by non-affiliates is $700 million or more as of the end of the second quarter of that year, the end of the fiscal year in which we have total annual gross revenue of $1.235 billion, the date on which we issue more than $1.0 billion in nonconvertible debt in a three-year period, or five years from the date of our IPO.

Our management team has limited experience managing a public company and we will incur significantly increased costs and devote substantial management time as a result of operating as a public company.

Most members of our management team have limited experience managing a publicly traded company, interacting with public company investors, and complying with the increasingly complex laws, rules, and regulations that govern public companies. We are subject to significant obligations relating to reporting, procedures and internal controls, and our management team may not successfully or efficiently manage such obligations. These obligations and scrutiny will require significant attention from our management and could divert their attention away from the day-to-day management of our business, which could adversely affect our business, results of operations, and financial condition. We expect that these requirements will increase our compliance costs. We have hired, and will need to hire, additional accounting, financial, and legal staff with appropriate public company experience and technical accounting knowledge and may need to establish an internal audit function. We cannot predict or estimate the amount of additional costs we may incur as a result of becoming a public company or the timing of these costs.

As a public company, it is more expensive for us to maintain director and officer liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to maintain coverage. These factors could also make it more difficult for us to attract and retain qualified members of our board of directors, particularly to serve on our audit committee and qualified executive officers.

The requirements of being a public company may strain our resources, divert management's attention and affect our ability to attract and retain executive management and qualified board members.

As a newly public company, we are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, the listing requirements of Nasdaq and other applicable securities rules and regulations. Compliance with these rules and regulations will increase our legal and financial compliance costs, make some activities more difficult, time-consuming or costly and increase demand on our systems and resources, particularly after we are no longer an "emerging growth company."

The Exchange Act requires, among other things, that we file annual, quarterly and current reports with respect to our business and results of operations. The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. In order to maintain and improve our disclosure controls and procedures and internal control over financial reporting to meet this standard, significant resources and management oversight may be required. As a result, management's attention may be diverted from other business concerns, which could adversely affect our business, results of operations, and financial condition. We may need to hire more employees in the future or engage outside consultants to comply with these requirements, which will increase our costs and expenses. In addition, changing laws, regulations and standards relating to corporate governance and public disclosure are creating uncertainty for public companies, increasing legal and financial compliance costs and making some activities more time consuming. These laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management's time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to their application and practice, regulatory authorities may initiate legal proceedings against us and our business may be adversely affected. However, for as long as we remain an "emerging growth company" as defined in the JOBS Act, we may take advantage of certain exemptions from various reporting requirements that are applicable to emerging growth companies as described above. We may take advantage of these reporting exemptions until we are no longer an emerging growth company.

We do not intend to pay dividends on our common stock, so any returns will be limited to the value of our common stock.

We have never declared or paid cash dividends on our common stock and do not expect to pay any dividends in the foreseeable future. Any determination to pay dividends in the future will be at the discretion of our board of directors and will depend on a number of factors, including our financial condition, results of operations, capital requirements, general business conditions and other factors that our board of directors may deem relevant. Our current credit facility imposes certain limitations on our ability to pay dividends and any new credit facility may contain certain similar restrictions. Until such time that we pay a dividend, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments.

We may need to raise additional funds to pursue our strategy, and we may be unable to raise capital when needed or on acceptable terms.

From time to time, we may seek additional equity or debt financing to fund our growth, develop new solutions or make acquisitions or other investments. Our business plans may change, general economic, financial or political conditions in our markets may change, or other circumstances may arise that have a material adverse effect on our cash flow and the anticipated cash needs of our business. Any of these events or circumstances could result in significant additional funding needs, requiring us to raise additional capital. We cannot predict the timing or amount of any such capital requirements at this time. If financing is not available on satisfactory terms, or at all, we may be unable to expand our business or to develop new business at the rate desired and our results of operations may suffer.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of our company, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws may delay or prevent an acquisition of us or a change in our management. These provisions include:

- authorizing "blank check" preferred stock, which could be issued by the board without stockholder approval and may contain voting, liquidation, dividend and other rights superior to our common stock, which would increase the number of outstanding shares and could thwart a takeover attempt;
- a classified board of directors whose members can only be dismissed for cause;
- the prohibition on actions by written consent of our stockholders;
- the limitation on who may call a special meeting of stockholders;
- the establishment of advance notice requirements for nominations for election to our board of directors or for proposing matters that can be acted upon at stockholder meetings; and
- the requirement of at least 75% of the outstanding capital stock to amend any of the foregoing second through fifth provisions.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which limits the ability of stockholders owning in excess of 15% of our outstanding voting stock to merge or combine with us. Although we believe these provisions collectively provide for an opportunity to obtain greater value for stockholders by requiring potential acquirers to negotiate with our board of directors, they would apply even if an offer rejected by our board were considered beneficial by some stockholders. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our corporate headquarters are located in New York, NY, where we occupy office space consisting of approximately 23,000 square feet pursuant to a lease agreement executed in July 2021 and expiring in October 2027.

Since 2007, we have maintained a presence in Netanya, Israel, which is overseen by one of our founders, where we occupy space consisting of approximately 47,000 square feet under a lease that expires in 2026. We use this facility primarily for technology and development, and, to a lesser extent, for general administration and sales and marketing. We maintain a regional office in London for general administration and sales and marketing. We also have sales and operations offices in a number of locations around the world, including Amsterdam, Brussels, Chicago, Cologne, Ljubljana, Madrid, Milan, Mumbai, Munich, Paris, Sao Paolo, Singapore, Sydney, Timişoara and Tokyo.

We believe that our current facilities are adequate to meet our needs for the immediate future, and that, should it be needed, suitable additional space will be available to accommodate any expansion of our operations.

Item 3. Legal Proceedings

Information with respect to this item may be found in Note 9 in the accompanying notes to the audited consolidated financial statements included in Part II, Item 8 “Financial Statements and Supplementary Data” of this Report, under “Legal Proceedings and other Matters,” which is incorporated herein by reference.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common stock began trading on The NASDAQ Stock Market LLC ("Nasdaq") on July 23, 2021 under the symbol "OB." Prior to July 23, 2021, there was no established public trading market for our common stock.

Holders of Record

As of February 28, 2023, there were approximately 163 holders of record of our common stock. The actual number of the Company's stockholders is greater than this number of record holders, which does not include stockholders who are the beneficial owners of shares that are held of record by brokers and other nominee holders.

Dividend Policy

We have never declared or paid cash dividends on our common stock. We currently intend to invest our available funds and any future earnings in the operation of our business, as well as share repurchases, and do not anticipate paying any dividends on our common stock in the foreseeable future. Any future determination to declare dividends will be made at the discretion of our Board of Directors ("Board") and will depend on our financial condition, operating results, capital requirements, general business conditions, and other factors that our board may deem relevant.

Unregistered Sales of Equity Securities

(a) Recent Sales of Unregistered Equity Securities

None.

(b) Use of Proceeds

On July 27, 2021, we sold 8,000,000 shares of our common stock in connection with our IPO, at a public offering price of 20.00 per share for an aggregate offering price of $160.0 million. The proceeds from the sale were $145.1 million, after deducting underwriting discounts and commissions and offering expenses payable by us. The offer and sale of all of the shares in our IPO were registered under the Securities Act pursuant to a registration statement on Form S-1 (File No. 333-257525), which was declared effective by the SEC on July 22, 2021.

A portion of the net proceeds from our IPO has been used for working capital and general corporate purposes. In addition, the net proceeds from our IPO was used to fund the purchase price to acquire video intelligence AG.

There has been no material change in the planned use of proceeds from our IPO as described in our Prospectus filed with the SEC pursuant to Rule 424(b) under the Securities Act.

Purchases of Equity Securities by the Issuer

On February 28, 2022, our Board approved a share repurchase program under which we were authorized to purchase up to $30 million of our common stock, par value $0.001 per share, with no requirement to purchase any minimum number of shares. We completed repurchases under this share repurchase program in November 2022.

On December 14, 2022, our Board approved a new share repurchase program, authorizing us to repurchase up to $30 million of our common stock, par value $0.001 per share, with no requirement to purchase any minimum number of shares. The manner, timing, and actual number of shares repurchased under the program will depend on a variety of factors, including price, general business and market conditions, and other investment opportunities. Shares may be repurchased through privately negotiated transactions or open market purchases, including through the use of trading plans intended to qualify under Rule 10b5-1 under the Exchange Act. The repurchase program may be commenced, suspended or terminated at any time by our Company at its discretion without prior notice.

In addition, we may from time to time withhold shares in connection with tax obligations related to vesting of restricted stock units in accordance with the terms of our equity incentive plans and the underlying award agreements.

The below table sets forth the repurchases of our common stock for the three months ended December 31, 2022:

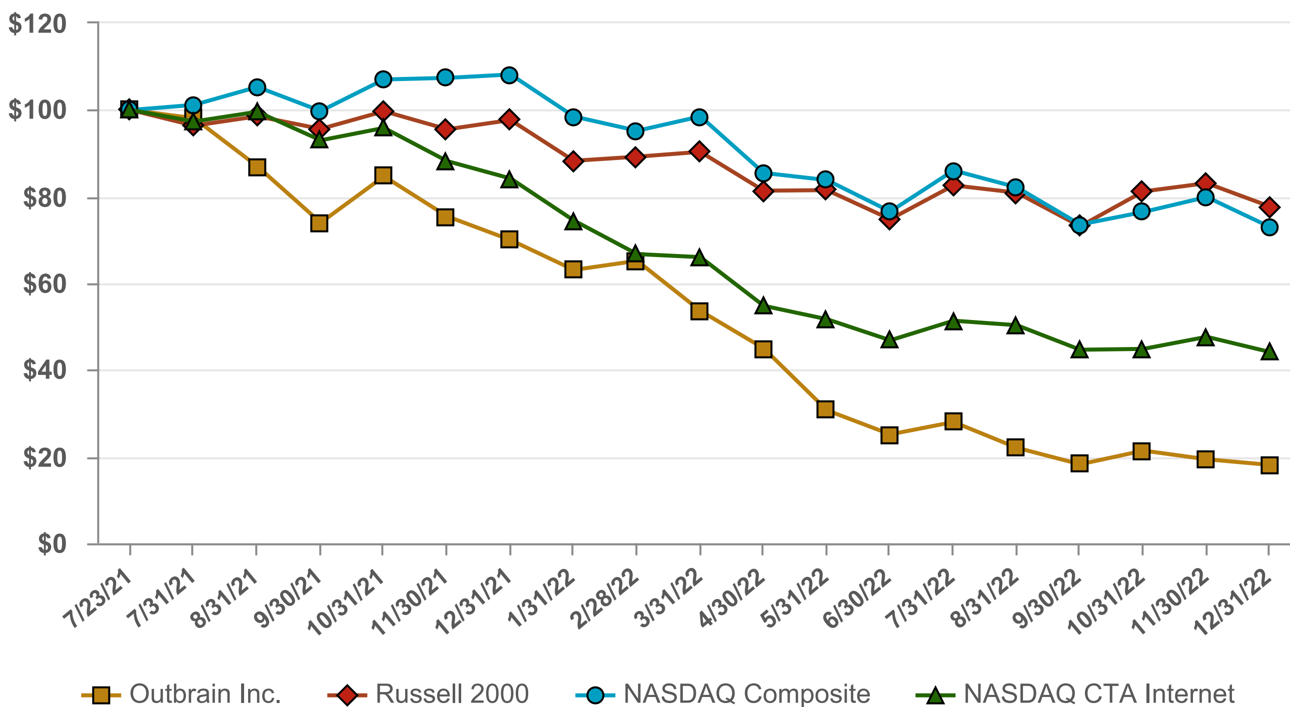
Period	(a) Total number of shares (or units) purchased [(1)]	(b) Average price paid per share (or unit) [(2)]	(c) Total number of shares (or units) purchased as part of publicly announced plans or programs	(d) Maximum number (or approximate dollar value) of shares (or units) that may yet be purchased under the plans or programs (in thousands)
October 2022	1,065,335	$4.08	1,040,772	$2,350
November 2022	570,883	$4.18	565,714	$—
December 2022	11,665	$3.55	—	$30,000
TOTAL	**1,647,883**	**$4.11**	**1,606,486**	

(1) Total number of shares purchased includes shares repurchased under our $30 million share repurchase program, as well as shares withheld to satisfy employee tax withholding obligations arising in connection with the vesting and settlement of restricted stock units under our 2007 Omnibus Securities and Incentive Plan.

(2) The average price paid per share under the share repurchase program includes commissions, which do not reduce the remaining authorized amount under the repurchase programs.

Stock Performance Graph

The following graph compares the cumulative total stockholder return on an initial investment of $100 in our common stock between July 23, 2021 (our initial trading day) and December 31, 2022, with the comparative cumulative total return of an investment of such amount in (i) the NASDAQ Composite Index (IXIC), (ii) the NASDAQ Internet Index, and (iii) the Russell 2000 Index (RUT) over the same period. We have not paid any cash dividends. Therefore, the total return calculation for us is solely based on the change in the price of our common stock, whereas the data for the comparative indices assumes reinvestment of dividends. The graph assumes the closing market price on July 23, 2021 of $20.00 per share as the initial value of our common stock. The returns shown below are based on historical results and are not necessarily indicative of, nor intended to forecast, potential future stock price performance. The graph is not deemed "filed" with the SEC and shall not be deemed incorporated by reference into any of our prior or future filings made with the SEC.



Item 6. [Reserved]

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

You should read the following discussion and analysis of our financial condition and results of operations together with our audited annual consolidated financial statements and the related notes and other financial information included elsewhere in this Annual Report on Form 10-K (this "Report"). In addition to historical financial information, the following discussion contains forward-looking statements that reflect our plans, estimates, beliefs and expectations, and involve risks and uncertainties. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this Report, particularly under Item 1A, "Risk Factors" and "Note About Forward-Looking Statements."

The purpose of this Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") discussion is to provide the readers of our financial statements with narrative information from our management, which is necessary to understand our business, financial condition, and results of operations. The MD&A should be read in conjunction with our audited consolidated financial statements and notes thereto. In addition to the audited consolidated financial statements prepared in accordance with the generally accepted accounting principles in the United States ("GAAP"), we use certain non-GAAP financial measures throughout this discussion to provide investors with supplemental metrics used by our management for financial and operational decision making. These measures are supplemental and are not an alternative to our financial statements prepared in accordance with U.S. GAAP. See "Non-GAAP Reconciliations" in this Report for the definitions and limitations of these measures, and reconciliations to the most comparable GAAP financial measures.

Business Overview

Outbrain Inc. (together with our subsidiaries, "Outbrain," the "Company," "we," "our" or "us") was incorporated in August 2006 in Delaware. The Company is headquartered in New York, New York with various wholly-owned subsidiaries, including in Israel, Europe and Asia.

Outbrain is a leading recommendation platform for advertisers and digital media owners, reaching over a billion unique users around the world. Outbrain's technology provides personalization, engagement and monetization solutions to thousands of digital media properties, including many of the world's most prestigious publishers. For tens of thousands of advertisers around the world, Outbrain helps attract new customers and grow their businesses, driving measurable results and return on investment.

Over the past decade, consumers have become increasingly accustomed to seeing highly curated digital content and ads that align with their unique interests. Similar to the way in which social media and search have simplified discovery by synthesizing billions of consumer data points to offer personalized experiences, we provide digital media owners with a platform that encompasses data at scale as well as prediction and recommendation capabilities, helping them deliver both editorial content and paid advertising personalized to their users, based on context and each user's interests and preferences. Our platform is built for user engagement and, as a mobile-first company, is designed to be highly effective on mobile devices. Outbrain's technology is deployed on the mobile apps and websites of most of our media partners, generating 72% of our revenue in 2022.

Outbrain operates a two-sided marketplace, which means we usually have exclusive control over all aspects of the user experience, allowing us to quickly test and deploy new formats for our advertisers and media owners. Since inception, we have been guided by the same core principles pertaining to our three constituents: users, media partners, and advertisers.

Users. We believe that by focusing on improving the user experience and ad format innovation, we are able to cultivate user behavior patterns that compound engagement over time, delivering superior long-term monetization for ourselves and for our media partners, as well as better return on ad spend for our advertisers.

Media Partners. We are committed to the long-term success of our media partners. Consistent with this philosophy, we focus on establishing a true win-win partnership. We strive to develop trusted, transparent, multi-year contracts with media partners, which are typically exclusive with us. Our media partners include both traditional publishers and companies in new and rapidly evolving categories such as mobile device manufacturers and web browsers.

Advertisers. We offer a unique advertising solution across the entire purchase funnel, serving tens of thousands of brands - from small businesses to large, Fortune 500 enterprise brands and the agencies that support them. Outbrain's value proposition to advertisers is to deliver measurable engagement that drives business outcomes - not limited to impressions, views, and reach.

Through our direct, usually exclusive code on page integrations with media partners, we have become one of the largest online advertising platforms on the open web. In 2022, we provided personalized ads to over a billion monthly unique users, delivering on average nearly 12 billion recommendations to content, services and products per day, with over 30,000 advertisers directly using our platform.

The following is a summary of our performance for the periods presented:

- Our revenue was $992.1 million in 2022, compared to $1,015.6 million in 2021 and $767.1 million in 2020. Revenue for 2022 included net unfavorable foreign currency effects of approximately $42.7 million, and increased $19.2 million, or 1.9% on a constant currency basis.
- Our gross profit was $192.7 million and our gross margin was 19.4% in 2022, compared to gross profit of $240.3 million and gross margin of 23.7% in 2021, and gross profit of $165.1 million and gross margin of 21.5% in 2020.
- Our Ex-TAC Gross Profit(1) was $234.8 million in 2022, compared to $272.1 million in 2021 and $194.3 million in 2020.
- Our net loss was $24.6 million, or (12.8)% of gross profit in 2022, compared to net income of $11.0 million, or 4.6% of gross profit in 2021, and a net loss of $4.4 million, or 2.6% of gross profit, in 2020. Net income for 2021 included a one-time tax benefit of $31.8 million due to a release of the valuation allowance on certain U.S. deferred tax assets. Net income for 2021 also included one-time charges of $42.0 million (pre-tax) to recognize the unamortized discount and deferred financing costs on our senior subordinated secured notes that were exchanged for convertible notes upon our IPO, as well as $16.5 million of one-time incremental cumulative stock-based compensation expense (pre-tax) for awards with an IPO performance condition.
- Our Adjusted EBITDA(1) was $26.3 million in 2022, compared to $88.9 million in 2021 and $41.1 million in 2020. Adjusted EBITDA(1) was 11.2%, 32.7% and 21.2% of Ex-TAC Gross Profit(1) in 2022, 2021 and 2020, respectively.

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(1) Ex-TAC Gross Profit and Adjusted EBITDA are non-GAAP financial measures. See “Non-GAAP Reconciliations” in this Report for the definitions and limitations of these measures, and reconciliations to the most comparable GAAP financial measures.

Recent Developments

On March 10, 2023, we learned that SVB was closed by the California regulators and the FDIC was appointed as receiver. On March 12, 2023, the Department of the Treasury, Federal Reserve and FDIC approved actions enabling the FDIC to complete its resolution of SVB in a manner that fully protects all depositors, and we regained full access to the funds held by SVB.

As a result of the closure of SVB, our ability to collect payments from our customers through our operating accounts maintained at SVB has been impacted and may continue to be impacted. We are in the process of establishing an alternate operating account to which our customers can remit payments. If we are unable to establish an alternate account in the near-term, our cash flow may be negatively impacted, including with respect to the impact of timing of receipts on our first quarter 2023 results, as well as any difficulty we may encounter in collecting unremitted past payments or any impact of the delay on our customers’ ability to make such payments.

We also have a revolving credit facility with SVB, which has not been drawn and under which no amounts are outstanding. While we are currently unable to make borrowings under the credit facility, we do not foresee any near-term needs to draw upon this facility. See our risk factor Item 1A - “*Our credit facility with SVB is currently not available for funding and may not be available for funding in the future. If our credit facility remains in effect, which remains uncertain, and we are able at any point to draw down on it, the terms of our facility subject us to operating restrictions and financial covenants that impose risk of default and may restrict our business and financing activities”* and our Liquidity and Capital Resources discussion below in this MD&A.

SVB is also the counterparty to the Company’s forward foreign currency hedge contracts, and we do not anticipate that SVB will perform on these obligations. We expect minimal exposure as a result of non-performance and plan to seek a new hedging program with one or more financial institution in the near-term.

We currently do not anticipate a material impact on our financial condition or on our operations as a result of the SVB closure, although this event may impact the timing of our cash collections and disbursements in the first quarter of 2023, with limited to no impact expected for the full year.

Acquisitions

On November 19, 2021, we entered into a definitive agreement, by and among our Company and the shareholders of video intelligence AG ("vi"), a Swiss-based contextual video technology company for digital media owners, for the acquisition of all of the outstanding shares of vi. The acquisition was completed on January 5, 2022. The purchase price of approximately $54.2 million was comprised of $49.4 million in cash and 355,786 shares of our common stock. This acquisition expanded the our video product offerings to include in-stream high-quality video content, delivering a better user experience and more value to our advertisers. This acquisition was accounted for as a business combination and the results of the acquired entity have been included in our results of operations beginning as of the acquisition date.

As part of our growth strategy, we plan to continue to evaluate strategic acquisition or investment opportunities to add incremental growth with compounding benefits to our business, to further expand our offerings, add key technology and/or reach new markets.

Macroeconomic Environment

General worldwide economic conditions have recently experienced significant instability as well as volatility and disruption in the financial markets, resulting from factors such as the effects of the Russia-Ukraine conflict, the COVID-19 pandemic, and general economic uncertainty. The current macroeconomic environment, with variables such as inflation, increased interest rates, recessionary concerns, currency exchange rate fluctuations, global supply chain disruptions, and labor market volatility, has negatively impacted our advertisers. Accordingly, these conditions have adversely impacted our business during the year ended December 31, 2022, and could, if they continue or worsen, adversely impact us in the future, including if our advertisers were to reduce or further reduce their advertising spending as a result of any of these factors. We continue to monitor our operations, and the operations of those in our ecosystem (including media partners, advertisers and agencies). These conditions make it difficult for us, our media partners, advertisers and agencies to accurately forecast and plan future business activities and could cause a further reduction or delay in overall advertising demand and spending, which would harm our business, financial condition and results of operations.

Factors Affecting Our Business

Retention and Growth of Relationships with Media Partners

We rely on relationships with our media partners for a significant portion of our advertising inventory and for our ability to increase revenue through expanding their use of our platform. To further strengthen these relationships, we continuously invest in our technology and product functionality to drive user engagement and monetization by (i) improving our algorithms; (ii) effectively managing our supply and demand; and (iii) expanding the adoption of our enhanced products by media partners.

Our relationships with media partners are typically long-term, exclusive and strategic in nature. Our top 20 media partners, based on our 2022 revenue, have been using our platform for an average of over seven years, despite their typical contract length being two to four years. Net revenue retention is an important indicator of media partner satisfaction, the value of our platform, as well as our ability to grow revenue from existing relationships.

We calculate media partner net revenue retention at the end of each quarter by starting with revenue generated on media partners' properties during the same period in the prior year, "Prior Period Retention Revenue." We then calculate the revenue generated on these same media partners' properties in the current period, "Current Period Retention Revenue." Current Period Retention Revenue reflects any expansions within the media partner relationships, such as any additional placements or properties on which we extend our recommendations, as well as contraction or attrition. Our media partner net revenue retention in a quarter equals the Current Period Retention Revenue divided by the Prior Period Retention Revenue. To calculate media partner net revenue retention for year-to-date and annual periods, we sum the quarterly Current Period Retention Revenue and divide it by the sum of the quarterly Prior Period Retention Revenue. These amounts exclude certain revenue adjustments and revenue recognized on a net basis. Our media partner net revenue retention was 86% for the year ended December 31, 2022, 126% for the year ended December 31, 2021 and 104% for the year ended December 31, 2020. For the year ended December 31, 2022 we have experienced lower yields mainly due to weaker demand on our platform, primarily as a result of the current macroeconomic conditions and the related impact on advertising spend, as well as due to unfavorable foreign currency effects.

Our growth also depends on our ability to secure partnerships with new media partners. New media partners are defined as those relationships in which revenue was not generated in the prior period, except for limited instances where residual revenue was generated on a media partner's properties. In such instances, the residual revenue would be excluded from net revenue retention above. Revenue generated on new media partners' properties contributed approximately 12% to revenue growth for the year ended December 31, 2022, 7% for the year ended December 31, 2021 and 7% for the year ended December 31, 2020.

User Engagement with Relevant Media and Advertising Content

We believe that engagement is a key pillar of the overall value that our platform provides to users, media partners and advertisers. Our algorithms enable effective engagement of users by facilitating the discovery of content, products and services that they find most interesting, as well as connecting them to personalized ads that are relevant to them. We believe that the user experience has a profound impact on long-term user behavior patterns and thus "compounds" over time improving our long-term monetization prospects. This principle guides our behavior, and, as a result, we do not focus on the price of ads, nor on maximizing such prices, as may be the case with some of our competitors. Given this view, we do not focus on cost-per-click or cost-per-impression as key performance indicators for the business. Consequently, we have a differentiated approach to monetization as we optimize our algorithms for the overall user experience rather than just for the price of each individual user engagement.

Growth in user engagement is driven by several factors, including enhancements to our recommendation engine, growth in the breadth and depth of our data assets, the increase in size and quality of our content and advertising index, user engagement, expansion on existing media partner properties where our recommendations can be served and the adoption of our platform by new media partners. As we grow user engagement, we are able to collect more data, enabling us to further enhance our algorithms, which in turn helps us make smarter recommendations and further grow user engagement, providing our platform and our business with a powerful growth flywheel. We measure the impact of this growth flywheel on our business by reviewing the growth of Click Through Rate ("CTR") for ads on our platform. CTR improvements increase the number of clicks on our platform. We believe that we have a significant opportunity to further grow user engagement, and thus our business, as today CTR for ads on our platform is less than 1% of recommendations served.

Advertiser Retention and Growth

We focus on serving ads that are most likely to deliver engagement, rather than on the price of the ads, which we believe leads to better ROAS for advertisers. Our growth is partially driven by retaining and expanding the amount of spend by advertisers on our platform, as well as acquiring new advertisers. Improving our platform with functionality and features that increase engagement and ROAS increases the attractiveness of our platform to existing and new advertisers while also growing our share of their advertising budgets. We continuously invest in enhancing our technological capabilities to deliver better ROAS and transparency on ad spend, and market these attributes to grow our advertiser base and share of wallet.

Prices paid by advertisers on our platform fluctuate period to period for a variety of reasons, including supply and demand, competition, macroeconomic conditions, and seasonality. While in 2021, average prices on an annual basis were up relative to prior year, we have experienced a downward trend resulting in lower average prices in 2022, compared to 2021 levels, reflecting the unfavorable macroeconomic conditions impacting our industry. Movements in average prices do not necessarily correlate to our revenue or Ex-TAC Gross Profit trends. In order to grow our revenue and Ex-TAC Gross Profit and maximize value for our advertisers and media partners, our focus as a business is on driving user engagement and ROAS for advertisers, not on optimizing for price.

For the year ended December 31, 2022, over 30,000 unique advertisers were active on our platform. In addition, we continue to grow our programmatic partnerships, enabling us to grow our advertiser base efficiently.

Expansion Into New Environments, New Content Experiences and New Ad Formats

The accelerating pace of technological innovation and adoption, combined with continuously evolving user behavior and content consumption habits, presents multiple opportunities for growth. The emergence of new devices, platforms and environments in which users spend time consuming content is one area of expansion for us. Similarly, the formats in which content can or will be consumed continue to evolve, as do user-friendly and impactful ad formats that can be delivered in or alongside that content. Fundamentally, we plan to continue making our platform available for media partners on all types of devices and platforms, and all formats of media, that carry their content.

Examples of new environments in which content consumption is expected to grow include connected TVs ("CTV"), screens for autonomous vehicles and public transport, pre-installed applications on new smartphones, smartphone native content feeds, push notifications and email newsletters. We are developing solutions that allow media partners, service providers and manufacturers to provide better curated, personalized and more engaging content feeds and recommendations in these environments. Through our acquisition of vi in the first quarter of 2022, we expanded our video product offerings to new formats and environments, including pre-roll high-impact video formats.

The development and deployment of new ad formats allow us to better serve users, media partners and, ultimately, advertisers who seek to target and engage users at scale; this continues to open and grow new types of advertiser demand, while ensuring relevance as the environments in which we operate diversify.

Investment in Our Technology and Infrastructure

Innovation is a core tenet of our Company and our industry. We plan to continue our investments in our people and our technology in order to retain and enhance our competitive position. For example, improvements to our algorithms help us deliver more relevant ads, driving higher user engagement, thereby improving ROAS for advertisers and increasing monetization for our media partners. Our Smartlogic product dynamically adjusts both the arrangement and the formats of content delivered to a user, depending on the user's preferences and our media partner's key performance indicators ("KPIs"), designed to provide a more personalized and engaging feed experience. We continue to invest in media partner and advertiser focused tools, technology and products as well as privacy-centric solutions, most recently announcing the launch of Keystone by Outbrain, which enables a more holistic management of overall revenue for media owners increasingly focused on revenue diversification.

We believe that our proprietary micro-services, API-based cloud infrastructure provides us with a strategic competitive advantage as we are able to deploy code an average of 300 times per day and grow in a scalable and highly cost-effective manner. As we develop and deploy solutions for enhanced integration of our technologies in new environments, with new content and ad formats, we anticipate activity through our platform to grow. We anticipate that the investment in our technology, infrastructure and solutions will contribute to our long-term growth.

Industry Dynamics

Our business depends on the overall demand for digital advertising, on the continuous success of our current and prospective media partners, and on general market conditions. Digital advertising is a rapidly evolving and growing industry, with growth that has outpaced the growth of the broader advertising industry. Content consumption continues to shift online, requiring media owners to adapt in order to successfully attract, engage and monetize their users. Given the large and growing volume of content being generated online, content curation tools are increasingly becoming a necessity for users and media owners alike. Advertisers increasingly rely on digital advertising platforms that deliver highly targeted ads and measurable performance. Regulators across most developed markets are increasingly focused on enacting and enforcing user privacy rules as well as tighter oversight of the major "walled garden" platforms. Industry participants have recently been, and likely will continue to be, impacted by changes implemented by platform leaders such as Apple's change to its Identifier for Advertisers policy and Google's evolving roadmap pertaining to the use of cookies within its Chrome web browser. See Item 1A, "Risk Factors" in this Report for additional information regarding changing industry dynamics with respect to industry participants and the regulatory environment. Given our focus on innovation, the depth and length of our media partner relationships and our scale, we believe that we are well positioned in the long-term to address and potentially benefit from many of these industry dynamics. Additionally, we believe that our strength in delivering engagement and clear outcomes for advertisers aligns well with the ongoing market shift towards increased accountability and expectations of ROAS from digital advertising spend generally.

Seasonality

The global advertising industry experiences seasonal trends that affect most participants in the digital advertising ecosystem. Our revenue generally fluctuates from quarter to quarter as a result of a variety of factors, including seasonality, as many advertisers allocate the largest portion of their budgets to the fourth quarter of the calendar year to coincide with increased holiday purchasing, as well as the timing of advertising budget cycles. Historically, the fourth quarter of the year has reflected the highest levels of advertiser spending, and the first quarter generally has reflected the lowest level of advertiser spending. In addition, expenditures by advertisers tend to be cyclical and discretionary in nature, reflecting changes in brand advertising strategy, budgeting constraints and buying patterns and a variety of other factors, many of which are outside of our control. The quarterly rate of increase in our traffic acquisition costs is generally commensurate with the quarterly rate of increase in our revenue. However, traffic acquisition costs have, at times, grown at a faster or slower rate than revenue, primarily due to the mix of the revenue generated or contracted terms with media partners. We generally expect these seasonal trends to continue, though historical seasonality may not be predictive of future results given the potential for changes in advertising buying patterns and macroeconomic conditions. These trends will affect our operating results and we expect our revenue to continue to fluctuate based on seasonal factors that affect the advertising industry as a whole.

Definitions of Financial and Performance Measures

Revenue

We generate revenue from advertisers through ads that we deliver across a variety of media partner properties. We charge advertisers for clicks on and, to a lesser extent, impressions of their ads, depending on how they choose to contract with us. We recognize revenue in the period in which the click or impression occurs.

The amount of revenue that we generate depends on the level of demand from advertisers to promote their content to users across our media partners' properties. We generate higher revenue at times of high demand, which is also impacted by seasonal factors. For any given marketing campaign, the advertiser has the ability to adjust its price in real time and set a maximum daily spend. This allows advertisers to adjust the estimated ad spend attributable to the particular campaign. Due to the measurable performance that our advertisers achieve with us, a portion of our advertisers spend with us on an unlimited basis, as long as their ROAS objectives are met.

Our agreements with advertisers provide them with considerable flexibility to modify their overall budget, price (cost-per-click or cost-per-impression), and the ads they wish to deliver on our platform.

Traffic Acquisition Costs

We define traffic acquisition costs ("TAC") as amounts owed to media partners for their share of the revenue we generated on their properties. We incur traffic acquisition costs in the period in which the revenue is recognized. Traffic acquisition costs are based on the media partners' revenue share or, in some circumstances, based on a guaranteed minimum rate of payment from us in exchange for guaranteed placement of our ads on specified portions of the media partner's digital properties. These guaranteed rates are typically provided per thousand qualified page views, whereas our minimum monthly payment to the media partner may fluctuate based on how many qualified page views the media partner generates, subject to a maximum guarantee. As such, traffic acquisition costs may not correlate with fluctuations in revenue, and our rates may remain fixed even with a decrease in revenue. Traffic acquisition costs also include amounts payable to programmatic supply partners.

Other Cost of Revenue

Other cost of revenue consists of costs related to the management of our data centers, hosting fees, data connectivity costs and depreciation and amortization. Other cost of revenue also includes the amortization of capitalized software that is developed or obtained for internal use associated with our revenue-generating technologies.

Operating Expenses

Our operating expenses consist of research and development, sales and marketing and general and administrative expenses. The largest component of our operating expenses is personnel costs. Personnel costs consist of wages, benefits, bonuses, stock-based compensation and, with respect to sales and marketing expenses, sales commissions.

Research and Development. Research and development expenses are related to the development and enhancement of our platform and consist primarily of personnel and the related overhead costs, amortization of capitalized software for non-revenue generating infrastructure and facilities costs.

Sales and Marketing. Sales and marketing expenses consist primarily of personnel and the related overhead costs for personnel engaged in marketing, advertising, client services, and promotional activities. These expenses also include advertising and promotional spend on media, conferences and other events to market our services, and facilities costs.

General and Administrative. General and administrative expenses consist primarily of personnel and the related overhead costs, professional fees, facilities costs, insurance, and certain taxes other than income taxes. General and administrative personnel costs include, among others, our executive, finance, human resources, information technology and legal functions. Our professional service fees consist primarily of accounting, audit, tax, legal, information technology and other consulting costs, including our implementation of the Sarbanes-Oxley Act requirements.

Other Expense, Net

Other expense, net is comprised of charges related to exchange of senior notes upon IPO, interest expense and other expense, net, and interest income.

Charges related to exchange of senior notes upon IPO. Charges for the year ended December 31, 2021 include a one-time charge of $42.0 million related to accelerated amortization of the unamortized discount and deferred issuance costs on the $200 million aggregate principal amount of senior subordinated secured notes issued on July 1, 2021 and exchanged to Convertible Notes upon our IPO.

Interest Expense. Interest expense consists of interest expense on our 2.95% Convertible Senior Notes due 2026 (the "Convertible Notes"), our revolving credit facility and capital leases. Interest expense may increase if we incur borrowings periodically under our revolving credit facility or if we enter into new debt facilities or capital leasing arrangements.

Interest Income and Other (Expense) Income, net. Interest income and other (expense) income, net primarily consists of interest earned on our cash and cash equivalents and investments in marketable securities, discount amortization relating to our investments in marketable securities, and foreign currency exchange gains and losses. Foreign currency exchange gains and losses, both realized and unrealized, relate to transactions and monetary asset and liability balances denominated in currencies other than the functional currencies, including mark-to-market adjustments on undesignated foreign exchange forward contracts. Foreign currency gains and losses may continue to fluctuate in the future due to changes in foreign currency exchange rates.

Provision (Benefit) for Income Taxes

Provision (benefit) for income taxes consists of federal and state income taxes in the United States ("U.S.") and income taxes in certain foreign jurisdictions, as well as deferred income taxes and changes in valuation allowance, reflecting the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes.

Realization of our deferred tax assets depends on the generation of future taxable income. In considering the need for a valuation allowance, we consider our historical and future projected taxable income, as well as other objectively verifiable evidence, including our realization of tax attributes, assessment of tax credits and utilization of net operating loss carryforwards.

Results of Operations

We have one operating segment, which is also our reportable segment. The following tables set forth our results of operations for the periods presented:

	Year Ended December 31,		
	2022	2021	2020
		(In thousands)	
Consolidated Statements of Operations:			
Revenue	$ 992,082	$ 1,015,630	$ 767,142
Cost of revenue:			
Traffic acquisition costs	757,321	743,579	572,802
Other cost of revenue	42,108	31,791	29,278
Total cost of revenue	799,429	775,370	602,080
Gross profit	192,653	240,260	165,062
Operating expenses:			
Research and development	40,320	39,169	28,961
Sales and marketing	108,816	95,786	77,570
General and administrative	57,065	70,749	48,354
Total operating expenses	206,201	205,704	154,885
(Loss) income from operations	(13,548)	34,556	10,177
Other expense, net:			
Charges related to exchange of senior notes upon IPO	—	(42,049)	—
Interest expense	(7,625)	(3,964)	(832)
Interest income and other (expense) income, net	2,600	(3,078)	(1,695)
Total other expense, net	(5,025)	(49,091)	(2,527)
(Loss) income before provision (benefit) for income taxes	(18,573)	(14,535)	7,650
Provision (benefit) for income taxes	6,008	(25,530)	3,293
Net (loss) income	$ (24,581)	$ 10,995	$ 4,357
Other Financial Data:			
Research and development as % of revenue	4.1 %	3.9%	3.8 %
Sales and marketing as % of revenue	11.0 %	9.4%	10.1 %
General and administrative as % of revenue	5.8 %	7.0%	6.3 %
Ex-TAC Gross Profit	$ 234,761	$ 272,051	$ 194,340
Adjusted EBITDA	$ 26,274	$ 88,884	$ 41,145

[(1)] Ex-TAC Gross Profit and Adjusted EBITDA are non-GAAP financial measures. See "Non-GAAP Reconciliations" in this Report for the definitions and limitations of these measures, and reconciliations to the most comparable GAAP financial measures.

Year Ended December 31, 2022 Compared to Year Ended December 31, 2021

Revenue

Revenue decreased by $23.5 million, or 2.3%, to $992.1 million in 2022 from $1,015.6 million in 2021. Revenue for 2022 included net unfavorable foreign currency effects of approximately $42.7 million, and increased $19.2 million, or 1.9%, on a constant currency basis, compared to the prior year period. Our reported revenue decreased approximately $146.6 million due to net revenue retention of 86% on existing media partners, as we have experienced lower yields mainly due to weaker demand on our platform, primarily as a result of the current macroeconomic conditions and the related impact on advertising spend, as well as due to unfavorable foreign currency effects. This decrease was partially offset by growth of approximately 12%, or $125.0 million, from new media partners, including our recently acquired vi business.

See "Non-GAAP Reconciliations" for information regarding the constant currency measures provided in this discussion and below to supplement our reported results.

Cost of Revenue and Gross Profit

Traffic acquisition costs increased $13.7 million, or 1.8%, to $757.3 million in 2022, compared to $743.6 million in the prior year period. Traffic acquisition costs included net favorable foreign currency effects of approximately $36.1 million, and increased $49.8 million, or 6.7%, on a constant currency basis, compared to the prior year period. Traffic acquisition costs grew despite lower revenue due to an unfavorable revenue mix and lower performance from certain deals. As a percentage of revenue, traffic acquisition costs increased to 76.3% in 2022, from 73.2% in 2021.

Other cost of revenue increased $10.3 million, or 32.5%, to $42.1 million in 2022, compared to $31.8 million in the prior year period, primarily due to increased depreciation expense on server equipment, higher hosting fees due to continued platform improvements, including increased data processing capacity, and higher network security related costs. This increase also includes costs from the newly acquired vi business, including the related amortization expense for intangible assets associated with developed technology. As a percentage of revenue, other cost of revenue increased 110 basis points to 4.2% in 2022 from 3.1% in 2021.

Gross profit decreased $47.6 million, or 19.8%, to $192.7 million in 2022, compared to $240.3 million in 2021, which was primarily attributable to the increase in cost of revenue and lower revenue, as previously described. Gross profit for 2022 included net unfavorable foreign currency effects of approximately $6.6 million, and decreased $41.0 million, or 17.0%, on a constant currency basis, compared to the prior year period.

Ex-TAC Gross Profit

Our Ex-TAC Gross Profit decreased $37.3 million, or 13.7%, to $234.8 million in 2022, from $272.1 million in 2021. Ex-TAC Gross Profit for 2022 included net unfavorable foreign currency effects of approximately $6.6 million, and decreased $30.7 million, or 11.3%, on a constant currency basis, compared to the prior year period. The decrease in Ex-TAC Gross Profit was primarily driven by lower revenue, as well as unfavorable revenue mix and lower performance from certain deals. See “Non-GAAP Reconciliations” for the related definition and reconciliations to our gross profit.

Operating Expenses

Operating expenses increased by $0.5 million, or 0.2%, to $206.2 million in 2022, from $205.7 million in 2021. Operating expenses for 2022 included net favorable foreign currency effects of approximately $10.7 million, and increased $11.2 million, or 5.4%, on a constant currency basis, compared to the prior year period. Reported operating expenses in 2021 reflected $16.5 million of one-time incremental cumulative stock-based compensation expense recorded for IPO-contingent awards, as well as a decrease of $8.2 million in regulatory costs, reflecting a partial insurance recovery in 2022. Such decreases were more than offset by a $25.2 million increase in other operating expenses in 2022, which was primarily comprised of higher other personnel-related costs of $11.6 million, increased public company costs of $4.2 million, expanded digital services taxes in Europe of $3.7 million, amortization of certain intangible assets related to our acquisition of vi, and increased costs of transitioning from a largely remote to a hybrid environment.

The components of operating expenses are discussed below:

- ***Research and development expenses*** — increased $1.2 million, primarily due to higher personnel-related costs to invest in our technology, offset in part by $1.2 million of one-time incremental cumulative stock-based compensation expense recorded 2021 for IPO-contingent awards.
- ***Sales and marketing expenses*** — increased $13.0 million, which was primarily due to higher personnel-related costs of $8.8 million, expanded digital services taxes of $3.7 million, amortization of certain intangible assets related to our acquisition of vi of $1.9 million, and increased costs related to the transition from a largely remote to a hybrid environment. These increases were partially offset by $4.2 million of one-time incremental cumulative stock-based compensation expense recorded in 2021 for IPO-contingent awards.
- ***General and administrative expenses*** — decreased $13.7 million, primarily due to $11.1 million of one-time incremental cumulative stock-based compensation expense recorded in 2021 for IPO-contingent awards, as well as a decrease in regulatory costs of $8.2 million, reflecting a partial insurance recovery in 2022. These decreases were partially offset by higher public company costs of $4.2 million, and increased costs of transitioning from a largely remote to a hybrid environment.

Operating expenses as a percentage of revenue increased to 20.8% in 2022 from 20.3% in 2021, reflecting a higher rate of increase in operating expenses than revenues, partially offset by a 1.6% decrease in operating expenses as a result of the absence of the one-time incremental cumulative stock-based compensation expense of $16.5 million recognized during the year ended December 31, 2021.

Total Other Expense, Net

Total other expense, net, decreased $44.1 million to $5.0 million in 2022, compared to $49.1 million in 2021. This decrease in expenses was primarily attributable to the absence of the $42.0 million of one-time charges related to the exchange and cancellation of senior notes upon IPO recorded in 2021 to recognize the unamortized discount and deferred issuance costs on senior subordinated secured notes issued on July 1, 2021, upon our IPO and convertible senior notes issuance. In addition, we recorded $3.6 million of income in connection with our new investment program initiated in July 2022. These decreases in expenses were partially offset by higher interest expense of $4.0 million on our convertible notes issued in July 2021. See Notes 1 and 7 to the accompanying audited consolidated financial statements for additional information.

Provision (Benefit) for Income Taxes

Provision for income taxes was $6.0 million in 2022, compared to benefit from income taxes of $25.5 million in 2021, largely due to the $31.8 million release of the valuation allowance on certain deferred tax assets in the U.S in 2021. In addition, provision for income taxes increased due to the increase in uncertain tax positions compared to prior year. These increases were partially offset by the impact of lower global pre-tax profitability in the current year and the geographic mix of earnings, including lower tax expense from the inclusion of foreign subsidiaries' income in the U.S. Our effective tax rate was (32.3)% in 2022, compared to 175.6% in 2021. Our 2021 effective tax rate was unfavorably impacted by the $31.8 million release of valuation allowance in the U.S. (See Note 8 to the accompanying audited consolidated financial statements for additional information.)

A provision enacted as part of the 2017 Tax Cuts & Jobs Act requires companies to capitalize certain research and experimental expenditures for tax purposes in tax years beginning after December 31, 2021. As a result, our utilization of net operating losses has increased in 2022, as compared to prior years.

In addition, on August 16, 2022, the U.S. enacted the Inflation Reduction Act of 2022, which among other things implements a 15% minimum tax on adjusted financial statement income of certain large corporations and a 1% excise tax on net share repurchases. Based on our current analysis of the provisions, this legislation is not expected to have a material impact on our consolidated financial statements, based on our current share repurchase program.

Our future effective tax rate may be affected by the geographic mix of earnings in countries with different statutory rates. Additionally, our future effective tax rate may be affected by our ongoing assessment of the need for a valuation allowance on our deferred tax assets or liabilities, or changes in tax laws, regulations, or accounting principles, as well as certain discrete items.

Net (Loss) Income

As a result of the foregoing, we recorded net loss of $24.6 million in 2022, as compared to net income of $11.0 million in 2021. As previously discussed, net income for 2021 included a one-time tax benefit of $31.8 million due to a release of the valuation allowance on certain deferred tax assets. Net income for 2021 also included $42.0 million of one-time charges related to exchange of senior notes upon IPO (pre-tax), as well as $16.5 million of one-time incremental cumulative stock-based compensation expense (pre-tax) for awards with an IPO performance condition.

Adjusted EBITDA

Our Adjusted EBITDA decreased $62.6 million to $26.3 million in 2022 from $88.9 million in 2021, due to lower Ex-TAC Gross Profit and increased operating expenses and other costs of revenue, as previously described. Our Adjusted EBITDA for 2022 included net favorable foreign currency effects of approximately $3.4 million. See "Non-GAAP Reconciliations" for the related definitions of Adjusted EBITDA and reconciliations to our net income.

Year Ended December 31, 2021 Compared to Year Ended December 31, 2020

Revenue

Revenue increased by $248.5 million, or 32.4%, to $1,015.6 million in 2021 from $767.1 million in 2020. Revenue grew approximately 25.8%, or $198.5 million, from net revenue retention on existing media partners primarily due to increased monetization from higher demand on our platform and our growth in the click-through-rate, and approximately 7.0%, or $53.8 million, from new media partners. Revenue in 2021 also benefited from net favorable foreign currency effects of approximately $6.7 million.

Cost of Revenue and Gross Profit

Traffic acquisition costs increased $170.8 million, or 29.8%, to $743.6 million in 2021, compared to $572.8 million in the prior year period, including net unfavorable foreign currency effects of approximately $7.3 million. Traffic acquisition costs grew less than revenue due to favorable revenue mix from higher margin media partners and improved performance on media owners with guarantee arrangements. As a percentage of revenue, traffic acquisition costs decreased to 73.2% in 2021, from 74.7% in 2020.

Other cost of revenue increased $2.5 million, or 8.6%, to $31.8 million in 2021, compared to $29.3 million in the prior year period, primarily due to higher hosting fees due to increased revenue and increased depreciation expense on server equipment. As a percentage of revenue, other cost of revenue decreased 70 basis points to 3.1% in 2021 from 3.8% in 2020.

Gross profit increased $75.2 million, or 45.6%, to $240.3 million in 2021, compared to $165.1 million in 2020, which was primarily attributable to the increase in revenue, partially offset by the corresponding increase in cost of revenue, as previously described.

Ex-TAC Gross Profit

Our Ex-TAC Gross Profit increased $77.8 million, or 40.0%, to $272.1 million in 2021, from $194.3 million in 2020, including net unfavorable foreign currency effects of approximately $0.6 million. The increase in Ex-TAC Gross Profit was primarily driven by our revenue growth as well as favorable revenue mix from higher margin media partners and improved performance on media owners with guarantee arrangements. See "Non-GAAP Reconciliations" for the related definition and reconciliations to our gross profit.

Operating Expenses

Operating expenses increased by $50.8 million, or 32.8%, to $205.7 million in 2021, from $154.9 million in 2020. Operating expenses for 2021 included approximately $16.5 million of one-time incremental cumulative stock-based compensation expense for awards with a performance condition that was met upon our IPO, and regulatory matter costs of $6.4 million. Operating expenses for 2020 included terminated merger expenses of $11.2 million, offset in part by a $2.3 million reversal of a tax-contingency recorded in 2019. The remaining $36.8 million increase in operating expenses was primarily attributable to higher personnel-related costs of $25.0 million, primarily reflecting higher headcount and incentive-based compensation, as well as increased professional fees of $4.3 million and marketing costs of $3.8 million. Operating expenses included net unfavorable foreign currency effects of approximately $4.6 million.

The components of operating expenses are discussed below:

- ***Research and development expenses*** — increased $10.2 million, primarily attributable to increased personnel-related costs to invest in the growth of our platform, including $1.2 million of one-time incremental cumulative stock-based compensation expense related to awards with a performance condition that was satisfied upon our IPO.
- ***Sales and marketing expenses*** — increased $18.2 million, primarily due to higher personnel-related costs of $14.3 million, including $4.2 million of one-time incremental cumulative stock-based compensation expense for awards with a performance condition that was satisfied upon our IPO, as well as higher marketing costs of $3.6 million.
- ***General and administrative expenses*** — increased $22.4 million, largely due to higher personnel-related costs of $18.3 million, including $11.1 million of one-time incremental cumulative stock-based compensation expense for awards with a performance condition that was satisfied upon our IPO, and higher professional fees of $10.5 million, which included regulatory matter costs of $6.4 million in 2021. Operating expenses for 2020 included terminated merger expenses of $11.2 million, partially offset by a $2.3 million reversal of a tax-contingency recorded in 2019 with a corresponding charge to income tax expense in 2020.

Operating expenses as a percentage of revenue increased slightly to 20.3% in 2021 from 20.2% in 2020.

Total Other Expense, Net

Total other expense, net, increased to $49.1 million in 2021, compared to $2.5 million in 2020, primarily due to $42.0 million of one-time charges recorded in 2021 to recognize the unamortized discount and deferred issuance costs on senior subordinated secured notes issued on July 1, 2021, upon our IPO and convertible senior notes issuance (see Note 7 to the accompanying audited consolidated financial statements for additional information). The increase in total other expense was also attributable to $3.1 million of interest expense on our convertible senior notes in 2021, as well as the absence of the $1.1 million gain on sale of an asset recorded in 2020.

(Benefit) Provision for Income Taxes

Benefit from income taxes was $25.5 million in 2021, compared to provision for income taxes of $3.3 million in 2020, primarily attributable to the release of the valuation allowance on certain deferred tax assets in the U.S. Our effective tax rate was 175.6% in 2021, compared to 43.0% in 2020. Our 2021 effective tax rate was unfavorably impacted by the $31.8 million release of valuation allowance in the U.S. (See Note 8 to the accompanying audited consolidated financial statements for additional information.) Our 2020 effective tax rate was unfavorably impacted by approximately 16.5 percentage points due to certain non-recurring prior year taxes in a foreign tax jurisdiction.

Our future effective tax rate may be affected by the geographic mix of earnings in countries with different statutory rates. Additionally, our future effective tax rate may be affected by our ongoing assessment of the need for valuation allowance on our deferred tax assets or liabilities, or changes in tax laws, regulations, or accounting principles, as well as certain discrete items.

Net Income

As a result of the foregoing, net income increased $6.6 million, to $11.0 million in 2021, from $4.4 million in 2020. As previously discussed, net income for 2021 included a one-time tax benefit of $31.8 million due to a release of the valuation allowance on certain deferred tax assets. Net income for 2021 also included charges of $42.0 million (pre-tax) to recognize the unamortized discount and deferred financing costs on our senior subordinated secured notes that were exchanged for convertible notes upon our IPO, as well as $16.5 million of one-time incremental cumulative stock-based compensation expense (pre-tax) for awards with an IPO performance condition.

Adjusted EBITDA

Our Adjusted EBITDA increased $47.7 million to $88.9 million in 2021 from $41.1 million in 2020, which was primarily attributable to the increase in Ex-TAC Gross Profit, partially offset by the corresponding increase in operating expenses as we continue to invest in our business. See “Non-GAAP Reconciliations” for the related definitions and reconciliations to our net income.

Non-GAAP Reconciliations

Because we are a global company, the comparability of our operating results is affected by foreign exchange fluctuations. We calculate certain constant currency measures and foreign currency impacts by translating the current year’s reported amounts into comparable amounts using prior year’s exchange rates. All constant currency financial information being presented is non-GAAP and should be used as a supplement to our reported operating results. We believe that this information is helpful to our management and investors to assess our operating performance on a comparable basis. However, these measures are not intended to replace amounts presented in accordance with U.S. GAAP and may be different from similar measures calculated by other companies.

We present Ex-TAC Gross Profit, Adjusted EBITDA, Adjusted EBITDA as a percentage of Ex-TAC Gross Profit, and Free Cash Flow because they are key profitability measures used by our management and the Board to understand and evaluate our operating performance and trends, develop short-term and long-term operational plans and make strategic decisions regarding the allocation of capital. Accordingly, we believe that these measures provide information to investors and the market in understanding and evaluating our operating results in the same manner as our management and the Board.

These non-GAAP financial measures are defined and reconciled to the corresponding U.S. GAAP measures below. These non-GAAP financial measures are subject to significant limitations, including those identified below. In addition, other companies in our industry may define these measures differently, which may reduce their usefulness as comparative measures. As a result, this information should be considered as supplemental in nature and is not meant as a substitute for revenue, gross profit, net (loss) income or net cash provided by operating activities presented in accordance with U.S. GAAP.

Ex-TAC Gross Profit

Ex-TAC Gross Profit is a non-GAAP financial measure. Gross profit is the most comparable GAAP measure. In calculating Ex-TAC Gross Profit, we add back other cost of revenue to gross profit. Ex-TAC Gross Profit may fluctuate in the future due to various factors, including, but not limited to, seasonality and changes in the number of media partners and advertisers, advertiser demand or user engagements.

There are limitations on the use of Ex-TAC Gross Profit in that traffic acquisition cost is a significant component of our total cost of revenue but not the only component and, by definition, Ex-TAC Gross Profit presented for any period will be higher than gross profit for that period. A potential limitation of this non-GAAP financial measure is that other companies, including companies in our industry which have a similar business, may define Ex-TAC Gross Profit differently, which may make comparisons difficult. As a result, this information should be considered as supplemental in nature and is not meant as a substitute for revenue or gross profit presented in accordance with U.S. GAAP.

The following table presents the reconciliation of Ex-TAC Gross Profit to gross profit, the most directly comparable U.S. GAAP measure, for the periods presented:

	Year Ended December 31,		
	2022	**2021**	**2020**
		(In thousands)	
Revenue	$ 992,082	$ 1,015,630	$ 767,142
Traffic acquisition costs	(757,321)	(743,579)	(572,802)
Other cost of revenue	(42,108)	(31,791)	(29,278)
Gross profit	192,653	240,260	165,062
Other cost of revenue	42,108	31,791	29,278
Ex-TAC Gross Profit	$ 234,761	$ 272,051	$ 194,340

Adjusted EBITDA

We define Adjusted EBITDA as net (loss) income before charges related to the exchange of senior notes upon IPO; interest expense; interest income and other (expense) income, net; provision (benefit) for income taxes; depreciation and amortization; stock-based compensation, and other income or expenses that we do not consider indicative of our core operating performance, including, but not limited to, IPO and public company implementation costs, merger and acquisition costs, regulatory matter costs, and severance costs related to our cost saving initiatives. We present Adjusted EBITDA as a supplemental performance measure because we believe it facilitates operating performance comparisons from period to period.

We believe that Adjusted EBITDA provides useful information to investors and others in understanding and evaluating our operating results in the same manner as our management and the Board. However, Adjusted EBITDA is a non-GAAP financial measure and how we calculate Adjusted EBITDA is not necessarily comparable to non-GAAP information of other companies. Adjusted EBITDA should be considered as a supplemental measure and should not be considered in isolation or as a substitute for any measures of our financial performance that are calculated and reported in accordance with U.S. GAAP.

The following table presents the reconciliation of Adjusted EBITDA to net (loss) income, the most directly comparable U.S. GAAP measure, for the periods presented:

	Year Ended December 31,		
	2022	2021	2020
		(In thousands)	
Net (loss) income	$ (24,581)	$ 10,995	$ 4,357
Interest expense	7,625	3,964	832
Interest income and other (expense) income, net	(2,600)	3,078	1,695
Charges related to exchange of senior notes upon IPO	—	42,049	—
Provision (benefit) for income taxes	6,008	(25,530)	3,293
Depreciation and amortization	26,919	19,470	18,509
Stock-based compensation	11,660	26,307	3,588
Regulatory matter costs, net of insurance proceeds	(1,875)	6,361	—
Merger and acquisition costs, public company implementation costs[1]	2,515	2,190	11,168
Severance costs	603	—	—
Tax contingency[2]	—	—	(2,297)
Adjusted EBITDA	$ 26,274	$ 88,884	$ 41,145
Net Income as % of Gross Profit	(12.8)%	4.6 %	2.6 %
Adjusted EBITDA as % of Ex-TAC Gross Profit	11.2 %	32.7 %	21.2 %

(1) Primarily includes costs related to our initial public offering, public company implementation costs and costs related to our acquisition of vi in January 2022.

(2) Reflects a reversal of a tax contingency recorded within operating expenses in 2019 and a corresponding charge to income tax expense in 2020, net of foreign exchange impact.

Free Cash Flow

Free cash flow is defined as cash flow provided by operating activities, less capital expenditures and capitalized software development costs. Free cash flow is a supplementary measure used by our management and the Board to evaluate our ability to generate cash and we believe it allows for a more complete analysis of our available cash flows. Free cash flow should be considered as a supplemental measure and should not be considered in isolation or as a substitute for any measures of our financial performance that are calculated and reported in accordance with U.S. GAAP.

The following table presents the reconciliation of free cash flow to net cash provided by operating activities.

	Year Ended December 31,		
	2022	2021	2020
		(In thousands)	
Net cash provided by operating activities	$ 3,813	$ 56,762	$ 52,986
Purchases of property and equipment	(13,375)	(9,743)	(1,511)
Capitalized software development costs	(12,569)	(10,311)	(8,990)
Free cash flow	$ (22,131)	$ 36,708	$ 42,485

LIQUIDITY AND CAPITAL RESOURCES

We regularly evaluate the cash requirements for our operations, commitments, development activities and capital expenditures and manage our liquidity risk in a manner consistent with our corporate priorities. During 2022, we initiated a new investment program, which is focused on achieving maximum returns within our investment policy parameters, while preserving capital and maintaining sufficient liquidity.

We believe that our cash and cash equivalents and investments will be sufficient to fund our anticipated operating expenses, capital expenditures, interest payments on our long-term debt, and planned share repurchases for at least the next 12 months and the foreseeable future. However, there are multiple factors that could impact our future liquidity, including our business performance, our ability to collect payments from our advertisers, having to pay our media partners even if our advertisers default on their payments, or other factors described under Item 1A "Risk Factors" included in this Report.

Sources of Liquidity

Our primary sources of liquidity are our cash and cash equivalents and investments in marketable securities and cash receipts from our advertisers. As discussed under "Recent Developments" in this MD&A, we have a revolving credit facility with SVB, which has been closed by the California regulators in March 2023. While we are currently unable to make borrowings under the credit facility, we do not foresee any near-term needs to draw upon this facility. We are currently evaluating our options with respect to potential alternate credit facilities, and we cannot guarantee that we will be able to obtain such alternate financing on favorable terms or in the desired timeframe.

We have historically experienced higher cash collections during our first quarter due to seasonally strong fourth quarter sales, and, as a result, our working capital needs typically decrease during the first quarter. We expect these trends to continue as we continue to grow our business.

As of December 31, 2022, in addition to cash flow from our operations, our available liquidity was follows:

	December 31, 2022
	(In thousands)
Cash and cash equivalents [1]	$ 105,580
Short-term investments	166,905
Long-term investments	78,761
Revolving Credit Facility [2]	70,683
Total	$ 421,929

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(1) As of December 31, 2022, approximately $42.6 million of our cash and cash equivalents was held outside of the United States by our non-U.S. subsidiaries. We currently do not have any plans to repatriate our earnings from our foreign subsidiaries. We intend to continue to reinvest our earnings from foreign operations for the foreseeable future, and do not anticipate that we will need funds generated from foreign operations to fund our domestic operations.

(2) See above under "Recent Developments" with respect to the impact of SVB's closure on our credit facility with SVB ("2021 Revolving Credit Facility"). The 2021 Revolving Credit Facility provides, subject to borrowing availability and certain other conditions, for revolving loans in an aggregate principal amount of up to $75.0 million (the "Facility"), with a $15.0 million sub-facility for letters of credit. Our borrowing availability under the Facility is calculated by reference to a borrowing base which is determined by specified percentages of eligible accounts receivable, based on the defined borrowing formula. The facility will terminate on the earlier of (i) November 2, 2026 or (ii) 120 days prior to the maturity date of our 2.95% Convertible Senior Notes due 2026, unless the convertible notes have been converted to common equity securities of the Company.

The 2021 Revolving Credit Facility contains representations and warranties, including, without limitation, with respect to collateral; accounts receivable; financials; litigation, indictment and compliance with laws; disclosure and no material adverse effect, each of which is a condition to funding. Additionally, the 2021 Revolving Credit Facility includes events of default and customary affirmative and negative covenants applicable to us and our subsidiaries, including, without limitation, restrictions on liens, indebtedness, investments, fundamental changes, dispositions, restricted payments and prepayment of the Convertible Notes and of junior indebtedness. The 2021 Revolving Credit Facility contains a financial covenant that requires, in the event that credit extensions under the Facility equal or exceed 85% of the lesser of the

available commitments under the Facility or upon the occurrence of an event of defaults, our Company to maintain a minimum consolidated monthly fixed charge coverage ratio of 1.00. We were in compliance with all of the financial covenants under the 2021 Revolving Credit Facility as of December 31, 2022 and December 31, 2021. See Notes 7 and 14 to the accompanying audited financial statements for additional information relating to our 2021 Revolving Credit Facility.

Material Cash Requirements

Our primary uses of liquidity are payments to our publishers, our operating expenses, capital expenditures, our long-term debt and the related interest payments, and repurchases under our $30 million share repurchase program. We may also use our available cash to make acquisitions or investments in complementary companies or technologies.

We primarily use our operating cash for payments due to media partners and vendors, as well as for personnel costs and other employee-related expenditures. Our contracts with media partners are generally variable based on volume, or guarantee a minimum rate of payment if the media partner reaches certain performance targets. See "Definitions of Financial and Performance Measures —Traffic Acquisition Costs."

Contractual Cash Obligations

The following table presents our material contractual obligations as of December 31, 2022:

	Payments Due by Period				
	Total	2023	2024-2025	2026-2027	Thereafter
			(In thousands)		
Long-term debt [1]	$ 236,000	$ —	$ —	$ 236,000	$ —
Interest [1]	27,848	6,962	13,924	6,962	—
Operating lease obligations [2]	15,418	4,004	6,703	3,201	1,510
Capital lease obligations [3]	2,099	1,842	257	—	—
Acquisition consideration [4]	1,476	1,191	285	—	—
Other commitments[5]	54,422	26,677	25,465	2,280	—
Total [6]	$ 337,263	$ 40,676	$ 46,634	$ 248,443	$ 1,510

(1) Our 2.95% Convertible Senior Notes are due July 27, 2026, with interest payable semi-annually in arrears on January 27 and July 27 of each year. See Note 7 to the accompanying financial statements for additional information, including conditions for early redemption.

(2) Operating lease agreements primarily relate to leases for certain office facilities and managed data center facilities, including one new operating lease agreement that has not yet commenced with future lease payments of approximately $2.4 million. See Note 5 to the accompanying financial statements for additional information relating to our leases.

(3) Capital lease and other obligations relate to prior leases for certain servers and related equipment. For the year ended December 31, 2022, we made regular payments totaling $3.2 million on our finance lease obligations. See Note 5 to the accompanying consolidated financial statements for additional information relating to our leases.

(4) Represents the remaining portion of the purchase price payable in connection with our 2022 acquisition of vi. See Note 2 to the accompanying consolidated financial statements for additional information.

(5) Other commitments include data service contracts and other hosting agreements, network services, and other costs to maintain our platform.

(6) We are unable to reliably estimate the timing of future payments related to uncertain tax positions; therefore, we have excluded $7.4 million from the preceding table related to uncertain tax positions, including accrued interest and penalties as of December 31, 2022.

Treasury Share Repurchases

In February 28, 2022, our Board of Directors (the "Board") approved a share repurchase program under which we are authorized to purchase up to $30 million of our common stock, par value $0.001 per share, with no requirement to purchase any minimum number of shares. During 2022, we paid $30.2 million, including commissions, to repurchase 6,389,129 shares under our share repurchase program, and there was no remaining availability under this share repurchase program as of December 31, 2022.

On December 14, 2022, our Board approved a new stock repurchase program, authorizing us to repurchase up to $30 million of its common stock, par value $0.001 per share, with no requirement to purchase any minimum number of shares. The manner, timing, and actual number of shares repurchased under the program will depend on a variety of factors, including price, general business and market conditions, and other investment opportunities. Shares may be repurchased through privately negotiated transactions or open market purchases, including through the use of trading plans intended to qualify under Rule 10b5-1 under the Exchange Act. The repurchase program may be commenced, suspended or terminated at any time at our discretion without prior notice. Repurchases under our new $30 million share repurchase program commenced in January 2023.

In addition, we periodically withhold shares to satisfy employee tax withholding obligations arising in connection with the vesting of restricted stock units and exercise of options and warrants in accordance with the terms of our equity incentive plans and the underlying award agreements. During 2022, 2021 and 2020, we withheld 245,465 shares, 1,032,995 shares and 27,769 shares, respectively, with a fair value of $2.5 million, $14.2 million and $0.3 million, respectively, to satisfy the minimum employee tax withholding obligations.

Capital Expenditures

Our cash flow used in investing activities primarily consists of capital expenditures and capitalized software development costs. We spent $13.4 million in capital expenditures in 2022, primarily relating to expenditures for servers and related equipment, leasehold improvements, and office equipment. We currently anticipate that our capital expenditures will be between $11 million and $14 million in 2023, primarily relating to expenditures for servers and related equipment, leasehold improvements, and other equipment. However, actual amounts may vary from these estimates.

Cash Flows

The following table summarizes the major components of our net cash flows for the periods presented:

	Year Ended December 31,		
	2022	2021	2020
		(In thousands)	
Net cash provided by operating activities	$ 3,813	$ 56,762	$ 52,986
Net cash used in investing activities	(317,898)	(20,101)	(9,423)
Net cash (used in) provided by financing activities	(31,699)	325,894	(4,228)
Effect of exchange rate changes	(4,043)	(1,030)	4,750
Net (decrease) increase in cash, cash equivalents and restricted cash	$ (349,827)	$ 361,525	$ 44,085

Operating Activities

Net cash from operating activities decreased $52.9 million, to cash provided by operating activities of $3.8 million in 2022, as compared to cash provided by operating activities of $56.8 million in 2021, primarily driven by a $56.0 million decrease in our net income after non-cash adjustments. Net cash related to our working capital declined by $3.2 million, primarily due to the unfavorable changes in accounts payable and other current liabilities and in prepaid expenses and other current assets, partially offset by the favorable change in accounts receivable. These changes in working capital were largely driven by lower profitability, higher prepayments to certain media owners in connection with long-term contracts, and the timing of payments and receipts.

Net cash provided by operating activities increased $3.8 million, to $56.8 million in 2021, as compared to $53.0 million in 2020, primarily driven by a $48.7 million increase in our net income after non-cash adjustments, largely offset by net use of cash related to working capital of $33.1 million, primarily due to the timing of payments, and an increase in other assets of $9.2 million, due to higher prepayments to certain media owners in connection with long-term contracts.

Our free cash flow for 2022 was use of cash of $22.1 million, as compared to free cash flow of $36.7 million in 2021 and $42.5 million in 2020, reflecting lower operating cash flow and higher capital expenditures in 2022. Free cash flow is a supplemental non-GAAP financial measure. See “Non-GAAP Reconciliations” for the related definition and a reconciliation to net cash provided by operating activities.

Investing Activities

Cash used in investing activities increased $297.8 million, to $317.9 million in 2022 from $20.1 million in 2021, primarily due to $246.7 million of purchases of marketable securities under our new investment program initiated in July 2022, net of maturities, and $45.2 million of consideration paid, net of cash acquired for our acquisition of vi.

Cash used in investing activities increased $10.7 million, to $20.1 million in 2021 from $9.4 million in 2020, largely due to higher capital expenditures of $8.2 million, primarily attributable to our purchasing as opposed to leasing of servers and related equipment.

Financing Activities

Cash from financing activities decreased $357.6 million to cash used in financing activities of $31.7 million in 2022, from cash provided by financing activities of $325.9 million in 2021. This decrease was primarily due to the absence of the prior year's net proceeds from common stock issuances upon our IPO of $145.1 million and net proceeds from issuances of our long-term debt of $193.3 million. In addition, treasury share repurchases increased by $18.5 million in 2022, including $30.2 million of repurchases under our $30 million share repurchase program initiated in February 2022, offset in part by lower shares withheld to satisfy employee tax withholding obligations on vested stock-based compensation awards.

Cash from financing activities increased $330.1 million to $325.9 million in 2021, largely due to net proceeds from common stock issuance upon our IPO of $145.1 million and net proceeds related to issuances of long-term debt of $193.3 million. These increases in cash from financing activities were partially offset by a $13.9 million increase in payments in connection with shares withheld to cover employee tax withholding obligations on vested stock-based compensation awards, primarily in connection with our IPO.

Critical Accounting Policies and Estimates

Our audited consolidated financial statements are prepared in accordance with U.S. GAAP. The preparation of these audited consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, expenses and related disclosures. We evaluate our estimates and assumptions on an ongoing basis. Our estimates are based on historical experience and various other assumptions that we believe to be reasonable under the circumstances. Our actual results could differ from these estimates.

We believe that the following policies may involve a higher degree of judgment and complexity in their application than most of our accounting policies and represent the critical accounting policies used in the preparation of our audited consolidated financial statements. Readers are encouraged to consider this summary together with our audited consolidated financial statements and the related notes, including Note 1, for a more complete understanding of the critical accounting policies discussed below.

Revenue Recognition

The determination of whether our revenue should be reported on a gross or net basis involves judgment. In general, we act as a principal on behalf of our advertisers and revenue is recognized gross of any costs that we remit to the media partners. In these cases, we determined that we control the advertising inventory before it is transferred to our advertisers. Our control is evidenced by our ability to monetize the advertising inventory before it is transferred to our advertisers. For those revenue arrangements where we do not control the advertising inventory before it is transferred to our advertisers, we are the agent and recognize revenue on a net basis.

Stock-based Compensation

We recognize stock-based compensation for stock-based awards, including stock options, restricted stock units ("RSUs") and stock appreciation rights ("SARs") based on the grant date fair value of the awards. We account for forfeitures as they occur. Determining the appropriate fair value of stock-based awards requires numerous assumptions, some of which are complex and subjective.

Certain of our stock option awards, RSUs and SARs had a service condition and a performance condition, satisfied upon our IPO, which was a qualifying liquidity event. Accordingly, we recognized stock-based compensation expense upon our IPO to the extent the related service condition was met.

The fair value of our RSUs is based on the fair value of our common stock on the date of grant, which is based on the closing price of our common stock subsequent to our IPO. Prior to our IPO, because there was no public market for our common stock, our Board determined the fair value of the common stock by considering a number of objective and subjective factors, including valuations of our common stock performed by an unrelated valuation specialist, valuations of comparable peer companies, sales of our convertible preferred stock to unrelated third parties, operating and financial performance, the lack of liquidity of our capital stock, and general and industry-specific economic outlook.

There were no stock options granted in 2022. The estimated grant-date fair value of our stock options granted in 2021 and 2020 was calculated using the Black-Scholes option pricing model, based on the following assumptions and inputs, each of which requires the use of subjective assumptions, as further described below.

	Year Ended December 31,	
	2021	2020
Grant date fair value	5.95	$4.61
Expected term (in years)	6.03	6.02
Risk-free interest rate	1.29 %	0.52 %
Expected volatility	43 %	44 %
Dividend rate	0 %	0 %

Expected term - represents the period over which our option awards are expected to be outstanding, determined using the simplified method, based on the average of the time to the vest date and the contractual term.

Risk-free interest rate - based on the U.S. Treasury yield curve on the date of grant for zero-coupon U.S. Treasury notes with maturities corresponding to the awards' expected term.

Expected volatility - due to our short trading history, estimated using average historical stock volatilities of comparable actively traded public companies within our industry over a period equivalent to the awards' expected term.

Expected dividend rate - assumed to be zero as we have not paid and do not anticipate paying any dividends.

Fair value of our common stock - subsequent to our IPO, the fair value of common stock is based on the closing price of our common stock on the date of grant. Prior to our IPO, our Board determined the fair value of the common stock by considering a number of objective and subjective factors, including valuations of our common stock performed by an unrelated valuation specialist, valuations of comparable peer companies, sales of our convertible preferred stock to unrelated third parties, operating and financial performance, the lack of liquidity of our capital stock, and general and industry-specific economic outlook.

If any of the assumptions used in the Black-Scholes option-pricing model change significantly, stock-based compensation for any future awards may differ materially compared with the previously granted awards.

Income Taxes

We are subject to income taxes in the United States and numerous foreign jurisdictions. Significant judgment is required in determining our provision for income taxes and income tax assets and liabilities, including evaluating uncertainties in the application of accounting principles and complex tax laws.

We record a provision for income taxes for the anticipated tax consequences of the reported results of operations using an asset and liability approach, which requires recognition of deferred income tax assets and liabilities for the expected future tax consequences of temporary differences between the financial reporting and tax bases of assets and liabilities, as well as for operating loss and tax credit carryforwards. Deferred income tax assets and liabilities are measured using the currently enacted tax rates that apply to taxable income in effect for the years in which those tax assets and liabilities are expected to be realized or settled.

We record a valuation allowance to reduce our deferred tax assets to the net amount that we believe is more likely than not to be realized. In evaluating our ability to recover our deferred tax assets within the jurisdictions in which they arise, we consider all available positive and negative evidence, including our history of pre-tax income, projected future taxable income, the scheduled reversals of deferred tax liabilities, taxable income available to carryback to prior years and our tax planning strategies. As a result of our analysis, during the fourth quarter of 2021, we concluded that it is more likely than not that the majority of the U.S. deferred tax assets will be realized, and released $31.8 million of our U.S. valuation allowance. During 2022, after weighing all of the evidence, we determined that the positive evidence, particularly the evidence that was objectively verifiable, continued to outweigh the negative evidence. However, upon evaluating our forecasted state taxable income, we increased our valuation allowance against state net operating loss carryforwards by $2.8 million at December 31, 2022.

We recognize tax benefits from uncertain tax positions only if we believe that it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of the position. Although we believe that we have adequately reserved for our uncertain tax positions, we can provide no assurance that the final tax outcome of these matters will not be materially different. We make adjustments to these reserves when facts and circumstances change, such as the closing of a tax audit or the refinement of an estimate. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences will affect the provision for income taxes in the period in which such determination is made and could have a material impact on our financial condition and operating results. The provision for income taxes includes the effects of any reserves that we believe are appropriate, as well as the related interest and penalties.

We have not made any material changes in the accounting methodology used to account for income taxes during the past three fiscal years. Changes in tax laws and rates could affect recorded deferred tax assets and liabilities in the future. Other than those potential impacts, we do not believe there is a reasonable likelihood that there will be a material change in tax related balances.

Recently Issued Accounting Pronouncements

See Note 1 to the accompanying audited consolidated financial statements for recently issued accounting standards, which may have an impact on our financial statements upon adoption.

Off-Balance Sheet Arrangements

We do not currently engage in off-balance sheet financing arrangements. In addition, we do not have any interest in entities referred to as variable interest entities, which includes special purpose entities and other structured finance entities.

JOBS Act Transition Period

We are an emerging growth company as defined in the JOBS Act. The JOBS Act provides that an emerging growth company may take advantage of an extended transition period for complying with new or revised accounting standards, delaying the adoption of some accounting standards until they would otherwise apply to private companies. We have elected to use the extended transition period under the JOBS Act for the adoption of certain accounting standards until the earlier of the date we (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, our audited consolidated financial statements may not be comparable to companies that have adopted new or revised accounting pronouncements as of public company effective dates.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We have operations both in the United States and internationally, and we are exposed to market risks in the ordinary course of our business. These risks include foreign exchange, interest rate, inflation and credit risks.

Foreign Currency Risk

Our consolidated results of operations and cash flows are subject to fluctuations due to changes in foreign currency exchange rates. The majority of our revenue and cost of revenue are denominated in U.S. Dollars, with the remainder in other currencies. Our operating expenses are generally denominated in the currencies in which our operations are located. A majority of our operating expenses are denominated in U.S. Dollars, with the remainder denominated primarily in New Israeli Shekels and to a lesser extent British pound sterling and Euros. We evaluate periodically the various currencies to which we are exposed and, from time to time, may enter into foreign currency forward exchange contracts to manage our foreign currency risk and reduce the potential adverse impact from the appreciation or the depreciation of our non-U.S. dollar-denominated operations, as appropriate.

During 2022, the U.S. Dollar strengthened against most of the currencies of the countries in which we operate, which had an impact on our operating results, as further described in Item 7, "Results of Operations." The effect of a hypothetical 10% increase or decrease in our weighted-average exchange rates on our revenue, cost of revenue and operating expenses denominated in foreign currencies would result in a $8.3 million unfavorable or favorable change to our operating loss for the year ended December 31, 2022.

Interest Rate Risk

Our exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of the interest rates in the United States. Our exposure to market risk for changes in interest rates relates primarily to our cash and cash equivalents, investments and any future borrowings under our 2021 Revolving Credit Facility. There have been no amounts outstanding under our revolving credit facility since we amended and restated our loan agreement in November 2021. Long-term debt recorded on our audited consolidated balance sheets as of December 31, 2022 and December 31, 2021 was $236.0 million and bears a fixed rate of interest.

As of December 31, 2022, our exposure to market risk for changes in interest rates relates primarily to our cash and cash equivalents of $105.6 million and our investments in marketable securities of $245.7 million under our new investments program initiated during the third quarter of 2022, which consist of U.S. Treasuries, U.S. government bonds, commercial paper, U.S. corporate bonds and municipal bonds, with maturities from three months to two years from the date of purchase. The primary objectives of our investment program are focused on achieving maximum returns within our investment policy parameters, while preserving capital and maintaining sufficient liquidity. We plan to actively monitor our exposure to the fair value of our investment portfolio in accordance with our policies and procedures, which include monitoring market conditions, to minimize investment risk.

A 100 basis point change in interest rates as of December 31, 2022 would change the fair value of investment portfolio by approximately $1.9 million. Since our debt investments are classified as available-for-sale, the unrealized gains and losses related to fluctuations in market volatility and interest rates are reflected within accumulated other comprehensive income (loss) within stockholders' equity in our audited consolidated balance sheets.

Inflation Risk

Our business is subject to risk associated with inflation. We continue to monitor the impact of inflation to minimize its effects. If our costs, including wages, were to become subject to significant inflationary pressures, we may not be able to fully offset such higher costs which could negatively impact our business, financial condition, and results of operations. Inflation throughout the broader economy has and could lead to reduced ad spend and indirectly harm our business, financial condition and results of operations. See Item 1A, "Risk Factors."

Credit Risk

Financial instruments that subject us to concentration of credit risk are cash and cash equivalents, investments and receivables. As part of our ongoing procedures, we monitor the credit levels and the financial condition of our customers in order to minimize our credit risk. We do not factor our accounts receivables, nor do we maintain credit insurance to manage the risk of credit loss. We are also exposed to a risk that the counterparty to our foreign currency forward exchange contracts will fail to meet its contractual obligations. In order to mitigate this risk, we perform an evaluation of our counterparty credit risk and our forward contracts have a term of no more than 12 months.

Item 8. Financial Statements and Supplementary Data

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Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Outbrain Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Outbrain Inc. and subsidiaries (the Company) as of December 31, 2022 and 2021, the related consolidated statements of operations, comprehensive (loss) income, convertible preferred stock and stockholders' equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2022, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2022, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ KPMG LLP

We have served as the Company's auditor since 2013.

New York, New York
March 15, 2023

KPMG LLP, a Delaware limited liability partnership and a member firm of
the KPMG global organization of independent member firms affiliated with
KPMG International Limited, a private English company limited by guarantee.

OUTBRAIN INC.
Consolidated Balance Sheets
(In thousands, except for number of shares and par value)

	December 31, 2022	December 31, 2021
ASSETS:		
Current assets:		
Cash and cash equivalents	$ 105,580	$ 455,397
Short-term investments in marketable securities	166,905	—
Accounts receivable, net of allowances	181,258	192,814
Prepaid expenses and other current assets	46,761	27,873
Total current assets	500,504	676,084
Non-current assets:		
Long-term investments in marketable securities	78,761	—
Property, equipment and capitalized software, net	39,890	28,008
Operating lease right-of-use assets, net	11,065	—
Intangible assets, net	24,574	5,719
Goodwill	63,063	32,881
Deferred tax assets	35,735	32,867
Other assets	27,556	20,331
TOTAL ASSETS	$ 781,148	$ 795,890
LIABILITIES AND STOCKHOLDERS' EQUITY:		
Current Liabilities:		
Accounts payable	$ 147,653	$ 160,790
Accrued compensation and benefits	19,662	23,331
Accrued and other current liabilities	126,092	99,590
Deferred revenue	6,698	4,784
Total current liabilities	300,105	288,495
Non-current liabilities:		
Long-term debt	236,000	236,000
Operating lease liabilities, non-current	8,445	—
Other liabilities	18,812	14,620
TOTAL LIABILITIES	$ 563,362	$ 539,115
Commitments and Contingencies (Note 9)		
STOCKHOLDERS' EQUITY:		
Common stock, par value of $0.001 per share − 1,000,000,000 shares authorized, 60,175,020 shares issued and 52,226,745 shares outstanding as of December 31, 2022; 1,000,000,000 shares authorized, 58,015,075 share issued and 56,701,394 shares outstanding as of December 31, 2021.	60	58
Preferred stock, par value of $0.001 per share − 100,000,000 shares authorized, none issued and outstanding as of December 31, 2022 and December 31, 2021	—	—
Additional paid-in capital	455,831	434,945
Treasury stock, at cost − 7,948,275 shares as of December 31, 2022 and 1,313,681 shares as of December 31, 2021	(49,168)	(16,504)
Accumulated other comprehensive loss	(9,913)	(4,474)
Accumulated deficit	(179,024)	(157,250)
TOTAL STOCKHOLDERS' EQUITY	217,786	256,775
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 781,148	$ 795,890

See Accompanying Notes to Consolidated Financial Statements.

OUTBRAIN INC.
Consolidated Statements of Operations
(In thousands, except for share and per share data)

	Year Ended December 31,		
	2022	2021	2020
Revenue	$ 992,082	$ 1,015,630	$ 767,142
Cost of revenue:			
Traffic acquisition costs	757,321	743,579	572,802
Other cost of revenue	42,108	31,791	29,278
Total cost of revenue	799,429	775,370	602,080
Gross profit	192,653	240,260	165,062
Operating expenses:			
Research and development	40,320	39,169	28,961
Sales and marketing	108,816	95,786	77,570
General and administrative	57,065	70,749	48,354
Total operating expenses	206,201	205,704	154,885
(Loss) income from operations	(13,548)	34,556	10,177
Other expense, net:			
Charges related to exchange of senior notes upon IPO	—	(42,049)	—
Interest expense	(7,625)	(3,964)	(832)
Interest income and other (expense) income, net	2,600	(3,078)	(1,695)
Total other expense, net	(5,025)	(49,091)	(2,527)
(Loss) income before provision (benefit) for income taxes	(18,573)	(14,535)	7,650
Provision (benefit) for income taxes	6,008	(25,530)	3,293
Net (loss) income	$ (24,581)	$ 10,995	$ 4,357
Weighted average shares outstanding:			
Basic	55,615,385	35,159,757	16,816,178
Diluted	55,615,385	53,894,347	20,186,802
Net (loss) income per common share:			
Basic	$ (0.44)	$ 0.31	$ 0.10
Diluted	$ (0.44)	$ 0.20	$ 0.08

See Accompanying Notes to Consolidated Financial Statements.

OUTBRAIN INC.
Consolidated Statements of Comprehensive (Loss) Income
(In thousands)

	Year Ended December 31,		
	2022	2021	2020
Net (loss) income	$ (24,581)	$ 10,995	$ 4,357
Other comprehensive (loss) income:			
Foreign currency translation adjustments	(3,870)	(184)	1,233
Change in unrealized losses on available-for-sale investments in debt securities (net of tax of $470 in 2022)	(1,569)	—	—
Total other comprehensive (loss) income	(5,439)	(184)	1,233
Comprehensive (loss) income	$ (30,020)	$ 10,811	$ 5,590

See Accompanying Notes to Consolidated Financial Statements.

OUTBRAIN INC.

Consolidated Statements of Convertible Preferred Stock and Stockholders' Equity (Deficit)

(In thousands, except for number of shares)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Treasury Stock		Accumulated Other Comprehensive (Loss) Income	Accumulated (Deficit) Income	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount		Shares	Amount			
Balance – January 1, 2020	27,652,449	$ 162,444	16,837,232	$ 17	$ 90,516	(252,917)	$ (2,070)	$ (5,523)	$ (172,602)	$ (89,662)
Exercise of employee stock options, net of shares withheld for taxes	—	—	305,934	—	674	(27,769)	(280)	—	—	394
Vesting of restricted stock units	—	—	296,322	—	—	—	—	—	—	—
Stock-based compensation	—	—	—	—	3,865	—	—	—	—	3,865
Other comprehensive income	—	—	—	—	—	—	—	1,233	—	1,233
Net income	—	—	—	—	—	—	—	—	4,357	4,357
Balance – December 31, 2020	27,652,449	$ 162,444	17,439,488	$ 17	$ 95,055	(280,686)	$ (2,350)	$ (4,290)	$ (168,245)	$ (79,813)
Conversion of convertible preferred stock to common stock	(27,652,449)	(162,444)	28,091,267	28	162,416	—	—	—	—	162,444
Issuance of common stock from initial public offering	—	—	8,000,000	8	145,097	—	—	—	—	145,105
Exercise of employee stock options, net of shares withheld for taxes	—	—	1,970,110	2	5,937	(56,262)	(666)	—	—	5,273
Vesting of restricted stock units, net of shares withheld for taxes	—	—	2,514,210	3	(3)	(976,733)	(13,488)	—	—	(13,488)
Stock-based compensation	—	—	—	—	26,443	—	—	—	—	26,443
Other comprehensive loss	—	—	—	—	—	—	—	(184)	—	(184)
Net income	—	—	—	—	—	—	—	—	10,995	10,995
Balance – December 31, 2021	—	$ —	58,015,075	$ 58	$ 434,945	(1,313,681)	$ (16,504)	$ (4,474)	$ (157,250)	$ 256,775
Exercise of employee stock options, warrants and restricted stock awards, net of shares withheld for taxes	—	—	827,319	1	4,154	(95,138)	(1,425)	—	—	2,730
Vesting of restricted stock units, net of shares withheld for taxes	—	—	976,840	1	(1)	(150,327)	(1,047)	—	—	(1,047)
Acquisition consideration	—	—	355,786	—	4,190	—	—	—	—	4,190
Shares repurchased under the share repurchase program	—	—	—	—	—	(6,389,129)	(30,192)	—	—	(30,192)
Stock-based compensation	—	—	—	—	12,543	—	—	—	—	12,543
Other comprehensive loss	—	—	—	—	—	—	—	(5,439)	—	(5,439)
Net loss	—	—	—	—	—	—	—	—	(24,581)	(24,581)
Other	—	—	—	—	—	—	—	—	2,807	2,807
Balance – December 31, 2022	—	$ —	60,175,020	$ 60	$ 455,831	(7,948,275)	$ (49,168)	$ (9,913)	$ (179,024)	$ 217,786

See Accompanying Notes to Consolidated Financial Statements.

OUTBRAIN INC.
Consolidated Statements of Cash Flows
(In thousands)

	Year Ended December 31,		
	2022	2021	2020
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net (loss) income	$ (24,581)	$ 10,995	$ 4,357
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Depreciation and amortization of property and equipment	11,125	7,499	6,638
Amortization of capitalized software development costs	9,540	8,441	7,545
Amortization of intangible assets	6,254	3,530	4,326
Stock-based compensation	11,660	26,307	3,588
Charges related to exchange of senior notes upon IPO	—	42,049	—
Non-cash operating lease expense	4,309	—	—
Provision for credit losses	3,291	2,647	2,621
Deferred income taxes	(3,853)	(31,810)	(2,256)
Other	(644)	3,433	(2,466)
Changes in operating assets and liabilities:			
Accounts receivable	5,283	(31,496)	(24,124)
Prepaid expenses and other current assets	(20,394)	(9,975)	(3,729)
Accounts payable and other current liabilities	7,965	36,106	55,538
Operating lease liabilities	(4,246)	—	—
Deferred revenue	2,184	(667)	2,159
Other non-current assets and liabilities	(4,080)	(10,297)	(1,211)
Net cash provided by operating activities	3,813	56,762	52,986
CASH FLOWS FROM INVESTING ACTIVITIES:			
Acquisition of business, net of cash acquired	(45,151)	—	—
Purchases of property and equipment	(13,375)	(9,743)	(1,511)
Capitalized software development costs	(12,569)	(10,311)	(8,990)
Purchases of marketable securities	(262,171)	—	—
Proceeds from maturities of marketable securities	15,500	—	—
Proceeds from sale of assets	—	—	1,117
Other	(132)	(47)	(39)
Net cash used in investing activities	(317,898)	(20,101)	(9,423)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from IPO issuance of common stock, net of underwriting costs	—	148,800	—
Payment of initial public offering transaction costs	—	(3,695)	—
Proceeds from issuance of debt	—	200,000	—
Payment of deferred financing costs	—	(6,656)	—
Proceeds from borrowings on revolving credit facility	—	—	10,000
Principal repayments on revolving credit facility	—	—	(10,000)
Proceeds from exercise of common stock options and warrants	4,155	5,939	825
Treasury stock repurchases and share withholdings on vested awards	(32,664)	(14,154)	(280)
Principal payments on finance lease obligations	(3,190)	(4,340)	(4,773)
Net cash (used in) provided by financing activities	(31,699)	325,894	(4,228)
Effect of exchange rate changes	(4,043)	(1,030)	4,750
Net (decrease) increase in cash, cash equivalents and restricted cash	(349,827)	361,525	44,085
Cash, cash equivalents and restricted cash — Beginning	455,592	94,067	49,982
Cash, cash equivalents and restricted cash — Ending	$ 105,765	$ 455,592	$ 94,067
RECONCILIATION OF CASH, CASH EQUIVALENTS, AND RESTRICTED CASH TO THE CONSOLIDATED BALANCE SHEETS			
Cash and cash equivalents	$ 105,580	$ 455,397	$ 93,641
Restricted cash, included in other assets	$ 185	$ 195	$ 426
Total cash, cash equivalents, and restricted cash	$ 105,765	$ 455,592	$ 94,067

OUTBRAIN INC.
Consolidated Statements of Cash Flows (Continued)
(In thousands)

	Year Ended December 31,		
	2022	2021	2020
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:			
Cash paid for income taxes, net of refunds	$ 6,887	$ 6,742	$ 2,639
Cash paid for interest	$ 7,463	$ 587	$ 760
SUPPLEMENTAL SCHEDULE OF NONCASH INVESTING AND FINANCING ACTIVITIES:			
Stock consideration issued for acquisition of a business	$ 4,190	$ —	$ —
Purchases of property and equipment included in accounts payable	$ 2,723	$ 15	$ 135
Acquisition consideration payable	$ 1,476	$ —	$ —
Stock-based compensation capitalized for software development costs	$ 883	$ 195	$ 212
Property and equipment financed under capital obligation arrangements	$ —	$ 1,837	$ 4,834
Conversion of preferred stock to common stock	$ —	$ 162,444	$ —
Unpaid deferred financing costs in accounts payable and accrued expenses	$ —	$ 28	$ —

See Accompanying Notes to Consolidated Financial Statements.

1. Organization, Description of Business and Summary of Significant Accounting Policies

Organization and Description of Business

Outbrain Inc. (together with its subsidiaries, "Outbrain," the "Company," "we," "our" or "us"), was incorporated in August 2006 in Delaware. The Company is headquartered in New York, New York and has wholly owned subsidiaries in Israel, Europe, Asia, Brazil and Australia. In connection with the Company's initial public offering ("IPO"), its common stock began trading on The Nasdaq Stock Market LLC ("Nasdaq") on July 23, 2021 under the "OB" ticker symbol.

Outbrain is a leading recommendation platform powering the open web. The Company's platform provides personalized recommendations that appear as links to content, advertisements and videos on media owners' online properties. The Company generates revenue from marketers through user engagements with promoted recommendations that it delivers across a variety of third-party media owners' online properties. The Company pays traffic acquisition costs to its media owner partners on whose digital properties the recommendations are shown. The Company's advertiser solutions are mainly priced using a performance-based model based on the actual number of engagements generated by users, which is highly dependent on its ability to generate trustworthy and interesting recommendations to individual users based on its proprietary algorithms. A portion of the Company's revenue is generated through advertisers participating in programmatic auctions wherein the pricing is determined by the auction results and not dependent on user engagement.

Basis of Presentation

The accompanying audited consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States of America ("US GAAP"). The accompanying audited consolidated financial statements include the accounts of Outbrain Inc. and its wholly owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of audited consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and related disclosures as of the date of the audited consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. Estimates and judgments are based on historical information and on various other assumptions that the Company believes are reasonable under the circumstances. Estimates and assumptions made in the accompanying audited consolidated financial statements include, but are not limited to, the allowance for credit losses, sales allowance, software development costs eligible for capitalization, valuation of deferred tax assets, the useful lives of property and equipment, the useful lives and fair value of intangible assets, valuation of goodwill, the fair value of stock-based awards, and the recognition and measurement of income tax uncertainties and other contingencies. Actual results could differ materially from these estimates.

Reclassifications

Certain reclassifications have been made to the prior periods' financial information in order to conform to the current period's presentation.

Cash and Cash Equivalents and Investments

The Company considers all highly liquid investments with maturities of three months or less when purchased to be cash equivalents. Cash and cash equivalents consist of cash on hand and highly liquid investments in money market funds, U.S. government bonds and commercial paper.

The Company's investments in debt securities are classified as available-for-sale and are recorded at fair value. The Company classifies its investments in debt securities as short-term or long-term, based on each security's maturity date. Unrealized gains and losses on available-for-sale securities are recognized in other comprehensive (loss) income ("OCI"), net of taxes. Although the Company does not have intent to sell its debt investments, the Company may sell them prior to their maturities for a variety of reasons, including portfolio diversification, credit quality, yields, and liquidity requirements. Any realized gains and losses on the sale of investments are determined based on a specific identification method and recorded within interest income and other (expense) income, net in the Company's consolidated statements of operations.

Restricted Cash

Restricted cash represents security deposits for facility leases and is included in other assets in the accompanying consolidated balance sheets.

Accounts Receivable and Allowance for Credit Losses

Accounts receivable are recorded at invoiced amounts, net of allowances for credit losses, if applicable, and are unsecured and do not bear interest. Accounts receivable also includes earned and billable amounts not yet invoiced as of the end of the reporting period.

The allowance for credit losses is based on the best estimate of the amount of probable credit losses in accounts receivable. The allowance for credit losses is determined based on historical collection experience, reasonable and supportable forecasted information, and any applicable market conditions. The allowance for credit losses also takes into consideration the Company's current customer information, collection history, and other relevant data. The Company reviews the allowance for credit losses on a quarterly basis. Account balances are written off against the allowance when it is deemed probable that the receivable will not be recovered. If circumstances change, such as higher-than-expected defaults or an unexpected material adverse change in a major customer's ability to meet its financial obligations, the Company's estimate of amounts collectible could be reduced by a material amount.

Certain Risks and Concentrations

Financial instruments that potentially subject the Company to concentrations of credit risk consist of cash and cash equivalents, restricted cash and accounts receivable. The Company's cash and cash equivalents and restricted cash are generally invested in high-credit quality financial instruments with both banks and financial institutions to reduce the amount of exposure to any single financial institution.

The Company generally does not require collateral to secure accounts receivable. No single marketer accounted for 10% or more of the Company's total revenue for the years ended 2022, 2021 and 2020, or 10% or more of its gross accounts receivable balance as of December 31, 2022 and 2021.

For the year ended December 31, 2022, none of the Company's media owners accounted for 10% of its total traffic acquisition costs. For the year ended December 31, 2021, one media owner accounted for 10% of the Company's total traffic acquisition costs. For the year ended December 31, 2020, two media owners individually accounted for 12% and 11% of the Company's total traffic acquisition costs.

Property, equipment and capitalized software, net

Property and equipment, including leasehold improvements, is stated at cost, less accumulated depreciation and amortization. Depreciation is computed using the straight-line method over the estimated useful lives of the related assets. Depreciation on property and equipment, excluding leasehold improvements, is three to five years. Leasehold improvements are amortized on a straight-line basis over the shorter of the estimated useful lives of the assets or the remaining lease term. Amortization on leasehold improvements ranges from one to eight years.

The Company capitalizes qualifying development costs associated with software that is developed or obtained for internal use, provided that management with the relevant authority authorizes and commits to the funding of the project, it is probable the project will be completed and the software will be used to perform the function intended. Capitalized costs, including costs incurred for enhancements that are expected to result in additional significant functionality are capitalized and amortized on a straight-line basis over the estimated useful life, which approximates three years. Costs related to preliminary project activities and post-implementation operation activities, including training and maintenance, are expensed as incurred.

Intangible assets, net

Intangible assets primarily consist of developed technology, media owner and customer relationships and trade names, resulting from the Company's acquisitions. Intangible assets are carried at cost, less accumulated amortization, unless a determination has been made that their value has been impaired. Intangible assets are amortized on a straight-line basis over their estimated useful lives. Amortization expense in the accompanying consolidated statements of operations is included as a component of other cost of revenue for developed technology assets and sales and marketing expense for customer and media owner relationships and tradenames.

Impairment of Long-Lived Assets

Long-lived assets consist of the Company's property, equipment, capitalized software development costs and other assets, including identifiable intangible assets with finite lives. The Company's long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable or that the useful life is shorter than originally estimated. Recoverability of these assets is first assessed by comparison of the carrying amount of each asset to the future undiscounted cash flows the asset is expected to generate over their remaining lives. If the asset is considered to be impaired, the amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset. If the useful life is shorter than originally estimated, the Company amortizes the remaining carrying value over the new shorter useful life.

Goodwill

Goodwill represents the excess of the purchase price of an acquired entity over the fair value of intangible assets acquired and liabilities assumed in a business combination. Goodwill is not amortized but instead evaluated for impairment. The Company performs its annual impairment test of goodwill during the fourth quarter of each fiscal year or whenever events or circumstances change that would indicate that goodwill may not be recoverable. In conducting the impairment test, the Company can opt to perform a qualitative assessment to test goodwill for impairment or can directly perform the two-step impairment test described below. If the Company performs a qualitative assessment and it is determined that the fair value of a reporting unit is more likely than not to be less than its carrying amount, a quantitative impairment test is performed. If the fair value of the reporting unit exceeds the carrying value of the net assets assigned to that unit, goodwill is not impaired. If the carrying value of the reporting unit exceeds its fair value, an impairment charge is recorded for the difference. Based on the Company's qualitative assessment performed during the fourth quarter of fiscal years 2022, 2021 and 2020, the Company concluded that it was more-likely-than-not that the estimated fair value of the Company's single reporting unit exceeded its carrying value. Accordingly, no goodwill impairment charges were recognized for the years ended December 31, 2022, 2021 and 2020.

Revenue Recognition

The Company recognizes revenues when it transfers control of promised services directly to its customers, in an amount that reflects the consideration to which the Company expects to be entitled to in exchange for those services. The Company recognizes revenue pursuant to the five-step framework contained in ASC 606: (i) identify the contract with a client; (ii) identify the performance obligations in the contract, including whether they are distinct in the context of the contract; (iii) determine the transaction price, including the constraint on variable consideration; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue as the Company satisfies the performance obligations.

The Company generates revenue primarily from advertisers through user engagement with the ads that it places on media partners' web pages and mobile applications. The Company's platform delivers ads to end-users that appear as links to articles and videos on media owners' sites.

The Company's customers include brands, performance marketers and other advertisers, which are collectively referred to as its advertisers, each of which contract for use of its services primarily through insertion orders or through self-service tools, allowing advertisers to establish budgets for their advertising campaigns. Advertising campaigns are primarily billed on a monthly basis. The Company's payment terms generally range from 30 to 60 days.

For advertising campaigns priced on a cost-per-click basis, the Company bills its advertisers and recognizes revenue when a user clicks on an advertisement it delivers.

For campaigns priced on a cost-per-impression basis, the Company bills its advertisers and recognizes revenue based on the number of times an advertisement is displayed to a user.

Variable consideration, including allowances, discounts, refunds, credits, incentives, or other price concessions, is estimated and recorded at the time that related revenue is recognized. Advance payments from advertisers for future services represent contract liabilities and are recorded as deferred revenue in the Company's consolidated balance sheets.

The determination of whether revenue should be reported on a gross or a net basis involves judgement. In general, the Company acts as a principal on behalf of its advertisers and revenue is recognized gross of any costs that it remits to the media partners. In these cases, the Company determined that it controls the advertising inventory before it is transferred to its advertisers. The Company's control is evidenced by its ability to monetize the advertising inventory before it is transferred to its advertisers. For those revenue arrangements where the Company does not control the advertising inventory before it is transferred to its advertisers, the Company is the agent and recognizes revenue on a net basis. The Company recognizes revenue net of applicable sales taxes.

Contract Balances. There were no contract assets as of December 31, 2022 or December 31, 2021. Contract liabilities primarily relate to advance payments and consideration received from customers. As of December 31, 2022 and December 31, 2021, the Company's contract liabilities were recorded as deferred revenue in its consolidated balance sheets. See Note 13 for disaggregation of the Company's revenue based on geography of where the Company's marketers are physically located.

Cost of Revenue

Traffic Acquisition Costs. Traffic acquisition costs consist of amounts the Company owes to media owners when users engage with promoted recommendations on media owners' properties. The Company incurs costs with media owners in the period in which the click-throughs occur or in some circumstances based on a guaranteed minimum rate of payment from the Company in exchange for guaranteed placement of the Company's promoted recommendations on specified portions of the media owners online properties. These guaranteed rates are typically provided per thousand qualified page views, whereby the Company's minimum monthly payment to the media owner may fluctuate based on how many qualified page views the media owner generates, subject to a maximum guarantee. Traffic acquisition costs also include amounts payable to programmatic supply partners.

In some instances, the Company may make upfront payments to media owners in connection with long-term contracts. The Company capitalizes these advance payments under these agreements if specific capitalization criteria have been met. The capitalization criteria includes the existence of future economic benefits to the Company, the existence of legally enforceable recoverability language (e.g., early termination clauses), management's ability and intent to enforce the recoverability language and the ability to generate future earnings from the agreement in excess of amounts deferred. Capitalized amounts are amortized as traffic acquisition costs over the shorter of the period of contractual recoverability or the corresponding period of economic benefit. Amounts not yet paid are accrued systematically based on the Company's estimate of user engagement.

Other Cost of Revenue. Cost of revenue also includes costs related to the management of the Company's data centers, hosting fees, data connectivity costs and depreciation and amortization. Cost of revenue also includes the amortization of capitalized software that is developed or obtained for internal use associated with the Company's revenue-generating technologies. Additionally, other cost of revenue includes amortization of intangible assets related to developed technology acquired by the Company and used in its revenue-generating efforts.

Research and Development

The Company incurs research and development expenses primarily relating to the development and enhancement of its content discovery platform. These expenses consist primarily of personnel and the related overhead costs and amortization of capitalized software for non-revenue generating infrastructure. Research and development expenses are expensed as incurred, except for internal-use software development costs that qualify for capitalization.

Advertising and Promotional Costs

Advertising and promotional costs are included in sales and marketing expenses as incurred in the accompanying consolidated statements of operations. Advertising and promotional costs were $15.6 million, $13.1 million and $9.3 million for the years ended December 31, 2022, 2021 and 2020, respectively.

Segment Information

The Company has one operating and reporting segment. The Company's chief operating decision maker is its Co-Chief Executive Officer who makes resource allocation decisions and assesses performance based on financial information presented on a consolidated basis.

Stock-based Compensation

The Company recognizes stock-based compensation for stock-based awards, including stock options, restricted stock units ("RSUs") and stock appreciation rights ("SARs") based on the estimated fair value of the awards. The fair value of the Company's RSUs is the fair value of the Company's common stock on the date of grant. The Company estimates the fair value of its stock option awards on the grant date using the Black-Scholes option-pricing model. The Black-Scholes option-pricing model requires the use of judgments and assumptions, including the option's expected term and the price volatility of the underlying stock. The Company accounts for forfeitures as they occur.

Certain of the Company's stock option awards, RSUs and SARs had a service condition and a performance condition, satisfied upon the Company's IPO, which was a qualifying liquidity event. Accordingly, the Company recognized stock-based compensation expense upon its IPO to the extent the related service condition was met. Stock-based compensation expense for unvested stock option and RSU awards, and other awards that vest subject to the satisfaction of service conditions is being recognized on a straight-line basis over the requisite service period.

Foreign Currency

The Company transacts business in various foreign currencies. In general, the functional currency of its foreign subsidiaries is the currency of the local country. Accordingly, revenues and expenses of operations outside the United States ("U.S.") are generally translated into U.S. dollars using weighted-average exchange rates, while assets and liabilities are translated into U.S. dollars using exchange rates in effect at the balance sheet date with the resulting translation adjustments recorded as a component of accumulated other comprehensive income (loss) within the statements of convertible preferred stock and stockholders' equity (deficit). Foreign currency transaction gains and losses resulting from remeasurement of transactions denominated in a currency other than the functional currency are recognized in the consolidated statements of operations. The net foreign exchange transaction gains (losses) included in interest income and other (expense) income, net in the accompanying consolidated statements of operations were $(2.1) million, $(3.3) million and $(3.1) million for the years ended December 31, 2022, 2021 and 2020, respectively.

Derivative Financial Instruments

The Company is exposed to certain risks relating to its ongoing business operations, including but not limited to, fluctuations in foreign currency exchange rates. The Company enters into foreign currency forward exchange contracts to manage its foreign currency exchange risk by reducing the effects of fluctuations in foreign currency exchange rates on its net cash flows. These derivative contracts are not designated as accounting hedges. Accordingly, the Company recognizes gains and losses resulting from a change in fair value for these derivatives in the period in which the change occurs. The Company classifies cash flows from these contracts as operating activities in its consolidated statements of cash flows. The notional amount of the Company's outstanding derivative instruments was $44.9 million and $33.5 million as of December 31, 2022 and 2021, respectively. See Note 14 for additional information.

Severance Pay Asset and Liability

The Company records a severance pay asset and liability on its consolidated balance sheets related to certain of its employees located in Israel. The liability for severance pay is calculated pursuant to Israeli severance pay law based on the most recent salary for the employees multiplied by the number of years of employment, as of the respective balance sheet date. Eligible employees are entitled to one month salary for each year of employment or a portion thereof. The Company's liability at each respective balance sheet date for its eligible Israeli employees is fully accrued in other liabilities in the accompanying consolidated balance sheets. The Company funds this obligation through monthly deposits to the employee's pension and management insurance policies. The carrying value of these policies is recorded as a severance fund asset in other assets in the accompanying consolidated balance sheets.

The deposited funds may be withdrawn only upon the fulfillment of the Company's obligation pursuant to Israeli severance pay law. The carrying value of its deposited funds is based on the cash surrender value of these policies and includes profits accumulated through the respective balance sheet date.

Defined Contribution Plans

The Company contributes to defined contribution savings plans covering eligible employees of the Company. Participants of the plans may defer annual pre-tax compensation, subject to statutory and plan limitations. In addition, a certain percentage of an employee's contributions are matched by the Company and vest over a specified period of time, subject to certain statutory and plan limitations. The Company's contributions were approximately $9.6 million, $8.4 million, and $6.6 million for 2022, 2021, and 2020, respectively, which were expensed as incurred.

Income Taxes

The Company accounts for income taxes using an asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred income tax assets and liabilities are measured using the currently enacted tax rates that apply to taxable income in effect for the years in which those tax assets and liabilities are expected to be realized or settled. The Company regularly assesses the likelihood that its deferred income tax assets will be realized. To the extent that the Company believes any amounts are not more likely than not to be realized, a valuation allowance is recorded to reduce the deferred income tax assets. The Company's deferred tax assets were $35.7 million and $32.9 million as of December 31, 2022 and 2021, respectively. The Company's deferred tax liabilities were $5.3 million and $1.7 million as of December 31, 2022 and 2021, respectively, and are included within other liabilities in the consolidated balance sheets. The Company regularly assesses the need for the valuation allowance on its deferred tax assets, and to the extent that it determines that an adjustment is needed, such adjustment will be recorded in the period that the determination is made.

The Company recognizes the effect of income tax positions only if those positions are more likely than not of being sustained. Recognized income tax positions are measured at the largest amount that is greater than 50% likely of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. The Company recognizes interest and penalties related to income tax matters as income tax expense.

Recently Adopted Accounting Pronouncements

Leases

In February 2016, the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update ("ASU") 2016-02, "*Leases (Topic 842)*," which sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract (i.e., lessees and lessors). This comprehensive new standard amends and supersedes existing lease accounting guidance and is intended to increase transparency and comparability by recognizing right-of-use ("ROU") lease assets and lease liabilities on the balance sheet and requiring disclosure of key information about leasing arrangements. In July 2018, this guidance was amended to allow companies to use the beginning of the period in which this standard is adopted as the date of initial application.

The Company adopted ASU 2016-02 on January 1, 2022 using the transition election allowing it not to restate prior periods. As such, results for reporting periods beginning on January 1, 2022 are presented under Accounts Standards Codification ("ASC") 842, while prior period amounts continue to be reported in accordance with the Company's historical accounting treatment under ASC 840, "Leases." The Company elected the package of practical expedients permitted under the transition guidance, which allows it not to reassess its prior conclusions about lease identification, lease classification and initial direct costs. In addition, the Company elected not to separate the lease and non-lease components for its real estate leases and not to recognize lease assets and liabilities for operating leases with initial terms of 12 months or less. The Company did not elect the "hindsight" practical expedient. The Company uses its incremental borrowing rate to determine the present value of lease payments, as the Company's leases do not have a readily determinable implicit discount rate. The incremental borrowing rate is the rate of interest the Company would have to pay to borrow on a collateralized basis over a similar term and amount in a similar economic environment.

Upon adoption, the Company recognized operating right-of-use assets of $14.8 million and operating lease liabilities of $15.2 million in its consolidated balance sheet as of January 1, 2022. In addition, the Company reclassified deferred rent and lease incentives as a component of operating right-of-use assets. The adoption of the new lease standard did not have a material impact on the Company's results of operations or cash flows and there was no cumulative-effect adjustment to the opening balance of retained earnings.

Credit Losses

In June 2016, the FASB issued ASU 2016-13, "*Financial Instruments - Credit Losses (Topic 326)*," which requires the measurement and recognition of expected credit losses for financial assets held at amortized cost. ASU 2016-13 replaces the existing incurred loss impairment model with an expected loss model which requires consideration of forward-looking information to calculate credit loss estimates. These changes result in an earlier recognition of credit losses. The Company's financial assets held at amortized cost include accounts receivable. The amendments in ASU 2020-05, "Revenue from Contracts with Customers (Topic 606) and Leases (Topic 842) Effective Dates for Certain Entities," deferred the effective date for Topic 326 to fiscal years beginning after December 15, 2022. The Company early adopted ASU 2016-13 as of January 1, 2022, using the adoption method based on the aging schedules of accounts receivable. The adoption of this standard did not have a material impact on the Company's audited consolidated financial statements.

2. Acquisition

On November 19, 2021, the Company entered into a definitive agreement, by and among the Company and the shareholders of video intelligence AG ("vi"), a Swiss-based contextual video technology company for digital media owners, for the acquisition of all of the outstanding shares of vi. The acquisition was completed on January 5, 2022. The aggregate purchase price of approximately $54.2 million was paid in the form of cash and Outbrain common stock, with the first installment of $37.3 million in cash and the equity portion paid at closing, an additional $10.6 million paid in the third quarter of 2022 and the majority of the remaining $1.5 million consideration payable in cash in the first quarter of 2023. The equity portion of the purchase price was comprised of 355,786 shares of the Company's common stock with a fair value of $4.2 million, which was subject to a post-closing adjustment of $0.4 million recorded in the Company's consolidated statement of operations for the year ended December 31, 2022, to increase the contingent consideration payable in cash to $0.9 million, based on the market price of the Company's stock determined one year from closing. This acquisition expanded the Company's video product offerings to include in-stream high-quality video content, delivering a better user experience and more value to its advertisers.

The following table summarizes the total purchase consideration as of the acquisition date:

	January 5, 2022 (In thousands)
Cash consideration paid on acquisition date	$ 37,311
Fair value of deferred consideration payable in cash	10,936
Fair value of contingent consideration payable	547
Fair value of stock consideration	4,190
Total fair value of purchase consideration	$ 52,984

This acquisition was accounted for as a business combination under the acquisition method of accounting and the results of operations of vi have been included in the Company's results of operations as of the acquisition date. The Company incurred transaction costs relating to the vi acquisition of $0.2 million, which were included in general and administrative expenses in the Company's consolidated statement of operations for the year ended December 31, 2022. The Company allocated the purchase price to identifiable assets acquired based on their estimated fair values at acquisition date, which required management to use significant judgment and estimates, including valuation methodologies, estimates of future revenue, costs and cash flows, discount rates, and identifying comparable companies. The Company engaged third-party valuation specialists to assist in determining the fair values of the acquired assets and liabilities.

The allocation of the purchase price to the identifiable assets and liabilities based on their estimated fair values as of the acquisition date was as follows:

	January 5, 2022
	(In thousands)
Cash and cash equivalents	$ 2,787
Accounts receivable	3,849
Prepaid expenses and other current assets	995
Property and equipment, net	43
Publisher relationships	10,783
Customer relationships	732
Content provider relationships	284
Technology intangibles	9,985
Tradenames	3,704
Accounts payable	(2,571)
Accrued and other liabilities	(2,768)
Deferred tax liability	(5,021)
Net assets acquired	22,802
Goodwill	30,182
Total	$ 52,984

The fair values of the publisher relationships were determined using the multi-period excess earnings income approach and the fair values of the customer and content provider relationships were determined using the cost approach. The fair value of trade names and technology was determined using the relief-from-royalty method. Identifiable intangible assets acquired are amortized on a straight-line basis over their estimated useful lives. The Company estimated useful lives of acquired publisher relationships and technology to be 8 years, and tradenames to be 9 years, and other relationships to be 5 years. Amortization expense for amortizable intangible assets is included within sales and marketing expense and other cost of revenue in the Company's consolidated statements of operations.

The excess of the purchase price over the aggregate fair value of the identifiable assets acquired was recorded as goodwill and is primarily attributable to expected synergies and increased offerings to customers the Company expects from future growth and potential monetization opportunities. Goodwill is not amortized but will be evaluated for impairment at least annually, or more frequently if there are indicators of impairment. The goodwill is not deductible for tax purposes.

3. Balance Sheet Components

Cash Equivalents and Investments

In July 2022, the Company initiated a new investment program. All of the Company's debt securities are classified as available-for-sale. The Company's cash equivalents and investments as of December 31, 2022 consisted of the following:

	December 31, 2022							
(In thousands)	Fair Value Level	Amortized cost [1]	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value	Cash Equivalents	Short-term investments	Long-term investments
Money market funds	1	$ 39,198	$ —	$ —	$ 39,198	$ 39,198	$ —	$ —
U.S. Treasuries	2	31,721	—	(317)	31,404	—	23,701	7,703
U.S. government bonds	2	77,259	—	(899)	76,360	—	52,254	24,106
Commercial paper	2	43,126	3	(161)	42,968	—	42,968	—
U.S. Corporate bonds	2	95,599	29	(694)	94,934	—	47,982	46,952
Total cash equivalents and investments		286,903	$ 32	$ (2,071)	$ 284,864	$ 39,198	$ 166,905	$ 78,761

[1] The amortized cost of debt securities excludes accrued interest of $1.0 million as of December 31, 2022.

The total estimated fair value of debt securities in an unrealized loss position as of December 31, 2022 was $232.1 million, all of which has been in an unrealized loss position for less than six months. The aggregate amount of unrealized losses as of December 31, 2022 was $2.1 million. The total estimated fair value of debt securities in an unrealized gain position is $13.6 million. For marketable securities with unrealized loss positions, the Company does not intend to sell these securities and it is more likely than not that the Company will hold these securities until maturity or a recovery of the cost basis. No allowance for credit losses was recorded for these securities as of December 31, 2022.

The following table shows the fair value of the Company's available-for-sale securities by contractual maturity:

	December 31, 2022
	(In thousands)
Within 1 year	$ 206,103
After 1 year through 2 years	78,761
Total fair value	$ 284,864

Accounts Receivable and Allowance for Credit Losses

Accounts receivable, net of allowance for credit losses consists of the following:

	December 31,	
	2022	2021
	(In thousands)	
Accounts receivable	$ 186,770	$ 197,216
Allowance for credit losses	(5,512)	(4,402)
Accounts receivable, net of allowance for credit losses	$ 181,258	$ 192,814

The allowance for credit losses consists of the following activity:

	Year Ended December 31,		
	2022	2021	2020
		(In thousands)	
Allowance for credit losses, beginning balance	$ 4,402	$ 4,174	$ 3,281
Provision for credit losses, net of recoveries	3,227	2,601	2,668
Write-offs	(2,117)	(2,373)	(1,775)
Allowance for credit losses, ending balance	$ 5,512	$ 4,402	$ 4,174

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consists of the following:

	December 31,	
	2022	2021
	(In thousands)	
Prepaid traffic acquisition costs	$ 23,149	$ 12,471
Prepaid taxes	15,280	7,314
Prepaid software licenses	2,465	2,201
Prepaid insurance	1,503	2,130
Other prepaid expenses and other current assets	4,364	3,757
Total prepaid expenses and other current assets	$ 46,761	$ 27,873

Property, Equipment and Capitalized Software, Net

Property, equipment and capitalized software, net consists of the following:

	December 31,	
	2022	2021
	(In thousands)	
Computer and equipment	$ 59,536	$ 43,316
Capitalized software development costs	67,685	54,233
Software	3,113	2,817
Leasehold improvements	2,859	1,547
Furniture and fixtures	1,177	83
Property, equipment and capitalized software, gross	134,370	101,996
Less: accumulated depreciation and amortization	(94,480)	(73,988)
Total property, equipment and capitalized software, net	$ 39,890	$ 28,008

The Company capitalized software development costs, including stock-based compensation, of $13.5 million and $10.5 million for the years ended December 31, 2022 and 2021, respectively. Accumulated amortization for capitalized software development costs was $47.8 million and $38.2 million as of December 31, 2022 and 2021, respectively.

As of December 31, 2022 and 2021, total computer equipment financed and software licensed under finance leases was $1.9 million and $4.9 million, net of accumulated amortization of $23.9 million and $21.0 million. Amortization expense related to total computer equipment financed and software licensed under finance leases was $2.9 million, $3.8 million and $3.7 million, respectively, for the years ended December 31, 2022, 2021 and 2020.

Accrued and Other Current Liabilities

Accrued and other current liabilities consist of the following:

	December 31,	
	2022	2021
	(In thousands)	
Accrued traffic acquisition costs	$ 73,396	$ 60,274
Accrued tax liabilities	15,013	9,240
Accrued agency commissions	13,451	10,639
Accrued professional fees	4,915	6,569
Operating leases obligations, current	3,236	—
Interest payable	3,074	3,094
Finance lease obligations, current	1,758	3,069
Other	11,249	6,705
Total accrued and other current liabilities	$ 126,092	$ 99,590

In addition to accrued traffic acquisition costs, accounts payable includes $136.8 million and $147.4 million of traffic acquisition costs as of December 31, 2022 and 2021, respectively.

4. Fair Value Measurements

The Company utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible. The Company's financial instruments include restricted time deposits, severance pay fund deposits and foreign currency forward contracts. The Company determines the fair value of its financial instruments based on assumptions that market participants would use in pricing an asset or liability in the principal or most advantageous market. When considering market participant assumptions in fair value measurements, the Company uses the fair value hierarchy described below to distinguish between observable and unobservable inputs:

Level I — Valuations based on quoted prices in active markets for identical assets and liabilities at the measurement date;

Level II — Valuations based on quoted prices in active markets for similar assets or liabilities, quoted prices for identical or similar assets or liabilities in inactive markets, or other inputs that are observable or can be principally corroborated by observable market data for substantially the full term of the related assets or liabilities; and

Level III — Valuations based on unobservable inputs that are significant to the measurement of the fair value of the assets or liabilities that are supported by little or no market data.

The following table sets forth the fair value of the Company's financial assets and liabilities measured on a recurring basis by level within the fair value hierarchy:

	December 31, 2022			
	Level I	Level II	Level III	Total
	(In thousands)			
Financial Assets:				
Cash equivalents and investments [1]	$ 39,198	$ 245,666	$ —	$ 284,864
Restricted time deposit [2]	—	185	—	185
Severance pay fund deposits [2]	—	5,378	—	5,378
Foreign currency forward contract [3]	—	726	—	726
Total financial assets	$ 39,198	$ 251,955	$ —	$ 291,153
Financial Liabilities:				
Foreign currency forward contract [4]	—	1,463	—	1,463
Total financial liabilities	$ —	$ 1,463	$ —	$ 1,463

	December 31, 2021			
	Level I	Level II	Level III	Total
	(In thousands)			
Financial Assets:				
Restricted time deposit [2]	$ —	$ 195	$ —	$ 195
Severance pay fund deposits [2]	—	6,086	—	6,086
Foreign currency forward contract [3]	—	741	—	741
Total financial assets	$ —	$ 7,022	$ —	$ 7,022

(1) Money market securities are valued using Level I of the fair value hierarchy, while the fair values of U.S. Treasuries, government bonds, commercial paper, corporate bonds and municipal bonds are considered Level II and are obtained from independent pricing services, which may use various methods, including quoted prices for identical or similar securities in active and inactive markets. See Note 3 for additional detail of the Company's fixed income securities by balance sheet location.

(2) Recorded within other assets.

(3) Recorded within prepaid expenses and other current assets.

(4) Recorded within accrued and other current liabilities.

The Company records the fair values of the assets and liabilities relating to its undesignated foreign currency forward contracts on a gross basis in its consolidated balance sheets, as they are not subject to master netting arrangements. There is no cash collateral required to be pledged by the Company or its counterparties. The Company enters into foreign currency forward exchange contracts to manage the effects of fluctuations in foreign currency exchange rates on its net cash flows from non-U.S. dollar denominated operations. For the year ended December 31, 2022, the Company recognized net unrealized losses of $1.5 million and net unrealized gains of $0.2 million and $0.4 million, for the years ended December 31, 2021 and 2020, respectively, within interest income and other income (expense), net in its consolidated statements of operations, related to mark-to-market adjustments on its undesignated foreign currency forward contacts. See Note 14 for additional information.

The Company's 2.95% Convertible Senior Notes due 2026 ("Convertible Notes") are recorded within long-term debt in its consolidated balance sheets at their carrying value, which may differ from their fair value. The fair value of Convertible Notes is estimated using external pricing data, including any available market data for other debt instruments with similar characteristics. The following table summarizes the carrying value and the estimated fair value of the Company's Convertible Notes, based on Level II measurements of the fair value hierarchy:

	December 31, 2022		December 31, 2021	
	Carrying Value	Estimated Fair Value	Carrying Value	Estimated Fair Value
	(In thousands)			
Convertible Notes	$ 236,000	$ 180,752	$ 236,000	$ 234,348

5. Leases

The Company leases certain equipment and computers under finance lease arrangements, as well as office facilities and managed data center facilities under non-cancelable operating lease arrangements for its U.S. and international locations that expire on various dates through 2033. These arrangements require the Company to pay certain operating expenses, such as taxes, repairs and insurance and contain renewal and escalation clauses. The Company's options to extend or terminate a lease are not included in the lease terms, unless the Company is reasonably certain it will exercise that option. The Company's leases generally do not contain any material restrictive covenants.

The Company's minimum lease payments include fixed payments for non-lease components included in the lease agreement, but exclude variable lease payments that are not dependent on an index or rate, such as common area maintenance, operating expenses, utilities, or other costs that are subject to fluctuations from period to period. Non-lease components that are variable in nature are recorded as variable lease expenses in the period incurred.

The following table summarizes assets and liabilities related to the Company's operating and finance leases:

	Consolidated Balance Sheet Location	December 31, 2022
		(In thousands)
Lease assets		
Operating leases	Operating lease right-of-use assets, net	$ 11,065
Finance leases	Property, equipment and capitalized software, net	1,858
Total lease assets		$ 12,923
Lease liabilities		
Current liabilities:		
Operating leases	Accrued and other current liabilities	$ 3,236
Finance leases	Accrued and other current liabilities	1,758
Non-current liabilities:		
Operating leases	Operating lease liabilities, non-current	8,445
Finance leases	Other liabilities	254
Total lease liabilities		$ 13,693

The following table presents the components of the Company's total lease expense:

	Consolidated Statements of Operations Location	Year Ended December 31, 2022
		(In thousands)
Operating lease cost		
Fixed lease costs	Cost of revenue and operating expenses	$ 4,309
Variable lease costs	Operating Expenses	136
Short-term lease costs	Cost of revenue and operating expenses	564
Financing lease cost:		
Depreciation	Cost of revenue	2,962
Interest	Interest expense	259
Total lease cost		$ 8,230

As of December 31, 2022, the maturities of the Company's lease liabilities under operating and finance leases were as follows:

Year	Operating Leases	Finance Leases
	(In thousands)	
2023	$ 3,802	$ 1,842
2024	3,327	257
2025	2,936	—
2026	1,731	—
2027	1,030	—
Thereafter	192	—
Total minimum payments required	$ 13,018	$ 2,099
Less: imputed interest	(1,337)	(87)
Total present value of lease liabilities	$ 11,681	$ 2,012

As of December 31, 2022, the Company entered into one new operating lease agreement that has not yet commenced with future lease payments of approximately $2.4 million. The lease will commence in the first quarter of 2023 and have a lease term of ten years.

The following table summarizes weighted-average lease terms and discount rates for the Company’s leases:

	December 31, 2022
Weighted-average remaining lease term (in years)	
Operating leases	3.87 years
Finance leases	1.05 years
Weighted-average discount rate	
Operating leases	5.82%
Finance leases	7.34%

Supplemental cash flow information related to leases is as follows:

	Year Ended December 31, 2022
	(In thousands)
Cash paid for amounts included in measurement of lease liabilities:	
Operating cash outflows from operating leases	$ 4,246
Cash flows from finance leases	$ 3,190
New operating lease assets obtained in exchange for new lease obligations	$ 1,247

As of December 31, 2021, prior to the adoption of ASU 2016-02, future minimum lease payments under the Company’s non-cancelable operating leases and capital leases were as follows:

Year Ending December 31:	Operating Leases	Capital Leases
	(In thousands)	
2022	$ 4,214	$ 3,329
2023	3,128	1,741
2024	2,768	257
2025	2,630	—
2026	1,399	—
Thereafter	929	—
Total minimum payments required	$ 15,068	$ 5,327

6. Goodwill and Intangible Assets

The changes in the carrying value of the Company's goodwill balance was as follows:

	December 31, 2022	December 31, 2021
	(In thousands)	
Goodwill, opening balance	$ 32,881	$ 32,881
Acquisition of vi	30,182	—
Goodwill, closing balance	$ 63,063	$ 32,881

The Company has not recorded any accumulated impairments of goodwill.

The gross carrying amount and accumulated amortization of the Company's intangible assets are as follows:

	December 31, 2022			
	Weighted Average Amortization Period	Gross Value	Accumulated Amortization	Net Carrying Value
		(In thousands)		
Developed technology	5.8 years	$ 18,411	$ (9,652)	$ 8,759
Customer relationships	4.1 years	5,856	(5,022)	834
Publisher relationships	6.3 years	18,738	(8,782)	9,956
Trade names	8.7 years	5,279	(1,143)	4,136
Content Provider Relationships	5.0 years	284	(56)	228
Other	15.8 years	888	(227)	661
Total intangible assets, net		$ 49,456	$ (24,882)	$ 24,574

	December 31, 2021			
	Weighted Average Amortization Period	Gross Value	Accumulated Amortization	Net Carrying Value
		(In thousands)		
Developed technology	3.2 years	$ 8,425	$ (8,425)	$ —
Customer relationships	4 years	5,345	(4,050)	1,295
Publisher relationships	4 years	8,403	(5,777)	2,626
Trade names	8 years	1,665	(572)	1,093
Other	15.8 years	876	(171)	705
Total intangible assets, net		$ 24,714	$ (18,995)	$ 5,719

No impairment charges were recorded for the Company's intangible assets subject to amortization during the years ended December 31, 2022, 2021, and 2020.

As of December 31, 2022, estimated amortization related to the Company's identifiable acquisition-related intangible assets in future periods was as follows:

Year Ending December 31,	Amount (In thousands)
2023	$ 4,205
2024	3,463
2025	3,463
2026	3,463
2027	3,264
Thereafter	6,716
Total	$ 24,574

7. Long-Term Debt

Convertible Notes

On July 1, 2021, the Company completed the sale of $200 million aggregate principal amount of senior subordinated secured notes due July 1, 2026 (the "Notes"), in a private placement to institutional investors affiliated with the funds managed by The Baupost Group, L.L.C. (the "Baupost Investors"), pursuant to a Senior Subordinated Secured Note Purchase Agreement dated July 1, 2021 (the "Note Purchase Agreement"). Upon issuance of the Notes, the Company recorded a $36.0 million discount in connection with the embedded conversion feature, as well as deferred financing costs of $6.0 million in its consolidated balance sheet. The Notes, which were exchanged and cancelled upon the IPO, bore interest that accrued at the rate of (i) prior to July 1, 2024, 10.0% per annum and (ii) on and after July 1, 2024, 14.5% per annum, payable quarterly and were guaranteed by certain of the Company's wholly-owned subsidiaries and secured by a second priority lien on all of the Company's and its subsidiaries' tangible and intangible assets, subject to certain excluded assets, permitted liens and customary exceptions.

On July 27, 2021, in connection with the closing of the Company's IPO and pursuant to the terms of the Note Purchase Agreement, the Company exchanged $200 million aggregate principal amount of the Notes due July 1, 2026 for $236.0 million aggregate principal amount of the Company's 2.95% Convertible Senior Notes due 2026 (the "Convertible Notes"), pursuant to an indenture, dated as of July 27, 2021 (the "Indenture"), between the Company and The Bank of New York Mellon, as trustee. Upon the issuance of such Convertible Notes, the Notes and the obligations of the Company and the guarantee thereunder have been canceled and extinguished. The Convertible Notes will mature on July 27, 2026, unless earlier converted, redeemed or repurchased. In connection with the exchange of Notes to Convertible Notes, the Company recognized accelerated amortization of the unamortized discount and deferred issuance costs relating to the Notes totaling $42.0 million, which was recorded within charges related to exchange of senior notes upon IPO in the Company's consolidated statement of operations for the year ended December 31, 2021. Deferred financing costs related to Convertible Notes were not material.

Interest on the Convertible Notes accrues from July 27, 2021 and is payable semi-annually in arrears on January 27 and July 27 of each year, beginning on January 27, 2022, at a rate of 2.95% per year. The initial conversion rate for the Convertible Notes is 40 shares of the Company's common stock per $1,000 principal amount of Convertible Notes (equivalent to an initial conversion price of $25 per share of the Company's common stock), subject to adjustment.

The Company may not redeem the Convertible Notes prior to July 27, 2024. On or after July 27, 2024, the Company may redeem for cash all or any portion of the Convertible Notes, at its option, if the last reported sale price of the common stock has been at least 130% of the conversion price then in effect for at least 20 trading days (whether or not consecutive) during any 30 consecutive trading day period (including the last trading day of such period) ending on, and including, the trading day immediately preceding the date on which the Company provides notice of redemption at a redemption price equal to 100% of the principal amount of the Convertible Notes to be redeemed plus accrued and unpaid interest to, but excluding, the redemption date. In addition, calling any Convertible Note for redemption will constitute a "make-whole fundamental change" (as defined in the Indenture) with respect to that Convertible Note, in which case the conversion rate applicable to the conversion of that Convertible Note will be increased if it is converted by holders after it is called for redemption.

Holders may convert all or any portion of their Convertible Notes, in multiples of $1,000 principal amount, into shares of the Company's common stock at any time until the second scheduled trading day immediately preceding the maturity date, at the conversion rate then in effect. The Company will settle conversions of the Convertible Notes by paying or delivering, as the case may be, cash, shares of common stock, or a combination thereof, at its election.

Upon the occurrence of a fundamental change (as defined in the Indenture), subject to certain conditions, holders of the Convertible Notes may require the Company to repurchase for cash all or any portion of their Convertible Notes in principal amounts of $1,000 or an integral multiple thereof, at a repurchase price of the principal amount of the Convertible Notes to be repurchased, plus accrued and unpaid interest to, but excluding, the repurchase date. In addition, following certain corporate events that occur prior to the maturity date or if the Company delivers a notice of redemption, the Company will, in certain circumstances, increase the conversion rate for a holder who elects to convert its Convertible Notes in connection with such a corporate event or convert its Convertible Notes called for redemption during the related redemption period, as the case may be. The Indenture contains customary covenants and events of default.

The Company was not required to bifurcate the embedded conversion feature and the Convertible Notes were not issued with a substantial premium. As such, the Company accounted for the Convertible Notes as a liability under the no proceeds allocated model. The Company calculates earnings per share using the if-converted method.

Revolving Credit Facility

On November 2, 2021, the Company entered into the Second Amended and Restated Loan and Security Agreement with Silicon Valley Bank ("SVB") (the "2021 Revolving Credit Facility"), which provides, subject to borrowing availability and certain other conditions, for revolving loans in an aggregate principal amount of up to $75.0 million (the "Facility"), with a $15.0 million sub-facility for letters of credit. The Company's borrowing availability under the Facility is calculated by reference to a borrowing base which is determined by specified percentages of eligible accounts receivable. The Facility will terminate on the earlier of (i) November 2, 2026 or (ii) 120 days prior to the maturity date of the Company's 2.95% Convertible Senior Notes due 2026, unless the Convertible Notes have been converted to common equity securities of the Company.

Outstanding loans under the Facility accrue interest, at the Company's option, at a rate equal to either (a) a base rate minus an applicable margin ranging from 1.5% to 1.0% per annum or (b) LIBOR plus an applicable margin of 1.5% to 2.0% per annum, in each case based upon borrowing availability under the Facility. The undrawn portions of the commitments under the Facility are subject to a commitment fee at a rate ranging from 0.20% per annum to 0.30% per annum, based upon borrowing availability under the Facility.

The 2021 Revolving Credit Facility contains representations and warranties, including, without limitation, with respect to collateral; accounts receivable; financials; litigation, indictment and compliance with laws; disclosure and no material adverse effect, each of which is a condition to funding. Additionally, the 2021 Revolving Credit Facility includes events of default and customary affirmative and negative covenants applicable to the Company and its subsidiaries, including, without limitation, restrictions on liens, indebtedness, investments, fundamental changes, dispositions, restricted payments and prepayment of the Convertible Notes and of junior indebtedness. The 2021 Revolving Credit Facility contains a financial covenant that requires, in the event that credit extensions under the Facility equal or exceed 85% of the available commitments under the Facility or upon the occurrence of an event of default, the Company to maintain a minimum consolidated monthly fixed charge coverage ratio of 1.00.

The obligations of the Company, and the other subsidiary co-borrowers under the 2021 Revolving Credit Facility are secured by a first-priority lien on substantially all the assets of the Company and such other subsidiary co-borrowers.

The Company was in compliance with all of the financial covenants under its 2021 Revolving Credit Facility as of December 31, 2022 and December 31, 2021. As of December 31, 2022 and December 31, 2021, the Company had no borrowings outstanding under the 2021 Revolving Credit Facility and its available borrowing capacity was $70.7 million and 75.0 million, respectively, based on the defined borrowing formula. Other assets in the Company's consolidated balance sheets as of December 31, 2022 and December 31, 2021 included deferred financing costs of $0.4 million and $0.5 million, respectively, which are being amortized over the term of the 2021 Revolving Credit Facility. See Note 14 for additional information.

8. Income Taxes

The components of (loss) income before income taxes and the income tax provision (benefit) are as follows:

	Year Ended December 31,		
	2022	2021	2020
		(In thousands)	
United States	$ (11,707)	$ (38,175)	$ (8,213)
Foreign	(6,866)	23,640	15,863
(Loss) income before provision for income taxes	$ (18,573)	$ (14,535)	$ 7,650

	Year Ended December 31,		
	2022	2021	2020
		(In thousands)	
Current provisions for income taxes:			
Federal	$ —	$ —	$ —
State	744	541	81
Foreign	9,117	5,739	5,468
Total current provision for income taxes	9,861	6,280	5,549
Deferred tax benefit:			
Federal	(792)	(25,787)	226
State	(1,153)	(5,558)	46
Foreign	(1,908)	(465)	(2,528)
Total deferred tax benefit	(3,853)	(31,810)	(2,256)
Provision (benefit) for income taxes	$ 6,008	$ (25,530)	$ 3,293

The reconciliation of the statutory federal income tax and the Company's effective income tax is as follows:

	Year Ended December 31,		
	2022	2021	2020
Tax at statutory federal rate	21.0 %	21.0 %	21.0 %
State tax—net of federal benefit	1.7 %	1.9 %	(3.9)%
Foreign withholding taxes	(2.0)%	(2.9)%	25.4 %
Foreign rate differential [1]	(11.8)%	3.2 %	(9.6)%
Stock compensation and other permanent items	(5.1)%	(24.9)%	10.0 %
Tax rate change	(0.1)%	(4.4)%	(3.4)%
Uncertain tax positions	(22.0)%	(18.9)%	(11.2)%
Change in valuation allowance	(13.6)%	209.4 %	(32.0)%
GILTI Inclusion—US	— %	(19.3)%	59.4 %
Foreign tax credit carryforwards	— %	4.9 %	(5.9)%
Capital loss carryforwards	— %	— %	(19.9)%
Return to provision adjustments	(0.4)%	5.4 %	11.8 %
Other	— %	0.2 %	1.3 %
Effective tax rate	(32.3)%	175.6 %	43.0 %

[1] Primarily relates to higher tax rates relating to certain of the Company's European operations.

Deferred taxes are the result of temporary differences between the bases of assets and liabilities for financial reporting and income tax purposes. Deferred tax assets and liabilities at December 31, 2022 and 2021 were comprised of the following:

	December 31,	
	2022	2021
	(In thousands)	
Deferred tax assets:		
Net operating loss carryforwards	$ 15,005	$ 21,498
Foreign tax credit carryforwards	1,048	1,797
Capital loss carryforwards	3,398	3,388
Stock-based compensation	1,110	396
Accruals, reserves, and other	6,276	6,458
Senior notes interest & deferred financing fees	10,033	10,275
Capitalization of research and development costs	13,946	—
Allowance for credit losses	1,409	1,017
Gross deferred tax assets	52,225	44,829
Valuation allowance	(15,629)	(10,731)
Total deferred tax assets	36,596	34,098
Deferred tax liabilities:		
Intangible assets and capitalized software	(6,181)	(2,859)
Total deferred tax liabilities	(6,181)	(2,859)
Net deferred tax assets	$ 30,415	$ 31,239

The Company regularly assesses the need for the valuation allowance on its deferred tax assets, and to the extent that it determines that an adjustment is needed, such adjustment will be recorded in the period that the determination is made.

During the fourth quarter of 2021, the Company reassessed the need for a valuation allowance, considering, among other things, its cumulative pre-tax book income, excluding one-time expenses, in the three-year period ended December 31, 2021, its projected future taxable income, and the scheduled reversals of its deferred tax liabilities. After weighing all of the evidence, the Company determined that the positive evidence in favor of releasing a portion of the valuation allowance outweighed the negative evidence against releasing the allowance on certain U.S. deferred tax assets, and concluded that it is more likely than not that the majority of the U.S. deferred tax assets will be realized. As a result, during the fourth quarter of 2021, the Company released $31.8 million of its U.S. valuation allowance.

During 2022, after weighing all of the evidence, the Company determined that the positive evidence, particularly the evidence that was objectively verifiable, continued to outweigh the negative evidence. However, upon evaluating its forecasted state taxable income, the Company increased its valuation allowance against state net operating loss carryforwards by $2.8 million at December 31, 2022. As of each reporting date, the Company will continue to consider existing evidence, both positive and negative, that could impact its view with regard to future realization of deferred tax assets. It is possible that the valuation allowance could change in the next 12 months.

Recognition of deferred tax assets is appropriate when realization of these assets is more likely than not. Based upon the weight of available evidence, which includes the Company's historical operating performance and the recorded cumulative net losses in prior fiscal periods, the Company recorded a valuation allowance of $15.6 million and $10.7 million against certain deferred tax assets as of December 31, 2022 and December 31, 2021, respectively. The net valuation allowance increased by $4.9 million and decreased by $30.5 million for the years ended December 31, 2022 and 2021, respectively.

As of December 31, 2022 and 2021, the Company had U.S. federal net operating loss carryforwards of $13.2 million and $56.6 million, respectively. The federal net operating loss carryforwards will expire at various amounts beginning in the year ending December 31, 2032, if not utilized. As of December 31, 2022 and 2021, the Company had state net operating loss carryforwards of $117.5 million and $120.5 million, respectively. State net operating losses will expire at various amounts beginning in the year ending December 31, 2025, if not utilized. As of December 31, 2022, the Company had Swiss net operating loss carryforwards of $14.4 million, which will expire in various amounts beginning in tax year 2023, if not utilized. As of December 31, 2022 and 2021, the Company had U.K. foreign tax credits of $1.0 million and $1.8 million, respectively, which can be carried forward indefinitely.

Utilization of the net operating losses may be subject to an annual limitation provided for in the Code under Section 382 and similar state codes. As of December 31, 2022, $2.9 million of federal net operating losses are currently limited from use under such provisions and any annual limitation could result in the expiration of net operating loss carryforwards before utilization.

While the Company has recognized the U.S. federal tax impact on a portion of the undistributed earnings of its foreign subsidiaries under the Tax Cuts and Jobs Act, enacted in 2017 ("Tax Act"), its policy with respect to foreign earnings remains unchanged and the Company considers them to be indefinitely reinvested. Upon distribution of those earnings in the form of a dividend or otherwise, the Company could be subject to taxes, including withholding taxes payable to various foreign countries, for which a deferred tax liability is not currently recognized.

On August 16, 2022, the U.S. enacted the Inflation Reduction Act of 2022, which among other things implements a 15% minimum tax on adjusted financial statement income of certain large corporations and a 1% excise tax on net stock repurchases. Based on the Company's current analysis of the provisions, this legislation is not expected to have a material impact on its audited consolidated financial statements, based on the Company's current share repurchase program.

In addition, a provision enacted as part of the 2017 Tax Cuts & Jobs Act requires companies to capitalize certain research and experimental expenditures for tax purposes in tax years beginning after December 31, 2021. As a result, the Company's net operating loss utilization has increased in 2022 as compared to prior years.

Unrecognized Tax Benefits

The activity related to the gross amount of unrecognized tax benefits is as follows:

	Year Ended December 31,		
	2022	2021	2020
		(In thousands)	
Beginning balance	$ 3,272	$ 1,232	$ 2,087
Decreases due to tax settlements	(464)	(616)	(1,172)
Decreases due to expirations of statutes of limitations	(93)	(112)	(71)
Additions based on tax positions related to prior year	1,617	2,323	67
Additions based on tax positions related to current year	3,020	445	321
Ending balance	$ 7,352	$ 3,272	$ 1,232

If recognized, the Company's gross unrecognized tax benefits would not have a material impact on its effective tax rate for the year ended December 31, 2022. While it is often difficult to predict the outcome of any particular uncertain tax position, the Company believes it is reasonably possible that its unrecognized tax benefits will decrease by approximately $1.6 million during the next 12 months. The Company further expects that the amount of unrecognized tax benefits will continue to change in the future as a result of ongoing operations, the outcomes of audits, and the expiration of the statute of limitations. This change is not expected to have a significant impact on the Company's results of operations or financial condition.

The Company recognizes accrued interest and penalties related to unrecognized tax benefits in its income tax provision (benefit). For the years ended December 31, 2022, 2021 and 2020, the Company recognized $0.9 million, $(0.1) million, and $(0.1) million of accrued interest and penalties, respectively, which are reflected in the table above.

The Company is subject to taxation in the United States, various states, and several foreign jurisdictions. The Company establishes reserves for open tax years for uncertain tax positions that may be subject to challenge by various taxing authorities. The consolidated tax provision and related accruals include the impact of such reasonably estimable losses and related interest and penalties as deemed appropriate. United States and foreign jurisdictions have statutes of limitations generally ranging from 3 to 5 years. However, the statute of limitations does not begin for years that a net operating loss carryforward was generated until the loss is applied against taxable income. In that scenario, the taxing authority can only make adjustments in the original loss year to the extent of the net operating loss. Open audit years in the United States are 2013 through 2022, in the U.K. are 2017 through 2022 and in Israel are 2020 through 2022. The Company is currently under audit in the U.K. for tax years 2018-2020.

9. Commitments and Contingencies

Legal Proceedings and Other Matters

From time to time, the Company may become subject to legal proceedings, claims and litigation arising in the ordinary course of business. In addition, the Company may receive letters alleging infringement of patent or other intellectual property rights. The Company is not currently a party to any material legal proceedings, nor is it aware of any pending or threatened litigation that, in its opinion, would have a material adverse effect on its business, operating results, cash flows or financial condition should such litigation be resolved unfavorably.

On April 29, 2021, the Company was notified that the Antitrust Division of the U.S. Department of Justice is conducting a criminal investigation into the hiring practices in its industry that includes the Company. The Company is continuing to cooperate with the Antitrust Division. While there can be no assurance regarding the ultimate resolution of this matter, the Company does not believe that its conduct violated applicable law.

10. Stockholders' Equity (Deficit)

In July 2021, the Company's certificate of incorporation was amended and restated to provide the Company with the authority to issue up to 1.1 billion shares, comprised of 1.0 billion shares of $0.001 par value common stock and 0.1 billion shares of $0.001 par value preferred stock. Each holder of common stock is entitled to one vote with respect to each share of common stock and is entitled to dividends, if and when declared by the Company's Board of Directors (the "Board"), subject to preferential rights of preferred stockholders.

Initial Public Offering

On July 22, 2021, the Company's Form S-1, filed on June 29, 2021, as amended, was declared effective by the U.S. Securities and Exchange Commission (the "SEC") in connection with the Company's IPO of the Company's common stock and its common stock began trading on Nasdaq on July 23, 2021. On July 27, 2021, the Company closed its IPO and issued 8,000,000 shares of its common stock at an initial offering price of $20.00 per share, receiving aggregate net proceeds of $145.1 million, after deducting underwriting discounts, commissions and other offering costs.

Deferred offering costs of $3.7 million primarily consisted of accounting, legal and other transaction costs directly related to the IPO. Prior to the IPO, deferred offering costs were recorded within prepaid expenses and other current assets on the Company's consolidated balance sheet. Upon the Company's IPO, such costs were reclassified to additional paid-in capital within stockholders' equity (deficit) and recorded against the proceeds of the offering.

Reverse Stock Split

In July 2021, the Company's Board and stockholders approved a 1-for-1.7 reverse stock split of its common and convertible preferred stock. The reverse stock split became effective on July 13, 2021. The par value of the common stock was not adjusted as a result of the reverse stock split. In addition, adjustments corresponding to the reverse stock split were made to the ratio at which the convertible preferred stock converted into common stock immediately prior to the closing of the IPO, in accordance with existing terms of the convertible preferred stock. All share and per-share amounts for all periods presented in these audited consolidated financial statements and notes thereto reflect the effect of the reverse stock split.

Convertible Preferred Stock

Prior to the IPO, the Company issued Series A-H convertible preferred stock. In connection with the IPO, all of the shares of the Company's convertible preferred stock outstanding automatically converted into an aggregate of 28,091,267 shares of the Company's common stock, with all series converted on a one-to-one basis, with the exception of Series F, which was converted at 1.14-to-1, based on the terms of the Series F agreement and the IPO price. The total carrying value of convertible preferred stock of $162.4 million was reclassified to stockholders' equity (deficit). As of December 31, 2022 and 2021, there were no shares of convertible preferred stock issued and outstanding.

Share Repurchases

On February 28, 2022, the Company's Board of Directors (the "Board") approved a share repurchase program under which the Company was authorized to purchase up to $30 million of the Company's common stock, par value $0.001 per share, with no requirement to purchase any minimum number of shares. During 2022, the Company repurchased 6,389,129 shares with a fair value of $30.2 million, including commissions, under its repurchase program and there was no remaining availability under this share repurchase program as of December 31, 2022.

On December 14, 2022, the Company's Board approved a new share repurchase program, authorizing the Company to repurchase up to $30 million of its common stock, par value $0.001 per share, with no requirement to purchase any minimum number of shares. The manner, timing, and actual number of shares repurchased under the program will depend on a variety of factors, including price, general business and market conditions, and other investment opportunities. Shares may be repurchased through privately negotiated transactions or open market purchases, including through the use of trading plans intended to qualify under Rule 10b5-1 under the Exchange Act. The repurchase program may be commenced, suspended or terminated at any time by the Company at its discretion without prior notice. Repurchases under the Company's new $30 million share repurchase program will commence in 2023.

In addition, the Company may periodically withhold shares to satisfy employee tax withholding obligations arising in connection with the vesting of restricted stock units and exercise of options and warrants in accordance with the terms of the Company's equity incentive plans and the underlying award agreements. During 2022, 2021 and 2020, the Company withheld 245,465 shares, 1,032,995 shares and 27,769 shares, respectively, with a fair value of $2.5 million, $14.2 million and $0.3 million, respectively, to satisfy the minimum employee tax withholding obligations.

Accumulated Other Comprehensive (Loss) Income

The following table details the changes in accumulated other compressive (loss) income ("AOCI"), net of tax:

	Foreign currency translation (loss) income	Unrealized losses on marketable securities	Total accumulated other comprehensive (loss) income
Balance–January 1, 2020	$ (5,523)	$ —	$ (5,523)
Other comprehensive income, net of tax	1,233	—	1,233
Balance–December 31, 2020	(4,290)	—	(4,290)
Other comprehensive loss, net of tax	(184)	—	(184)
Balance–December 31, 2021	(4,474)	—	(4,474)
Other comprehensive loss, net of tax	(3,870)	(1,569)	(5,439)
Balance–December 31, 2022	$ (8,344)	$ (1,569)	$ (9,913)

There were no amounts reclassified from AOCI to earnings during any of the periods presented.

11. Stock-based Compensation

Equity Incentive Plans

In July 2021, the Board and the Company's stockholders approved the 2021 Long-Term Incentive Plan (the "2021 LTIP"), which became effective in connection with the closing of the Company's IPO. The 2021 LTIP may be used to grant, among other award types, stock options and restricted stock units ("RSUs"). The number of shares of common stock reserved for future issuance under the 2021 Plan will also be increased pursuant to provisions for annual automatic evergreen increases. The Company's previous awards issued under its 2007 Omnibus Securities and Incentive Plan, as amended and restated on January 21, 2009 ("2007 Plan"), remain subject to the 2007 Plan. As of December 31, 2022, approximately 5,942,000 and 356,000 and shares were available for grant under the 2021 LTIP and the 2007 Plan, respectively. The Company generally issues new shares for stock option exercises and vesting of restricted stock units.

The Company recognizes stock-based compensation for stock-based awards, including stock options, RSUs and stock appreciation rights ("SARs") based on the estimated fair value of the awards. The Company estimates the fair value of its stock option awards on the grant date using the Black-Scholes option pricing model. The fair value of RSUs is the fair value of the Company's common stock on the date of grant. The Company accounts for forfeitures as they occur.

The following table summarizes stock-based compensation expense recognized in the Company's consolidated statements of operations for the periods presented:

	Year Ended December 31,		
	2022	2021	2020
		(In thousands)	
Research and development	$ 2,355	$ 3,959	$ 810
Sales and marketing	4,938	8,656	2,071
General and administrative	4,367	13,692	707
Total stock-based compensation	$ 11,660	$ 26,307 [(1)]	$ 3,588
Tax benefit related to stock-based compensation expense	$ 1,560	$ 4,482	$ 98

(1) Includes $16.5 million of stock-based compensation expense recorded during the three months ended September 30, 2021, in connection with the Company's stock option awards, restricted stock awards, RSUs and SARs for which the service condition has been met and a performance condition was satisfied upon the Company's IPO, which was a qualifying liquidity event. Stock-based compensation expense for unvested awards will be recognized over the remainder of the requisite service period.

During the years ended December 31, 2022, 2021 and 2020, approximately $0.9 million, $0.2 million and $0.2 million, respectively, of stock-based compensation expense was capitalized by the Company as part of capitalized software development costs within property, equipment and capitalized software, net.

Stock Options

The following table summarizes stock option activity for the year ended December 31, 2022:

	Stock Options			
	Number of Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value of Outstanding Options (In thousands)
Outstanding — December 31, 2021	3,482,900	$ 8.11	4.87	$ 20,513
Granted	—	$ —		
Exercised	(639,084)	$ 4.02		
Forfeited/expired	(162,380)	$ 8.28		
Outstanding — December 31, 2022	2,681,436	$ 9.08	4.49	$ —
Exercisable — December 31, 2022	2,191,342	$ 8.64	3.75	$ —

The aggregate intrinsic value of options exercised in 2022 was $3.0 million. The tax benefit from 2022 stock option exercises was $0.1 million. As of December 31, 2022, total unrecognized stock-based compensation related to unvested stock options was $2.3 million, which is expected to be recognized over a weighted-average period of 2.0 years.

There were no stock options granted in 2022. The estimated grant-date fair value of all of the Company's stock options granted in 2021 and 2020 was calculated using the Black-Scholes option pricing model, based on the following assumptions and inputs, each of which is subjective and generally requires significant judgment:

	Year Ended December 31,	
	2021	2020
Grant date fair value	5.95	$4.61
Expected term (in years)	6.03	6.02
Risk-free interest rate	1.29 %	0.52 %
Expected volatility	43 %	44 %
Dividend rate	0 %	0 %

Expected term. The expected term represents the period over which the Company's option awards are expected to be outstanding, determined using the simplified method, based on the average of the time to the vest date and the contractual term.

Risk-Free Interest Rate. The risk-free interest rate is based on the U.S. Treasury yield curve on the date of grant for zero-coupon U.S. Treasury notes with maturities corresponding to the awards' expected term.

Expected Volatility. Due to the Company's short trading history, expected term is estimated using average historical stock volatilities of comparable actively traded public companies within its industry over a period equal to the awards' expected term.

Dividend rate. The expected dividend rate was assumed to be zero as the Company has not paid and does not anticipate paying any dividends in the foreseeable future.

Fair value of common stock. For stock options granted subsequent to the Company's IPO, fair value is based on the closing price of its common stock reported on Nasdaq on the date of grant. Prior to the Company's IPO, because there was no public market for its common stock, the fair value was determined by its board of directors, with input from management and valuation reports performed by third-party valuation specialists.

Restricted Stock Units

The following table summarizes RSU activity for the year ended December 31, 2022:

	RSUs	
	Number of Shares	**Weighted-Average Grant Date Fair Value**
Outstanding—December 31, 2021	1,848,142	$ 11.61
Granted	2,230,666	$ 8.98
Vested	(976,840)	$ 10.84
Forfeited	(316,458)	$ 11.09
Outstanding—December 31, 2022	2,785,510	$ 9.87

All of the Company's restricted stock awards and certain of the Company's RSUs had a performance condition, which was met upon the Company's IPO and the expense was recognized based on the requisite service period that has been met to date.

For restricted stock units granted subsequent to the Company's IPO, the fair value is based on the closing price of its common stock reported on Nasdaq on the date of grant. Prior to the Company's IPO, because there was no public market for its common stock, the fair value was determined by its board of directors, with input from management and valuation reports performed by third-party valuation specialists. The weighted-average grant-date fair value for restricted stock units granted in 2022, 2021 and 2020 was $8.98, $13.53 and $10.95, respectively. As of December 31, 2022, the unrecognized stock-based compensation cost related to unvested RSUs was $26.0 million, which is expected to be recognized over a weighted average period of 2.8 years.

Stock Appreciation Rights (SARs)

In 2014, the Company granted SARs with a contractual term of 10 years, to certain employees. These awards vest subject to performance conditions and can be cash or share settled, at the option of the employee. The Company's SARs vested upon the Company's IPO and are accounted for as liability awards, with remeasurement at the end of each reporting period until these awards are settled. As of December 31, 2022, 3,390 SAR awards were outstanding with a weighted average exercise price of 7.67, a weighted average remaining contractual term of 1.8 years and an aggregate intrinsic value of $0.

Stock-Based Awards Granted Outside of Equity Incentive Plans

Warrants

The Company issued equity classified warrants to purchase shares of common stock to certain third-party advisors, consultants and financial institutions, which expire between 2024 and 2026. The following table summarizes warrant activity outside of the Plan and related information:

	Warrants Outstanding			
	Number of Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value of Outstanding Warrants (In thousands)
Outstanding—December 31, 2021	376,470	$ 7.57	3.37	$ 2,420
Warrants exercised	(188,235)	7.57		
Outstanding and exercisable—December 31, 2022	188,235	$ 7.57	2.37	$ —

Employee Stock Purchase Plan

In July 2021, the Board and the Company's stockholders approved a new 2021 Employee Stock Purchase Plan (the "ESPP"), which became effective in connection with the closing of the Company's IPO. A total of approximately 1,830,000 shares of the Company's common stock have been reserved for issuance under the ESPP, which is subject to annual automatic evergreen increases. As of December 31, 2022, no shares have been purchased under the ESPP as it is not yet active.

12. Net (Loss) Income Per Common Share

Prior to the Company's IPO in 2021, the Company applied the two-class method to calculate basic and diluted (loss) income per share attributable to common stockholders as shares of its convertible preferred stock, when outstanding, were participating securities due to their participation rights. The two-class method is an earnings allocation method under which earnings per share is calculated for common stock considering a participating security's rights to undistributed earnings as if all such earnings had been distributed during the period. The Company's participating securities were not included in the computation of loss per share attributable to common stockholders in periods of net loss because the convertible preferred stockholders had no contractual obligation to participate in losses. Subsequent to its adoption of ASU 2020-06 on January 1, 2021, the Company utilized the if-converted method to calculate the dilutive impact of Convertible Notes for the years ended December 31, 2022 and 2021, and its previously outstanding convertible preferred stock on its earnings per share for the year ended December 31, 2021.

	Year Ended December 31,		
	2022	2021	2020
	(In thousands, except share and per share data)		
Numerator:			
Basic and diluted:			
Net (loss) income	$ (24,581)	$ 10,995	$ 4,357
Less: undistributed income allocated to participating securities	—	—	(2,688)
Net (loss) income attributable to common stockholders	$ (24,581)	$ 10,995	$ 1,669
Denominator:			
Basic weighted-average shares used in computing net (loss) income attributable to common stockholders, basic	55,615,385	35,159,757	16,816,178
Weighted average dilutive share equivalents:			
Preferred stock, stock options, warrants and RSUs	—	18,734,590	3,370,624
Diluted weighted-average shares used in computing net (loss) income attributable to common stockholders	55,615,385	53,894,347	20,186,802
Net (loss) income per share attributable to common stockholders:			
Basic	$ (0.44)	$ 0.31	$ 0.10
Diluted	$ (0.44)	$ 0.20	$ 0.08

The following weighted-average shares have been excluded from the calculation of diluted net (loss) income per share attributable to common stockholders for each period presented because they are anti-dilutive:

	Year Ended December 31,		
	2022	2021	2020
Convertible preferred stock	—	—	27,652,451
Options to purchase common stock	2,681,436	1,080,703	1,867,546
Convertible debt	9,440,000	9,440,000	—
Warrants	188,235	—	297,299
Restricted stock units	2,785,510	—	233,782
Total shares excluded from diluted net (loss) income per share	15,095,181	10,520,703	30,051,078

13. Segment and Geographic Information

The Company has one operating and reporting segment.

The following table represents total revenue based on where the Company's marketers are physically located:

	Year Ended December 31,		
	2022	2021	2020
	(In thousands)		
USA	$ 330,333	$ 372,855	$ 288,789
Europe, the Middle East and Africa (EMEA)	553,051	523,580	398,923
Other	108,698	119,195	79,430
Total revenue	$ 992,082	$ 1,015,630	$ 767,142

The Company's long-lived assets by geographic location, which are comprised of property, equipment and capitalized software, net and operating lease right-of-use assets, net are summarized below:

	December 31,	
	2022	2021
	(In thousands)	
USA	$ 43,191	$ 25,246
EMEA	7,181	2,638
Other	583	124
Total long-lived assets, net	$ 50,955	$ 28,008

14. Subsequent Events

On March 10, 2023, the Company learned that Silicon Valley Bank ("SVB") had been closed by the California regulators and the Federal Deposit Insurance Corporation ("FDIC") had been appointed as receiver. On March 12, 2023, the Department of the Treasury, Federal Reserve and FDIC approved actions enabling the FDIC to complete its resolution of SVB in a manner that fully protects all depositors, and the Company has regained full access to the funds held by SVB. As a result of the closure of SVB, the Company's ability to collect payments from its customers through its operating accounts maintained at SVB has been impacted and may continue to be impacted. The Company is in the process of establishing an alternate operating account to which its customers can remit payments. The Company also has a revolving credit facility with SVB, which has not been drawn and it does not foresee any near-term needs to draw upon this facility. SVB is also the counterparty to the Company's forward foreign currency hedge contracts.

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosures

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our co-Chief Executive Officers ("co-CEOs") and Chief Financial Officer ("CFO"), has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) or 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")), as of December 31, 2022. Based on such evaluation, our co-CEOs and CFO have concluded that as of December 31, 2022, our disclosure controls and procedures are designed at a reasonable assurance level and are effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the SEC, and that such information is accumulated and communicated to our management, including our co-CEOs and CFO, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There were no changes to our internal control over financial reporting that occurred during the three months ended December 31, 2022 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management, including our co-CEOs and CFO, does not expect that our disclosure controls and procedures or internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well designed and implemented, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues within a company are detected.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act). We maintain internal control over financial reporting designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP.

Internal control over financial reporting includes maintaining records that, in reasonable detail, accurately and fairly reflect our transactions; providing reasonable assurance that transactions are recorded as necessary for the preparation of our consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; providing reasonable assurance that receipts and expenditures of company assets are made in accordance with management authorization; and providing reasonable assurance that unauthorized acquisition, use or disposition of company assets that could have a material effect on the consolidated financial statements would be prevented or detected on a timely basis. Because of its inherent limitations, internal control over financial reporting is not intended to provide absolute assurance that a misstatement of our consolidated financial statements would be prevented or detected.

Under the supervision and with the participation of our Co-Chief Executive Officers and Chief Financial Officer, our management conducted an evaluation of the effectiveness of our internal control over financial reporting based on the criteria set forth in "Internal Control—Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Based on this assessment, our management concluded that our internal control over financial reporting was effective at the reasonable assurance level as of December 31, 2022.

Attestation Report of the Independent Registered Public Accounting Firm

This Annual Report does not include an attestation report of our registered public accounting firm regarding internal control over financial reporting due to an exemption established by the JOBS Act for "emerging growth companies."

Item 9B. Other Information

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Information relating to the directors and executive officers of the Company, as well as information relating to compliance with Section 16(a) of the Securities Exchange Act of 1934, as required by this Item 10, will be contained in our definitive Proxy Statement to be filed with the SEC in connection with our 2023 annual meeting of stockholders pursuant to Regulation 14A not later than 120 days after December 31, 2022 (the "2023 Proxy Statement"), and such information is incorporated herein by reference.

The Company's corporate governance policies and procedures, including the Code of Business Conduct and Ethics and Charters of the Committees of the Board are available, free of charge, on its website under the headings Investors / Governance at https://investors.outbrain.com/governance/documents-charters, or by writing to Outbrain Inc., 111 West 19th Street, New York, New York 10011, c/o Corporate Secretary. The Company's Code of Business Conduct applies to all of its directors, officers and employees.

Item 11. Executive Compensation

Information relating to executive compensation and the Compensation Committee, as required by this Item 11, will be contained in the 2023 Proxy Statement, and such information is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information relating to certain beneficial ownership of certain stockholders and management, as well as certain other information required by this Item 12, will be contained in the 2023 Proxy Statement, and such information is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Information relating to director independence and certain relationships and related transactions, as required by this Item 13, will be contained in the 2023 Proxy Statement, and such information is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

Information relating to fees paid to and services performed by KPMG LLP and our Audit Committee's pre-approval policies and procedures with respect to non-audit services, as required by this Item 14, will be contained in the 2023 Proxy Statement, and such information is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) (1) Financial Statements

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(a) (2) Financial Statement Schedules

None.

(a) (3) Exhibits

See the Exhibit Index of this Annual Report on Form 10-K

EXHIBIT INDEX

Exhibit No.	Description
3.1	Twelfth Amended and Restated Certificate of Incorporation of the Company, as currently in effect (incorporated by reference to Exhibit 3.5 to the Company's Form S-1/A filed with the SEC on July 20, 2021).
3.2	Amended and Restated By-laws of the Company, as currently in effect (incorporated by reference to Exhibit 3.4 to the Company's Form S-1/A filed with the SEC on July 20, 2021).
4.1	Specimen stock certificate (incorporated by reference to Exhibit 4.1 to the Company's Form S-1/A filed with the SEC on July 20, 2021).
4.2	Amended and Restated Investors' Rights Agreement by and among the Company and the other parties thereto dated April 1, 2019 (incorporated by reference to Exhibit 4.2 to the Company's Form S-1 filed with the SEC on June 29, 2021)
4.3	Warrant to purchase shares of common stock issued to Silicon Valley Bank dated September 29, 2016 (incorporated by reference to Exhibit 4.3 to the Company's Form 10-K filed with the SEC on March 18, 2022).
4.4	Warrant to purchase shares of common stock issued to Silicon Valley Bank dated November 20, 2014 (incorporated by reference to Exhibit 4.4 to the Company's Form S-1 filed with the SEC on June 29, 2021).
4.5	Indenture, dated as of July 27, 2021, by and between Outbrain Inc. and The Bank of New York Mellon, as trustee (incorporated herein by reference to Exhibit 4.1 to the Company's Form 8-K filed with the SEC on July 28, 2021).
4.6	Form of 2.95% Convertible Senior Note due 2026 (incorporated herein by reference to Exhibit 4.2 to the Company's Form 8-K filed with the SEC on July 28, 2021).
4.7	Description of Registrant's Securities (incorporated by reference to Exhibit 4.7 to the Company's Form 10-K filed with the SEC on March 18, 2022).
10.1	Form of Indemnification Agreement between the Registrant and its directors and officers (incorporated by reference to Exhibit 10.1 to the Company's Form S-1/A filed with the SEC on July 20, 2021).
10.2	Second Amended and Restated Loan and Security Agreement, dated as of November 2, 2021, by and among the Company, as lead borrower, certain of its domestic subsidiaries, as co-borrowers, and Silicon Valley Bank, as lender (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed with the SEC on November 8, 2021).
10.3†	2007 Omnibus Securities and Incentive Plan, as amended and restated, and foreign addenda (incorporated by reference to Exhibit 10.3 to the Company's Form S-1 filed on June 29, 2021).
10.4†	2021 Long-Term Incentive Plan, and foreign addenda (incorporated by reference to Exhibit 10.4 to the Company's Form S-1/A filed with the SEC on July 20, 2021).
10.5†	Form of Restricted Stock Unit Agreement under the Outbrain Inc. 2021 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 to the Company's Form 10-Q filed with the SEC on May 16, 2022).
10.6†	Amended and Restated Employment Agreement, dated July 19, 2021, by and between Elise Garofalo and the Company (incorporated by reference to Exhibit 10.11 to the Company's Form S-1/A filed with the SEC on July 20, 2021).
10.7†	First Amendment to Amended and Restated Employment Agreement, dated August 25, 2022, by and between the Company and Elise Garofalo (incorporated by reference to Exhibit 10.2 to the Company's Form 10-Q filed with the SEC on November 10, 2022).
10.8†	Executive Employment Agreement, dated July 19, 2021, by and between Yaron Galai and the Company (incorporated by reference to Exhibit 10.12 to the Company's Form S-1/A filed with the SEC on July 20, 2021).
10.9†	Executive Employment Agreement, dated July 19, 2021, by and between David Kostman and the Company (incorporated by reference to Exhibit 10.13 to the Company's Form S-1/A filed with the SEC on July 20, 2021).
10.10†	Executive Employment Agreement, dated August 3, 2022, by and between the Company and Jason Kiviat (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K/A filed with the SEC on August 5, 2022.)
10.11†	Form of 2021 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.14 to the Company's Form S-1/A filed with the SEC on July 20, 2021).

Exhibit No.	Description
10.12	English Translation of Unprotected Lease Agreement dated January 17, 2017 by and between Cash and Carry Food Services Ltd. and Outbrain Israel Ltd. (incorporated by reference to Exhibit 10.15 to the Company's Form S-1 filed with the SEC on June 29, 2021).
10.13	English Translation of Addendum C dated June 30, 2022 to the Lease Agreement by and between Cash and Carry Food Services Ltd. and Outbrain Israel Ltd. (incorporated by reference to Exhibit 10.1 to the Company's Form 10-Q filed with the SEC on August 12, 2022).
10.14	Senior Subordinated Secured Note Purchase Agreement dated July 1, 2021 by and between the Registrant, Baupost Private Investments A-2, L.L.C., Baupost Private Investments B-2, L.L.C., Baupost Investments C-2, L.L.C., Baupost Private Investments P-2, L.L.C., Baupost Private Investments Y-2, L.L.C., Baupost Private Investments BVI-2, L.L.C., Baupost Private Investments BVII-2, L.L.C., Baupost Private Investments BVIII-2, L.L.C., Baupost Private Investments BVIV-2, L.L.C. and The Bank of New York Mellon (incorporated by reference to Exhibit 10.17 to the Company's Form S-1/A filed with the SEC on July 6, 2021).
10.15	Sublease Agreement dated July 14, 2021 by and between Dineinfresh, Inc. d/b/a Plated and the Company (incorporated by reference to Exhibit 10.18 to the Company's Form S-1/A filed with the SEC on July 20, 2021).
21.1*	List of subsidiaries of the Company.
23.1*	Consent of KPMG LLP, independent registered public accountants.
24.1*	Power of attorney (included in signature page of this Annual Report on Form 10-K).
31.1*	Certification of Principal Executive Officer Pursuant To Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Principal Executive Officer Pursuant To Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.3*	Certification of Principal Financial Officer Pursuant To Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*❖	Certification of the Principal Executive Officers and Principal Financial Officer Pursuant To 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document
104*	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Filed herewith.

❖ This certification is not deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act.

† Compensatory plan or agreement.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

OUTBRAIN INC.

By: /s/ David Kostman

Name: David Kostman

Title: *Co-Chief Executive Officer*

Date: March 15, 2023

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Yaron Galai, David Kostman, Jason Kiviat and Veronica Gonzalez, jointly and severally, his or her attorney-in-fact, with the power of substitution, for him or her in any and all capacities, to sign any amendments to this Annual Report on Form 10-K and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signatures	Title	Date
/s/ Yaron Galai Yaron Galai	Co-Founder and Co-Chief Executive Officer and Chairman of the Board (principal executive officer)	March 15, 2023
/s/ David Kostman David Kostman	Co-Chief Executive Officer and Director (principal executive officer)	March 15, 2023
/s/ Jason Kiviat Jason Kiviat	Chief Financial Officer (principal financial officer)	March 15, 2023
/s/ Wenkai Bradshaw Wenkai Bradshaw	Chief Accounting Officer and SVP, Corporate Controller (principal accounting officer)	March 15, 2023
/s/Yoni Cheifetz Jonathan (Yoni) Cheifetz	Director	March 15, 2023
/s/Nithya B. Das Nithya B. Das	Director	March 15, 2023
/s/Shlomo Dovrat Shlomo Dovrat	Director	March 15, 2023
/s/ Kate Taneyhill Jhaveri Kate Taneyhill Jhaveri	Director	March 15, 2023
/s/Yaffa Krindel Yaffa Krindel	Director	March 15, 2023
/s/Arne Wolter Arne Wolter	Director	March 15, 2023

Executive Officer, Director and Stockholder Information

Executive Officers

Yaron Galai
Co-Founder and Co-Chief Executive Officer

David Kostman
Co-Chief Executive Officer

Jason Kiviat
Chief Financial Officer

Directors

Yaron Galai
Chairman of the Board, Co-Founder
and Co-Chief Executive Officer, Outbrain Inc.

Jonathan (Yoni) Cheifetz
Partner, Lightspeed Ventures

Nithya b. Das
Former Chief Operating Officer
and Chief Legal Officer at Olo Inc.

Shlomo Dovrat
Co-Founder, Viola Group and General Partner
and Co-Founder, Viola Ventures

David Kostman
Co-Chief Executive Officer, Outbrain Inc.

Yaffa Krindel
Retired Managing Partner of Star Ventures

Kate Taneyhill Jhaveri
Global Head of Marketing, TikTok

Arne Wolter
Chief Sales and Marketing Officer, Statista

Stockholder Information

Corporate Headquarters
Outbrain Inc.
111 West 19th Street
New York, NY 10011
(646) 867-0149

Annual Stockholders' Meeting
June 15, 2023
www.virtualshareholdermeeting.com/OB2023

Stock Market Listing
The Nasdaq Stock Market LLC
Symbol: OB

Transfer Agent and Registrar
Questions regarding stock holdings, certificate replacement/transfer and address changes should be directed to:

American Stock Transfer & Trust Company, LLC
6201 15th Avenue
Brooklyn, NY 11219
Toll-free: (800) 937-5449
International: +1 (718) 921-8124
Email: helpAST@equiniti.com
Website: www.astfinancial.com

Annual Report on Form 10-K
and Other Company Information
The Company's Annual Report on Form 10-K will be sent without charge to any stockholder upon request by contacting:

Outbrain Inc.
Investor Relations Office
111 West 19th Street
New York, NY 10011
(646) 867-0149

In addition, the Company's financial reports and recent filings with the Securities and Exchange Commission, including our Form 10-K, as well as other Company information, are available via the Internet on our website at investors.outbrain.com.