

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, 2023
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: 001-40464

ZETA GLOBAL HOLDINGS CORP.

(Exact name of Registrant as specified in its Charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

3 Park Ave, 33rd Floor
New York, NY 10016
(Address of principal executive offices)

80-0814458
(I.R.S. Employer
Identification No.)

10016
(Zip Code)

Registrant's telephone number, including area code: (212) 967-5055

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A common stock, par value \$0.001 per share	ZETA	The New York Stock Exchange

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	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Small reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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 Exchange Act). YES ☐ NO ☒

As of June 30, 2023, the aggregate market value of the registrant's Class A common stock, \$0.001 par value, held by non-affiliates of the registrant was approximately \$1.2 billion (based upon the closing sale price of the Class A common stock on June 30, 2023 on The New York Stock Exchange). The market value of the registrant's Class B common stock is not included in the above value as there is no active market for such stock.

The number of shares of registrant's Class A common stock outstanding as of February 16, 2024 was 189,361,292. The number of shares of registrant's Class B common stock outstanding as of February 16, 2024 was 29,055,489.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement relating to its 2024 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2023 are incorporated herein by reference in Part III.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), which involve substantial risks and uncertainties. All statements made in this Annual Report on Form 10-K that are not statements of historical fact, including statements about our beliefs and expectations and regarding future events or our future results of operations, financial condition, business, strategies, financial needs, and the plans and objectives of management, are forward-looking statements and should be evaluated as such. These statements often include words such as “anticipate,” “expect,” “suggests,” “plan,” “believe,” “intend,” “estimates,” “targets,” “projects,” “should,” “could,” “would,” “may,” “will,” “forecast” and other similar expressions or the negative of those terms. We base these forward-looking statements on our current expectations, plans and assumptions that we have made in light of our experience in the industry, as well as our perceptions of historical trends, current conditions, expected future developments and other factors we believe are appropriate under the circumstances at such time. As you read this Annual Report on Form 10-K, you should understand that these statements are not guarantees of future performance or results. The forward-looking statements are subject to and involve risks, uncertainties and assumptions, and you should not place undue reliance on these forward-looking statements. Although we believe that these forward-looking statements are based on reasonable assumptions at the time they are made, you should be aware that many factors could affect our business, results of operations and financial condition and could cause actual results to differ materially from those expressed in the forward-looking statements. Factors that may cause actual results to differ materially from current expectations include, but are not limited to:

- Our success and revenue growth depends on our ability to add and retain scaled customers and convert our scaled customers into super-scaled customers;
- We often have long sales cycles, which can result in significant time between initial contact with a potential customer and execution of a customer agreement, making it difficult to project when, if at all, we will generate revenue from those customers;
- We may experience fluctuations in our operating results, which could make our future operating results difficult to predict;
- If we do not manage our growth effectively, the quality of our platform and solutions may suffer, and our business, operating results and financial condition may be adversely affected;
- Our industry is intensely competitive, and if we do not effectively compete against current and future competitors or fail to innovate and make the right investment decisions in our product offerings and platform, our business, operating results and financial condition could be harmed;
- Future acquisitions or strategic investments could be difficult to identify and integrate, divert the attention of management and disrupt our business, dilute stockholder value and adversely affect our business, operating results and financial condition;
- The technology industry is subject to increasing scrutiny that could result in U.S. federal or state government actions that could negatively affect our business;
- Our business and the effectiveness of our platform depends on our ability to collect and use data online. New consumer tools, regulatory restrictions and potential changes to web browsers and mobile operating systems all threaten our ability to collect such data, which could harm our operating results and financial condition and adversely affect the demand for our products and solutions;
- Actual or perceived failures to comply with applicable data protection, privacy and security laws, regulations, standards and other requirements could adversely affect our business, results of operations and financial condition;
- Any unfavorable publicity or negative public perception of current data collection practices could result in additional regulations which may impact the effectiveness of our data cloud and platform;
- A significant inadvertent disclosure or breach of confidential and/or personal information we process, or a security breach of our or our customers’, suppliers’ or other partners’ IT Systems could be detrimental to our business, reputation, financial performance and results of operations;
- We depend on third-party data centers, systems and technologies to operate our business, the disruption of which could adversely affect our business, operating results and financial condition;
- If we fail to detect or prevent fraud or malware intrusion on our platform, devices, or systems, or into the systems or devices of our customers and their consumers, publishers could lose confidence in our platform, and we could face legal claims and regulatory investigations, any of which could adversely affect our business, operating results and financial condition;

- The standards that private entities and inbox service providers adopt in the future to regulate the use and delivery of email may interfere with the effectiveness of our platform and our ability to conduct business;
- Any actual or perceived failure to comply with evolving regulatory frameworks around the development and use of artificial intelligence could adversely affect our business, results of operations, and financial condition;
- Catastrophic events such as pandemics, earthquakes, flooding, droughts, fire and power outages, and business and operational interruption by man-made problems such as war, conflicts and acts of terrorism; and
- Other factors discussed in other sections of this Annual Report on Form 10-K, including the section titled “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

You should not place undue reliance on our forward-looking statements and you should not rely on forward-looking statements as predictions of future events. The results, events and circumstances reflected in the forward-looking statements may not be achieved or occur, and actual results, events or circumstances could differ materially from those described in the forward-looking statements. The forward-looking statements made in this Annual Report on Form 10-K should not be construed to be exhaustive and speak only as of the date of this report. We undertake no obligation to update any forward-looking statements made in this Annual Report on Form 10-K to reflect events or circumstances after the date of this Annual Report on Form 10-K or to reflect new information or the occurrence of unanticipated events, except as required by law. If we update one or more forward-looking statements, no inference should be drawn that we will make additional updates with respect to those or other forward-looking statements.

Unless the context otherwise requires, references in this Annual Report on Form 10-K to “Zeta,” “we,” “us,” “our” or “the Company” refer to Zeta Global Holdings Corp. and its consolidated subsidiaries.

Our Website and Availability of SEC Reports and Other Information

The Company maintains a website at the following address: <https://zetaglobal.com>. The information on the Company’s website is not incorporated by reference in, or otherwise to be regarded as part of this Annual Report on Form 10-K.

We make available on or through our website certain reports and amendments to those reports we file with or furnish to the Securities and Exchange Commission (“SEC”) pursuant to Section 13(a) or 15(d) of the Exchange Act. These include our annual reports on Form 10-K, our quarterly reports on Form 10-Q, and our current reports on Form 8-K. We make this information available on our website free of charge as soon as reasonably practicable after we electronically file the information with, or furnish it to, the SEC.

Investors and others should note that we routinely announce material information to investors and the marketplace using SEC filings, press releases, public conference calls, webcasts, and the Zeta Global Investor Relations website. We use these channels as well as social media channels (e.g., the Zeta Facebook account (facebook.com/ZetaGlobal); the Zeta Instagram account (instagram.com/zetaglobal); the Zeta X account (twitter.com/zetaglobal); and the Zeta LinkedIn account (linkedin.com/company/zetaglobal)) as a means of disclosing information about our business to our customers, colleagues, investors, and the public. While not all of the information that we post to the Zeta Investor Relations website or on our social media channels is of a material nature, some information could be deemed to be material. Accordingly, we encourage investors, the media, and others interested in Zeta to review the information that we share on the Zeta Investor Relations website and on our social media channels. The information on the Zeta Investor Relations website and the Company’s social media channels is not incorporated by reference in, or otherwise to be regarded as part of, this Annual Report on Form 10-K.

PART I

Item 1. Business.

Overview

Zeta is a leading omnichannel data-driven cloud platform that provides enterprises with consumer intelligence and marketing automation software. We empower our customers to target, connect and engage consumers through software that delivers personalized marketing across all addressable channels, including email, social media, web, chat, Connected TV (“CTV”) and video, among others. We believe our actionable insights derived from consumer intent enable our customers to acquire, grow and retain consumer relationships more efficiently and effectively than the alternative solutions available in the market.

Our Zeta Marketing Platform, or ZMP, is the largest omnichannel marketing platform with identity data at its core. The ZMP can analyze billions of structured and unstructured data points to predict consumer intent by leveraging sophisticated machine learning algorithms and the industry’s largest opted-in data set for omnichannel marketing. The ZMP acts on these insights by connecting with consumers through native integration of marketing channels and API integration with third parties. The ZMP’s data-driven algorithms and processes learn and optimize each customer’s marketing program in real time, producing a ‘flywheel effect’ that enables our customers to test, learn and improve their marketing programs in real time.

The ZMP empowers our customers to personalize consumer experiences at scale across multiple touchpoints. Marketing programs are created and orchestrated by our customers through automated workflows and sophisticated dashboards. Our Consumer Data Platform (“CDP+”) ingests, analyzes and distills disparate data points to generate a single view of a consumer, encompassing identity, profile characteristics, behaviors and purchase intent, which is then made accessible through a single console. Our Agile Intelligence suite (formerly known as Opportunity Explorer) synthesizes Zeta’s proprietary data and data generated by our customers to uncover consumer insights that are translated into marketing programs designed for highly targeted audiences across digital channels, including email, SMS, websites, applications, social media, CTV and chat.

We designed the ZMP using a flexible, service-oriented architecture in order to facilitate rapid development of new solutions, to meet evolving industry demands and to support new use cases and marketing requirements. The ZMP is hosted in the Zeta Hybrid Cloud, which is a unique pairing of a public cloud (AWS/Google/Azure) deployment and self-hosted private cloud (VMware/Docker/Kubernetes) resources designed to facilitate workload management in a cost-effective, performant and efficient manner.

We have also dedicated significant resources to the goal of building customer trust by developing and implementing programs designed to protect data privacy and to promote a secure technical environment. The resources we dedicated to this goal include engineers, analysts, lawyers, policy experts and operations specialists, as well as hardware and software from leading vendors and solutions we have designed and built. In particular, we have implemented a number of technical innovations, process enhancements and industry solutions in response to our increased obligations with respect to our data. For example, we can identify and implement user consent parameters and opt-in or opt-out as applicable and can evaluate whether such consents apply to our various data sources, products or customers.

The ZMP is built on the following four pillars:

1. Opted-in Data Set

Our data set is an amalgamation of our private proprietary data, publicly available data and data provided by our partner ecosystem.

Our data set contains more than 240 million opted-in individuals in the U.S. and more than 535 million opted-in individuals globally with an average of more than 2,500 attributes per individual, which may be demographic, behavioral, psychographic, transactional, or indicative of preference. On average, we ingest more than one trillion content consumption signals per month on a global basis and synthesize this information into hundreds of intent-based audiences, which can then be used to create marketing programs. All this data is managed through a proprietary database structure that has patented flexibility, speed and scalability.

2. Patented AI Engine

We believe our proprietary data is key to our AI engine. We analyze this data through extensive application of AI technologies, including machine learning, natural language processing, and generative AI. We leverage our AI technologies and data within the ZMP to:

- Seamlessly collect and ingest structured and unstructured data into the ZMP;
- Detect PII and apply data governance in accordance with business, state, and federal rules and regulations;
- Quickly and reliably analyze key consumer attributes and signals;
- Identify consumer intent by running sophisticated algorithms to analyze data;
- Cluster related concepts and prioritize actionable insights to create intent-based graphs;
- Create audiences comprised of individuals or affinity-driven clusters scored based on intent;
- Forecast experience-based outcomes at an individual and audience level;
- Personalize content to make experiences more relevant for the consumer and profitable for the enterprises; and
- Create channel and content recommendations to optimize marketing performance.

3. Omnichannel Engagement

Our platform provides integrated access to a wide range of omnichannel inventory and data sources, as well as third-party services and platforms. The ZMP integrates these third-party sources and services to enable our customers to deploy their targeted marketing programs through a wider range of channels, devices and formats, all within a single platform. This enables our customers to improve how they identify and engage the modern consumer who is using multiple devices and platforms (e.g., mobile, website, applications, social media, CTV and email).

4. Performance Optimization

Zeta's platform provides real-time results to our customers through a graphical dashboard and makes recommendations for improvement through the same graphical interface. Our AI engineers continuously update the machine learning algorithms to improve the overall ROI for our customers.

Our Platform and Products

The ZMP is a single platform designed to enable enterprises to acquire, grow and retain consumer relationships more efficiently and effectively than alternative solutions available in the market. The platform consists of three core products (CDP, ESP, DSP) with modules that can be "turned on" to meet our customers' specific business needs. Artificial intelligence is native to the ZMP, unlocking new capabilities for creativity, automation, optimization, forecasting, planning, and onboarding. Our customers can purchase our products individually or in combination based on their evolving needs. We also offer various technical upgrades, consulting services, additional integrations, and access to ad-hoc data sources, services, and channels. As a result, our customers are incentivized to allocate an increasing percentage of their marketing budgets to our platform and to enter long-term contractual commitments.

Messaging – ESP

Zeta Messaging, our ESP offering, provides our customers with end-to-end omnichannel messaging capabilities. From segmentation to automation of campaigns, we deliver rich, individualized experiences that drive engagement through email, mobile, social and other channels. Using access to our intelligence tools, our ESP customers can expand their knowledge of their customers with past purchase behavior, channel preferences, real-time interests, and predictive intent. Our built-in artificial intelligence not only selects audiences and automates campaigns, but it can also optimize content and recommendations dynamically, based on our intelligence-driven understanding of customer needs, interests, and forecasted behavior. As a component of the ZMP, Zeta Messaging offers integrated data management, enterprise-scale delivery and support, and sophisticated omnichannel orchestration. Our customers benefit from an account team committed to their success and backed by experts in strategy, content creation, data and analytics.

Data Management – CDP

Our customers can use Zeta CDP as their system of record for all consumer information. Zeta CDP delivers a single, actionable view of customers and prospects that include real-time identifiers and attributes. Customers can consolidate multiple databases and internal and external data feeds, and organize their data based on their unique needs and performance metrics. Enriched with intent-based scoring from our proprietary data, Zeta CDP makes it possible to identify anonymous website visitors and engage them across multiple channels with meaningful, individualized experiences. Zeta CDP has extensive technical flexibility and can adjust to custom data schemas with limited or no pre-configuration required. If necessary, we can also engineer a deeper level of data integration between Zeta CDP and a customer's unique marketing infrastructure.

Activation - DSP

Zeta Activation aims to help our customers to maximize the power of paid media to engage the right audiences where and how they want to be reached, with personalized messages determined by billions of real-time signals and predictive insights. Zeta Activation delivers highly personalized, targeted experiences via desktop, mobile, CTV and social, among other channels. It operates on one of the industry's most durable and persistent identity graphs, anchored by people-based identifiers with minimal reliance on third-party cookies. In turn, Zeta Activation provides more precise analytics and attribution, with zero-to-minimal data loss across channels, and can be used to intelligently optimize media spend. Through our single-platform approach, we can integrate paid media and multichannel campaigns to deliver true cross-channel marketing across desktop, mobile, display and video, CTV, search, email, and web, among other channels. We offer one of the largest proprietary data sets in the U.S., informing the campaigns that our customers launch with rich, actionable insights. Our superior integrated data management capabilities can update individual profiles with new data instantaneously.

Intelligence - Agile

Actionable intelligence is the foundation of the ZMP and our products. We showcase our differentiated capability to synthesize trillions of behavioral signals into intent-based scores tied to a unique individual through our Agile Intelligence product suite. Based on our proprietary data and uniquely modeled intender scores, our Agile Intelligence suite can present immediate and actionable opportunities within the ZMP that our customers can then use to generate growth. A closed-loop cycle from insight to activation enables our AI engine to quickly learn from the available data, identify the best data signals and create accurate and up-to-date Zeta Identity Graphs™. The Agile Intelligence suite is woven into the fabric of the ZMP and is accessible through five product modules: MarketPulse, CustomerPulse, DMAPulse, AudiencePulse and CompetitorPulse.

- *MarketPulse* provides marketers with real-time notifications and longitudinal visualizations representing changes in consumer sentiment and interest.
- *CustomerPulse* provides marketers with real-time, actionable insights across acquisition, retention and growth opportunities derived by enriching a customer's data with Zeta data.
- *DMAPulse* provides marketers with real-time, actionable insights on designated market areas that should receive increased or decreased investments to optimize market share and customer acquisition efficiency.
- *AudiencePulse* provides marketers with real-time, actionable insights on more than 900 Zeta audiences predicting consumer intent and interest.
- *CompetitorPulse* provides marketers with actionable insights on the business's competitive set and opportunities to capture market share and prevent customer attrition.

Our customers can use all five of the modules or choose any individual module to obtain data-cloud based insights on their existing consumers and prospects. We offer Agile Intelligence suite for a licensing fee and/or an incremental fee based on customers' utilization of the ZMP. The terms of our subscription agreements are typically quarterly or annual.

Our Growth Strategies

Our data and AI-powered platform enables our customers to transform their digital marketing strategy, accelerate their revenue growth and enhance business returns. In turn, our customers' success motivates them to increase their use of our platform, thereby accelerating our revenue and growth. Key elements of our long-term growth strategy include:

Further penetrate our existing customer base. We have customers spanning a wide spectrum of industry verticals and we believe we can achieve significant organic growth by cross-selling our existing solutions, making full use of our data capabilities and insights and by capturing an increased share of our scaled customers' marketing spend by introducing new features and functionalities within the ZMP.

Acquire new scaled customers. We intend to aggressively pursue new scaled customers by investing in our sales and customer service teams while driving increased efficiencies in our go-to-market approach. We also intend to focus on converting our scaled customers into new super-scaled customers. The Agile Intelligence suite also serves as a sales accelerator to help acquire and grow new customers. We also have extensive relationships with many marketing agencies and enterprises and believe we can extend our platform to provide B2B marketing capabilities.

Continue to innovate and develop new products. With over 500 data scientists and engineers, we believe we are well positioned to quickly develop new products and take full advantage of the shift to digital marketing. Since we view data as one of our key competitive advantages, we will also continue to invest resources to expand our data offerings, both from third-party providers, as well as our proprietary data sources.

Continue to strengthen our partnership ecosystem and expand sales capacity. With a focus on growing our sales capacity, we are building a sophisticated sales operation to focus on opportunity creation and progression. We believe these new capabilities will allow us to further strengthen our relationships with our existing customers and gain global market share.

Expand into international markets. As we expand relationships with our existing customers in the U.S., we are also investing in select regions in Europe.

Our Key Strengths

Zeta’s competitive strengths historically have included the following:

Omnichannel Engagement

Through the ZMP, our customers are able to identify and target consumers across a wide range of digital channels. These channels can work independently, in parallel or in concert depending on the marketing strategies and tactics of our customers. Many of these channels, such as email and programmatic, are native to the ZMP, while others, such as social media, are accessed through API integrations with companies, such as Facebook and Snap.

Actionable Insights

Our customers can use the Agile Intelligence suite module in the ZMP to obtain and take action on high-value consumer insights in real-time. The ZMP monitors, aggregates and synthesizes the behaviors of individuals globally across multiple points of interactions to predict interest and intent.

Recognized Leader in Marketing Automation

We believe our customers choose our platform over others because of its powerful, integrated and easy to use applications, rapid integration with various channels and technologies, and seamless onboarding of our customers’ and third-party data. We have been recognized by various third-party research reports as a leader in the marketing automation sector such as in 2022, when we were recognized as a “Leader” in The Forrester Wave™: Email Marketing Service Providers, Q1 2022 and received the highest possible scores across eight criteria including innovation roadmap, market approach, content management, dynamic content, and measuring engagement. In addition, in 2023, we were named as a Leader in IDC’s MarketScape for Worldwide Omni-Channel Marketing Platforms for B2C Enterprises.

Secure, Scalable and Reliable Platform

The ZMP has been designed to provide our customers with high levels of reliability, data integrity, performance and security. We built and maintain a multi-tenant application architecture that has been designed to enable our service to scale securely, reliably and cost-effectively to tens of thousands of customers and millions of users. Our multi-tenant application architecture maintains the integrity and separation of customer data while still permitting all customers to use the same application functionality simultaneously. Our architecture also enables us to segment access privileges across our user base.

Our Customers

We work with some of the largest and most well-known enterprises across a wide spectrum of industry verticals including consumer & retail, telecommunications, financial services, business services and insurance, which contributed 17%, 15%, 10%, 10% and 6% of our revenues for the year ended December 31, 2023 and 12%, 12%, 13%, 11% and 8% of our revenues for the year ended December 31, 2022, respectively. 97% of our revenue for the year ended December 31, 2023 was derived from scaled customers, which we define as customers from which we have generated trailing-12-month revenue of at least \$100,000. As a subset of scaled customers, we define super-scaled customers as customers from which we have generated trailing-12-month revenue of at least \$1,000,000. We had 1,242 and 1,155 total customers, and 452 and 403 scaled customers, including 131 and 103 super-scaled customers, as of December 31, 2023 and 2022, respectively.

Competition

The markets for our products are characterized by intense competition, new industry standards, evolving distribution models, disruptive technology developments, frequent product introductions, short product life cycles, price cutting with resulting downward pressure on gross margins and price sensitivity on the part of customers. Our future success will depend on our ability to enhance and better integrate our existing products, introduce new products on a timely and cost-effective basis, meet changing customer needs, provide best-in-class data security to maintain customer confidence and combat cyber-attacks, extend our core technology into new applications and anticipate emerging standards, business models, software delivery methods and other technological changes.

We believe no single company has offerings that match the comprehensive capabilities of the ZMP and CDP+, but we face collective competition from a variety of companies. Our competitive market is highly fragmented with most competitors focused on specific use cases, end markets and/or types of data sets and point solutions. We believe the principal factors that drive competition between vendors in our market include:

- Quality of insights and analytics;
- Omnichannel automation;
- Real-time scoring and decisioning of data sets;
- Utility of data management tools;
- Comprehensive systems integration;
- Ease and speed of data ingestion and data onboarding; and
- Scale and scope of identity and audience data.

We believe we compete favorably across these factors. In particular, we believe the ZMP's competitive advantages include:

- Intuitiveness and ease of use;
- Comprehensive feature set;
- Present workflows and automation;
- Rapid deployment;
- Flexibility and scalability;
- Seamless integration with a customer's existing technologies; and
- Favorable customer ROI and total cost of ownership.

For additional information, see the section titled "Risk Factors—Risks Related to Our Business and Industry—Our 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 harmed" and "Risk Factors—Risks Related to Data Collection and Security, Intellectual Property and Technology Industry Regulations— Our intellectual property rights may be difficult to enforce and protect, which could enable others to copy or use aspects of our technology without compensating us, thereby eroding our competitive advantages and having an adverse effect on our business, results of operations and financial condition."

Seasonality

In general, the marketing industry experiences seasonal trends that affect the vast majority of participants in the digital marketing ecosystem. Historically, marketing activity is higher in the fourth quarter of the calendar year to coincide with the holiday shopping season as compared to the first quarter. As a result, the subsequent first quarter tends to reflect lower activity levels and lower performance. We generally expect these seasonality trends to continue and our ability to effectively manage our resources in anticipation of these trends may affect our operating results.

Data Privacy & Security Laws

Contemporary consumers use multiple platforms to learn about and purchase products, and have come to expect a seamless experience across all channels. This challenges marketing organizations to balance the demands of the consumer for a seamless experience with privacy-compliant methods of managing data and using such data to create these experiences. The global data protection landscape is rapidly evolving, and we are or may become subject to numerous state, federal and foreign laws, requirements and regulations governing the collection, use, disclosure, retention, and security of data. In the U.S., both Congress and state legislatures, along with federal regulatory authorities, have continued to increase their attention on the collection and use of consumer data, including as it relates to internet-based marketing. California has enacted broad-based privacy legislation, the California Consumer Privacy Act (“CCPA”), as supplemented by the subsequent California Privacy Rights Act (“CPRA”), which came into force in 2023. State legislatures outside of California have proposed dozens of data privacy bills similar to, but distinct from, the CCPA/CPRA, and new laws have been adopted in Colorado and Virginia which also came into force in 2023. We anticipate that, as with the CCPA/CPRA, new laws in the U.S. at either the state or federal level will generally allow personal information collection by businesses as the default, so long as data use practices are made transparent to consumers and consumer rights are honored when requested (opt-out model), with the exception of select classes of “sensitive data.” To date, despite significant legislative activity around privacy in the states and at the federal level, there have been no significant or credible efforts at legislation that would require prior consent before data is used (opt-in model), apart from sensitive data. Zeta believes that a continued emphasis on an opt-out regime in the U.S. will mean a continued ability to collect and use non-sensitive personal data at scale for marketing purposes.

Outside the U.S., the General Data Protection Regulation (“GDPR”) (and the UK equivalent, the United Kingdom GDPR (“UK GDPR”)) remain in force in Europe, and, overlaid with country-level laws implementing the ePrivacy Directive, continues to raise questions about the application of these laws to third-party marketing technology companies such as Zeta. Many non-U.S., non-EU jurisdictions have also enacted or are developing laws and regulations governing the collection and use of personal data, including Brazil, Canada, Japan, Singapore, India, South Africa and others. These laws represent a spectrum of opt-in vs. opt-out models, with the GDPR establishing the most stringent set of requirements for obtaining consumer consent. These requirements have served as barriers to the expansion of Zeta’s business in these markets; Zeta has created compliant solutions, but has not been able in some cases to achieve sufficient scale of data collection to create compelling business cases for customers in these markets.

Human Capital

We believe that our employees love working at Zeta because they believe that they are working towards a larger mission. We pride ourselves in hiring the best global talent with employees across the U.S. (including New York and Silicon Valley), the EU, the UK and India. As of December 31, 2023, we had 1,783 employees, including 955 employees located outside of the U.S. None of our U.S. employees are represented by a labor union with respect to their employment. We consider our relations with our employees to be good and have not experienced interruptions of operations or work stoppages due to labor disagreements.

Diversity, Equity and Inclusion

Zeta is devoted to and invested in living our commitment to diversity, equity and inclusion, which we know drives more collaboration, innovation, and better outcomes for teams and individuals. Representation at Zeta, and ensuring an inclusive workplace where all feel like they belong and can bring their true selves at work, is at the core of Zeta’s DEI strategy. We strive to empower all talent to excel as unique individuals, while also providing a forum to connect for everyone to learn from one another and celebrate our differences.

Zeta is focused on ensuring equitable processes, standards, and policies. We also create awareness around different backgrounds, cultures and communities through global panel discussions, volunteering and mentoring opportunities, as well as providing comprehensive trainings to all employees.

We currently have five Employee Resource Groups (ERGs) with strong engagement and participation: Bridge Builders (Black Community), WING (Women's Community), PRIDE (LGBTQIA+ community), LiT (Latinx Community) and MOSIAC (AAPI Community). Each ERG also welcomes allies as we believe that creating meaningful change can only be achieved by working collectively as a united team.

Compensation, Benefits, and Employee Wellness

We aim to provide market-competitive compensation and benefit programs for our employees. To recruit and retain the best talent in a highly competitive marketplace, we routinely examine and refresh our compensation packages that may include salary, bonuses, sales commissions and equity. We believe by offering our full-time employees equity under our incentive award plan and providing an employee stock purchase plan, we can build a strong feeling of ownership and commitment to our shared long-term success.

In addition to our commitment to providing market-competitive compensation packages, we continue to look for ways to enhance our total rewards programs. Our full-time employees are offered medical, dental and vision insurance and life and disability insurance plans. These plans are designed to provide a comprehensive benefits package that is flexible and allows employees to maximize benefits based on individual needs. Furthermore, we provide the following programs, which vary by country/region: generous paid time off, family leave, flexible work schedules, and 401(k) matching.

Intellectual Property

We have a patent portfolio of more than 125 U.S. and international patents and applications which include 21 granted patents and 33 pending patent applications covering machine learning and artificial intelligence (AI). Our AI patents focus on integrating predictive personalization, outcome forecasting, and generative AI holistically throughout our products to increase efficiency, enhance user experience, and deliver better customer outcomes. Other aspects of our patent portfolio cover data governance, security, and management technology. Our key patents in these areas enhance the transferability and integrity of our data assets and the interoperability and scalability of our data platforms. We also currently own trademark registrations and applications for the ZETA and DISQUS names and variants thereof and other product-related marks in the United States and certain foreign countries. We have also registered numerous internet domain names related to our business. We also rely on copyright laws to protect creative aspects of our website and computer programs related to our platform and our proprietary technologies. In addition, we enter into confidentiality agreements and invention or work product assignment agreements with employees and contractors involved in the development of our proprietary intellectual property. We intend to pursue additional intellectual property protection to the extent we believe it would be beneficial and cost effective.

Item 1A. Risk Factors.

In addition to the other information set forth in this Annual Report on Form 10-K, you should carefully consider the risks and uncertainties described below, which could materially adversely affect our business, operating results, financial condition, and cash flow.

Summary of Risk Factors

We are providing the following summary of the risk factors contained in this Annual Report on Form 10-K to enhance the readability and accessibility of our risk factor disclosures. We encourage you to carefully review the full risk factors immediately following this summary as well as the other information in this report, including the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes. The risks and uncertainties described in this Annual Report on Form 10-K may not be the only ones we face. If any of the risks actually occur, our business, operating results, financial condition, cash flows and prospects could be materially and adversely affected. These risks and uncertainties include, but are not limited to, the following:

- Our success and revenue growth depends on our ability to add and retain scaled customers and convert our scaled customers into super-scaled customers.
- We often have long sales cycles, which can result in significant time between initial contact with a potential customer and execution of a customer agreement, making it difficult to project when, if at all, we will generate revenue from those customers.
- We may experience fluctuations in our operating results, which could make our future operating results difficult to predict.

- If we do not manage our growth effectively, the quality of our platform and solutions may suffer, and our business, operating results and financial condition may be adversely affected.
- Our industry is intensely competitive, and if we do not effectively compete against current and future competitors or fail to innovate and make the right investment decisions in our product offerings and platform, our business, operating results and financial condition could be harmed.
- Future acquisitions or strategic investments could be difficult to identify and integrate, divert the attention of management and disrupt our business, dilute stockholder value and adversely affect our business, operating results and financial condition.
- The technology industry is subject to increasing scrutiny that could result in U.S. federal or state government actions that could negatively affect our business.
- Our business and the effectiveness of our platform depends on our ability to collect and use data online. New consumer tools, regulatory restrictions and potential changes to web browsers and mobile operating systems all threaten our ability to collect such data, which could harm our operating results and financial condition and adversely affect the demand for our products and solutions.
- Actual or perceived failures to comply with applicable data protection, privacy and security laws, regulations, standards and other requirements could adversely affect our business, results of operations and financial condition.
- Any unfavorable publicity or negative public perception of current data collection practices could result in additional regulations which may impact the effectiveness of our data cloud and platform.
- A significant inadvertent disclosure or breach of confidential and/or personal information we process, or a security breach of our or our customers', suppliers' or other partners' IT Systems could be detrimental to our business, reputation, financial performance and results of operations.
- We depend on third-party data centers, systems and technologies to operate our business, the disruption of which could adversely affect our business, operating results and financial condition.
- If we fail to detect or prevent fraud or malware intrusion on our platform, devices, or systems, or into the systems or devices of our customers and their consumers, publishers could lose confidence in our platform, and we could face legal claims and regulatory investigations, any of which could adversely affect our business, operating results and financial condition.
- The standards that private entities and inbox service providers adopt in the future to regulate the use and delivery of email may interfere with the effectiveness of our platform and our ability to conduct business.
- Any actual or perceived failure to comply with evolving regulatory frameworks around the development and use of artificial intelligence could adversely affect our business, results of operations, and financial condition.
- Catastrophic events such as pandemics, earthquakes, flooding, droughts, fire and power outages, and business and operational interruption by man-made problems such as war, conflicts and acts of terrorism.

Risks Related to Our Business and Our Industry

Our success and revenue growth depends on our ability to add and retain scaled customers.

Our success is dependent on regularly adding new customers, in particular new scaled customers, and increasing our existing customers' usage of our platform in order to convert our scaled customers into super-scaled customers. We also continually work on converting our non-scaled customers into scaled customers. Many of our contracts and relationships with customers do not include automatic renewal or exclusive obligations requiring them to use our platform or maintain or increase their use of our platform. Our customers, in particular our scaled customers, typically have relationships with numerous providers and can use both our platform and those of our competitors without incurring significant costs or disruption. Our customers may also choose to decrease their overall marketing spend for any reason, including if they do not believe they are generating a sufficient return on their marketing spend. Further, we may not be successful at educating and training our new and existing customers on how to use our platform, in particular our advanced reporting tools, in order for them to benefit from it and generate revenues. Accordingly, we must continually work to win new scaled customers and educate and retain existing scaled customers, increase their usage of our platform and capture a larger share of their marketing spend, which may lead to an increase in our super-scaled customers.

In 2023, our top ten customers accounted for approximately one-third of our total revenue and no customer accounted for more than 10% of our total revenue. Occasionally, we enter into separate contracts and billing relationships with individual marketing agencies that are owned by the same holding company and account for them as separate customers. However, if a holding company of multiple marketing agencies chooses to exert control over the individual agencies in the future and terminate their relationship with us, it could result in a disproportionate loss of revenue.

A substantial portion of our revenue is derived from usage-based pricing, which is less stable than subscription-based pricing. If our customers, in particular our scaled customers, decide not to continue to use our platform or decrease their usage of our platform for any reason, or if we fail to attract new customers and turn them into scaled customers or super-scaled customers, our revenue could decline, which would materially and adversely harm our business, operating results and financial condition. We cannot assure that our scaled customers will continue to use and increase their spend on our platform or that we will be able to attract a sufficient number of new scaled customers to continue to grow our revenue. If scaled customers representing a significant portion of our business decide to materially reduce their use of our platform or cease using our platform altogether, our revenue could be significantly reduced, which could have a material adverse effect on our business, operating results and financial condition. We may not be able to replace scaled customers who decrease or cease their usage of our platform with new scaled customers that will use our platform to the same extent.

We often have long sales cycles, which can result in significant time between initial contact with a potential customer and execution of a customer agreement, making it difficult to project when, if at all, we will obtain new customers and when we will generate revenue from those customers.

As part of our sales efforts, we invest considerable time and expense evaluating the specific organizational needs of our potential customers and educating these potential customers about the technical capabilities and value of our platforms and solutions. We may spend substantial time and resources prospecting for new business or responding to requests for proposals from potential customers, and these efforts may not result in us ultimately generating any revenue from a potential customer. It is possible that we will be unable to recover any of these expenses.

Our results of operations also depend on sales to enterprise customers, which make product purchasing decisions based in part or entirely on factors, or perceived factors, not directly related to the features of our platform, including, among others, a customer's projections of business growth, uncertainty about economic conditions, capital budgets, anticipated cost savings from the implementation of our platform, potential preference for such customer's internally-developed software solutions, perceptions about our business and platform, more favorable terms offered by potential competitors, and previous technology investments. As a result of these and other factors, there can be no assurance that we will be successful in making a sale to a potential customer. If our sales efforts to a potential customer do not result in sufficient revenue to justify our investments, our business, operating results and financial condition could be adversely affected.

We are subject to payment-related risks if customers dispute, do not pay their invoices, or decrease their amount of spend due to unforeseen downturns in their financial condition. Any decreases or significant delays in payments could have a material adverse effect on our business, operating results and financial condition. These risks may be heightened during economic downturns or customer impacts from such downturns, including supply chain disruptions or shortages.

We may become involved in disputes with our customers over the operation of our platform, the terms of our agreements or our billings for purchases made by them through our platform. In the past, certain customers have sought to slow their payments to us or been forced into filing for bankruptcy protection, resulting in delay or cancellation of their pending payments to us. In certain cases, customers have been unable to timely make payments, and we have suffered losses. Certain of our contracts with marketing agencies state that if their customer does not pay the agency, the agency is not liable to us, and we must seek payment solely from their customer, a type of arrangement called sequential liability. Contracting with these agencies, which in some cases have or may develop higher-risk credit profiles, may subject us to greater credit risk than if we were to contract directly with the customer.

If we are unable to collect customers' fees on a timely basis or at all, we could incur write-offs for bad debt, which could have a material adverse effect on our business, operating results and financial condition for the periods in which the write-offs occur. In the future, bad debt may exceed reserves for such contingencies, and our bad debt exposure may increase over time. Even if we are not paid by our customers on time or at all, we may still be obligated to pay for the inventory we have purchased for our customers' marketing campaigns, and consequently, our results of operations and financial condition would be adversely impacted.

We may experience fluctuations in our operating results, which could make our future operating results difficult to predict.

Our quarterly and annual operating results have fluctuated in the past, and we expect our future operating results to fluctuate due to a variety of factors, many of which are beyond our control. Our liquidity and revenue can fluctuate quarter to quarter as certain of our customers have seasonal marketing activity. Historically, marketing activity is higher in the fourth quarter of the calendar year to coincide with the holiday shopping season as compared to the first quarter. As a result, the subsequent first quarter tends to reflect lower activity levels and lower performance. The varying nature of our pricing mix between periods, customers and products may also make it more difficult for us to forecast our future operating results. Further, these factors may make it more difficult to make comparisons between prior, current and future periods. As a result, period-to-period comparisons of our operating results should not be relied upon as an indication of our future performance.

In addition, the following factors may cause our operating results to fluctuate:

- Our usage-based pricing model makes it difficult to forecast revenues from our current customers and future prospects;
- changes in our pricing policies, the pricing policies of our competitors and the pricing or availability of data or other third-party services;
- the seasonal budgeting cycles and internal marketing budgeting and strategic purchasing priorities of our customers;
- our ability to retain and attract top talent;
- our ability to anticipate or respond to changes in the competitive landscape, or improvements in the functionality of competing solutions that reduce or eliminate one or more of our competitive advantages;
- our ability to maintain and expand our relationships with data centers and strategic third-party technology vendors, who provide floor space, bandwidth, cooling and physical security services on which our platform operates;
- our ability to successfully expand our business internationally;
- the emergence of significant privacy, data protection, security or other threats, regulations or requirements applicable to our business and shifting views and behaviors of consumers concerning use of data and data privacy;
- extraordinary expenses, such as litigation or other dispute-related settlement payments; and
- future accounting pronouncements or changes in our accounting policies.

Any one of the factors referred to above or herein or the cumulative effect of any combination of factors referred to above or herein may result in our operating results being below our expectations and the expectations of securities analysts and investors, or may result in significant fluctuations in our quarterly and annual operating results, including fluctuations in our key performance indicators ("KPIs"). This variability and unpredictability could result in our failure to meet our business plan or the expectations of securities analysts or investors for any period. In addition, a significant percentage of our operating expenses are fixed in nature in the short term and based on forecasted revenue trends. Accordingly, in the event of revenue shortfalls, we are generally unable to mitigate the negative impact on our results of operations in the short term.

If we do not manage our growth effectively, the quality of our platform and solutions may suffer, and our business, operating results and financial condition may be adversely affected.

The continued growth in our business may place demands on our infrastructure and our operational, managerial, administrative and financial resources. Our success will depend on the ability of our management 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;
- improve coordination among our engineering, product, operations and other support organizations;
- manage multiple relationships with various partners, customers and other third parties;
- manage international operations;
- develop our operating, administrative, legal, financial and accounting systems and controls; and
- recruit, hire, train and retain personnel, especially those possessing extensive engineering skills and experience in complex technologies and data sciences, of which there is limited supply and increasing demand.

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

Our industry is intensely competitive, and if we do not effectively compete against current and future competitors or fail to innovate and make the right investment decisions in our product offerings and platform, our business, operating results and financial condition could be harmed.

Our industry is intensely competitive. To sustain and grow our revenue, we must continuously respond to the different trends driving our industry. We generally have flexible master services agreements in place with our customers. Such agreements allow our customers to change the amount of spend through our platform or terminate our services with limited notice. As a result, the introduction of new entrants or technology that are superior to or that achieve greater market acceptance than our products and solutions could negatively impact our revenue. In such an event, we may experience a reduction in market share and may have to respond by reducing our prices, resulting in lower profit margins for us.

There has also been rapid evolution and consolidation in the marketing technology industry, and we expect this trend to continue. Larger companies typically have more assets to purchase emerging companies or technologies, which gives them a competitive edge. If we are not able to effectively compete with these consolidated companies, we may not be able to maintain our market share and may experience a reduction in our revenue.

Our industry is subject to rapid and frequent changes in technology, evolving customer needs and the frequent introduction of new and enhanced offerings by our competitors, making it intensely competitive. To sustain and grow our revenue, we must continuously respond to the different trends driving our industry. We must regularly make investment decisions regarding offerings and technology to maintain the technological competitiveness of our products and platform and meet customer demand and evolving industry standards. As we continue to grow and attract a broader customer base, we will have to invest more time and effort to maintain a certain level of performance in our products and platform.

The complexity and uncertainty regarding the development of new technologies and the extent and timing of market acceptance of innovative products and solutions create difficulties in maintaining this competitiveness. The success of any enhancement or new solution depends on many factors, including timely completion, adequate quality testing, appropriate introduction and market acceptance. If our competitors are able to orientate their product to meet the specific needs of a particular industry better than us, they may be able to amass market share faster than us and by consequence, reduce our current and future revenues.

Without the timely introduction of new products, solutions and enhancements, our offerings could become technologically or commercially obsolete over time, or we may be required to make unanticipated and costly changes to our platform or business model, in which case our revenue and operating results would suffer. New customer demands, superior competitive offerings or new industry standards could require us to make unanticipated and costly changes to our platform or business model. If we fail to enhance our current products and solutions or fail to develop new products to adapt to our rapidly changing industry or to evolving customers' needs, demand for our platform could decrease and our business, operating results and financial condition may be adversely affected.

Our use and reliance upon technology and development resources in India may expose us to unanticipated costs and liabilities, which could affect our ability to realize cost savings from our technology operations in India and other non-U.S. locations.

We conduct a significant amount of our technology and product development work in India and other global locations. We cannot ensure that our reliance upon development resources in India and other non-U.S. locations will enable us to achieve meaningful cost reductions or greater resource efficiency. Further, our operations in India involve significant risks, including:

- difficulty hiring and retaining engineering and management resources due to intense competition for such resources and resulting wage inflation;
- heightened exposure to changes in economic, security and political conditions, war, conflicts and acts of terrorism;
- different standards of protection for intellectual property rights and confidentiality protection;
- the effects of pandemics, epidemics or other health crises on general health and economic conditions; and
- fluctuations in currency exchange rates and tax compliance.

The enforcement of intellectual property rights and confidentiality protections in India may not be as effective as in the U.S. or other countries. Policing unauthorized use of proprietary technology is difficult and expensive and we might need to resort to

litigation to protect our trade secrets and confidential information. The experience and capabilities of Indian courts in handling intellectual property litigation vary, and outcomes are unpredictable. Further, such litigation may require significant expenditure of cash and management efforts and could harm our business, operating results and financial condition. An adverse determination in any such litigation will impair our intellectual property rights and may harm our business, operating results and financial condition.

We expect to continue to rely on significant cost savings obtained by concentrating our technology and development and engineering work in India and other non-U.S. locations, but difficulties resulting from the factors noted above and other risks related to our operations in India or such other non-U.S. locations could increase our expenses and harm our competitive position. The historical rate of wage inflation has been higher in India than in the U.S. In addition, if the Rupee strengthens against the U.S. Dollar, our costs would increase. If the cost of technology and development work in India significantly increases or the labor environment in India changes unfavorably, our cost savings may be diminished. Any such developments could adversely affect our business, operating results and financial condition.

Our success depends on our ability to retain key members of our management team, and on our ability to hire, train, retain and motivate new employees.

Our success depends upon the continued service of members of our senior management team and other key employees. Our Co-Founder and Chief Executive Officer, David Steinberg, is critical to our overall management, as well as the continued development of our platform, relationships with our customers and vendors and our overall strategic direction. We do not maintain “key person” insurance for any member of our senior management team or any of our other key employees. Our senior management and key personnel are all employed on an at-will basis, which means that they could terminate their employment with us at any time, for any reason and without notice. In addition, some of our key employees may receive significant proceeds from sales of our Class A common stock, which may reduce their motivation to continue to work for us. As a result, we may be unable to retain them, which could make it difficult to operate our business, cause us to lose expertise or know-how and increase our recruitment and training costs.

Our success also depends on our ability to hire, train, retain and motivate new employees. We have incurred substantial stock-based compensation expense and will continue to incur stock-based compensation expense in future years as a result of our equity compensation plan under which we grant time-based and performance-based restricted stock awards. Competition for employees in our industry can be intense, and we compete for experienced personnel with many companies that have greater resources than we have. The market for engineering talent is particularly intense in New York, where we are headquartered and in the San Francisco Bay Area, the EU and India where we have offices. Our future growth will also depend in part on our ability to establish sales teams that effectively solve problems and efficiently execute our objectives. We will need to establish teams that are well versed in complex and varied systems of distribution across national, regional and international markets. We believe that there is significant competition for sales personnel with the sales skills and technical knowledge that we require. Our ability to achieve growth in revenue in the future will depend, in large part, on our success in recruiting, training and retaining sufficient numbers of sales personnel with relevant industry knowledge and strong selling skills.

We believe our corporate culture has been critical to our success and we plan to continue to invest time and resources to continue building it. In particular, Diversity, Equity and Inclusion (“DEI”) is a strategic imperative at Zeta. Our DEI team is focused on driving inclusiveness, innovation and stronger business results by attracting a more diverse talent pool and creating a more inclusive work environment for all our employees around the world. Although we have adopted policies to promote compliance with laws and regulations as well as to foster a respectful workplace for all employees, our employees may fail to abide by these policies. In addition to damaging our reputation, actual or alleged misconduct could affect the confidence of our stockholders, regulators and other parties and could have a material adverse effect on our business, operating results and financial condition.

Future acquisitions or strategic investments could be difficult to identify and integrate, divert the attention of management and disrupt our business, dilute stockholder value and adversely affect our business, operating results and financial condition.

As part of our growth strategy, we may acquire or invest in other businesses, assets or technologies that are complementary to and fit within our strategic goals. Acquisitions are inherently risky and if they fail, they can result in costly remediating steps such as litigation and divestiture. Any acquisition or investment may divert the attention of management and require us to use significant amounts of cash, issue dilutive equity securities or incur debt. The anticipated benefits of any acquisition or investment may not be realized, and we may be exposed to unknown risks, any of which could adversely affect our business, operating results and financial condition, including risks arising from:

- difficulties in integrating the operations, technologies, product or service offerings, administrative systems and personnel of acquired businesses, especially if those businesses operate outside of our core competency or geographies in which we currently operate;

- ineffectiveness or incompatibility of acquired technologies or solutions;
- potential loss of key employees of the acquired businesses;
- inability to maintain key business relationships and reputations of the acquired businesses;
- diversion of management attention from other business concerns;
- litigation arising from the acquisition or the activities of the acquired businesses, including claims from terminated employees, customers, former stockholders or other third parties and intellectual property disputes;
- assumption of contractual obligations that contain terms that are not beneficial to us, require us to license or waive intellectual property rights, or increase our risk of liability;
- complications in the integration of acquired businesses or diminished prospects;
- failure to generate the expected financial results related to an acquisition on a timely manner or at all;
- weak, ineffective, or incomplete data privacy compliance strategies by the acquired company resulting in our inability to use acquired data assets;
- failure to accurately forecast the financial or other business impacts of an acquisition; and
- implementation or remediation of effective controls, procedures and policies for acquired businesses.

To fund future acquisitions, we may pay cash, which would diminish our cash reserves, or issue additional shares of our Class A common stock, which could dilute current stockholders' holdings in our company. Borrowing to fund an acquisition would result in increased fixed obligations and could also subject us to covenants or other restrictions that could limit our ability to effectively run our business.

We may be adversely affected by the effects of inflation.

Inflation has the potential to adversely affect our liquidity, business, operating results and financial condition of operations by increasing our overall cost structure, particularly if we are unable to achieve commensurate increases in the prices we charge our customers. The existence of inflation in the economy has resulted in, and may continue to result in, higher interest rates and capital costs, increased costs of labor, weakening exchange rates and other similar effects. As a result of inflation, we have experienced and may continue to experience, cost increases. Although we may take measures to mitigate the impact of this inflation, if these measures are not effective, our business, operating results, financial condition and liquidity could be materially adversely affected. Even if such measures are effective, there could be a difference between the timing of when these beneficial actions impact our results of operations and when the cost of inflation is incurred.

Our international operations subject us to additional costs and risks, and may not yield returns, and our continued international expansion may not be successful.

We have entered into several international markets and expect to enter into additional markets in the future. We expect to continue to expand our international operations, which may require significant management attention and financial resources and may place burdens on our management, administrative, operational, legal and financial infrastructure. The costs and risks inherent in conducting business internationally include:

- difficulty and costs associated with maintaining effective controls at foreign locations;
- adapting our platform and solutions to non-U.S. customer preferences and customs;
- difficulties in staffing and managing foreign operations;
- difficulties in enforcing our intellectual property rights;
- new and different sources of competition;
- regulatory and other delays and difficulties in setting up foreign operations;
- compliance with anti-bribery laws, such as the U.S. Foreign Corrupt Practices Act and the United Kingdom ("UK") Anti-Bribery Act 2010, by us, our employees and our business partners;
- compliance with export and import control and economic sanctions, laws and regulations, such as those administered by the U.S. Office of Foreign Assets Control;

- compliance with foreign data privacy laws, such as the EU ePrivacy Directive, GDPR, UK data protection laws, and Brazil's General Data Protection Law ("LGPD"), which could materially diminish our ability to collect data and/or the effectiveness of our platform;
- restrictions on the transfers of funds;
- currency exchange rate fluctuations and foreign exchange controls;
- economic and political instability in some countries;
- compliance with the laws of numerous taxing jurisdictions where we conduct business, potential double taxation of our international earnings, and potentially adverse tax consequences due to changes in applicable U.S. and foreign tax laws; and
- the complexity and potential adverse consequences of U.S. tax laws as they relate to our international operations.

As we continue to expand our business globally, our success will depend, in large part, on our ability to anticipate and effectively manage these risks. These factors and others could harm our ability to increase international revenues and, consequently, could adversely affect our business, operating results and financial condition. The expansion of our existing international operations and entry into additional international markets will require significant management attention and financial resources. Our failure to manage these risks successfully could adversely affect our business, operating results and financial condition.

Our business is subject to the risk of catastrophic events such as pandemics, earthquakes, flooding, droughts, fire and power outages, and to business and operational interruption by man-made problems such as war, conflicts and terrorism.

Our business is vulnerable to damage or interruption from pandemics, earthquakes, extreme weather events, flooding, droughts, fire, power outages, telecommunications failures, terrorist attacks, acts of war, human errors, break-ins and similar events. A significant natural disaster could have a material adverse effect on our business, operating results, and financial condition, and our insurance coverage may be insufficient to compensate us for losses that we may incur. As we rely heavily on our data center facilities, computer and communications systems and the Internet to conduct our business and provide high-quality customer service, any disruptions of the foregoing could negatively impact our ability to run our business and either directly or indirectly disrupt publishers' and partners' businesses, which could have an adverse effect on our business, operating results, and financial condition.

In particular, the COVID-19 pandemic, including the reactions of governments, markets and the general public, resulted in a number of adverse consequences for our business, operating results, and financial condition, many of which were beyond our control. Any resurgences or variants of the virus or other epidemics, pandemics or health crises could have a material negative impact on economic and market conditions around the world, which could have a significant negative impact on our and our customers, suppliers' or other partners' business, operating results, and financial condition. Actual or threatened war, terrorist activity, political unrest, civil strife, and other geopolitical uncertainty could have a similar effect on our and our customers, suppliers' or other partners' business, financial condition or growth strategy.

Risks Related to Data Collection and Security, Intellectual Property and Technology Industry Regulations

The technology industry is subject to increasing scrutiny that could result in U.S. government actions that could negatively affect our business.

We may face claims relating to the information or content that is made available through our platform. Though we contractually require our customers to represent that they will follow our policies with respect to all information or content they upload to our systems, we may be exposed to potential liability if our customers do not abide by such policies. In particular, the nature of our business may expose us to claims related to defamation, dissemination of misinformation or news hoaxes, discrimination, harassment, intellectual property right infringement, rights of publicity and privacy, personal injury torts, laws regulating hate speech or other types of content, and breach of contract, among others. The technology industry is subject to intense media, political and regulatory scrutiny, including on issues related to antitrust and artificial intelligence, which exposes us to government investigations, legal actions and penalties. For instance, various regulatory agencies, including competition and consumer protection authorities, have active proceedings and investigations concerning multiple technology companies on antitrust and other issues. If we become subject to such investigations, we could be liable for substantial fines and penalties, be required to change our products or alter our business operations, receive negative publicity, or be subject to civil litigation, all of which could harm our business. Lawmakers also have proposed new laws and regulations, and modifications to existing laws and regulations, that affect the activities of technology

companies such as the recent efforts to eliminate or modify Section 230 of the Communications Decency Act. If such laws and regulations are enacted or modified, they could negatively impact us, even if they are not specifically intended to affect our company. In addition, the introduction of new products, expansion of our activities in certain jurisdictions, or other actions that we may take may subject us to additional laws, regulations and other scrutiny. The increased scrutiny of certain acquisitions in the technology industry also could affect our ability to enter into strategic transactions of our own or to acquire other businesses.

Compliance with new or modified laws and regulations could increase the cost of conducting our business, limit the opportunities to increase our revenues, or prevent us from offering certain products and services. While we have adopted policies and procedures designed to ensure compliance with applicable laws and regulations, there can be no assurance that our employees, contractors or agents will not violate such laws and regulations. If we are found to have violated laws and regulations, it could materially adversely affect our reputation, financial condition and operating results. We also could be harmed by government investigations, litigation, or changes in laws and regulations directed at our customers, business partners, or suppliers in the technology industry that would have the effect of limiting our ability to do business with those entities. There can be no assurance that our business will not be materially adversely affected, individually or in the aggregate, by the outcomes of such investigations, litigation or changes to laws and regulations in the future.

Our business and the effectiveness of our platform depends on our ability to collect and use online data. New tools used by consumers to limit data collection, regulatory restrictions and potential changes to web browsers and mobile operating systems affect our ability to collect such data, which could harm our operating results and financial condition.

We have one of the largest compilations of personal data relating to U.S. and international consumers in the world. The ability of our platform to deliver high quality solutions to our customers is based on our technology's capability to derive relevant, actionable insights from the data that we ingest into our systems and our ability to execute marketing programs across digital channels such as email, social media, website and other touchpoints to engage consumers. The principal way that we collect individual opted-in data is directly from the consumers when they register or interact with our platform (such as the DISQUS commenting system), or with partners' services. We also use various tracking technologies, both proprietary and those provided through third-party suppliers in order to connect to individuals across marketing channels for the purpose of targeting consumers and delivering campaigns. The future of these and other digital data collection practices is evolving, with some prominent companies in the industry recently announcing that they will implement their own individual data collection tools and phase out others. This approach may or may not be compatible with our current operations in those channels and platforms. It is yet to be determined if there will be an industry-wide framework for targeting consumers in a digital environment. Furthermore, regulatory and legislative actions may influence which data collection tools are permitted in various jurisdictions and may further restrict our data collection efforts. Without this incremental data, we may not have sufficient insight into the consumer's activity to provide some of our current tools, which may impact our capacity to execute our customers' programs efficiently and effectively.

Consumers can, with increasing ease, implement technologies that limit our ability to collect and use data to track and deliver our solutions across different marketing channels and platforms. Various digital tracking tools may be deleted or blocked by consumers. The most commonly used internet browsers also allow consumers to modify their browser settings to block first-party cookies (placed directly by the publisher or website owner that the consumer intends to interact with), which are not affected by changes from web browsers and operating systems, or third-party cookies (placed by parties that do not have direct relationship with the consumer), which some browsers may block by default. Mobile devices using Android and iOS operating systems limit the ability of cookies, or similar technology, to track consumers while they are using applications other than their web browser on the device. Even if cookies and ad blockers do not ultimately have an adverse effect on our business, investor concerns about the utility and robustness of these tracking technologies could limit demand for our stock and cause its price to decline.

We also partner with third-party data suppliers and publishers. When we purchase or license from third-party data suppliers, we are dependent upon our ability to obtain such data on commercially reasonable terms and in compliance with applicable regulations. If a substantial number of data suppliers were to withdraw or withhold their data from us, or if we had to terminate our ties with data suppliers either due to commercial or regulatory reasons, our ability to provide products to our customers could be materially adversely impacted, which could result in decreased revenues and operating results. We cannot provide assurance that we will be successful in maintaining our relationships with these external data source providers or that we will be able to continue to obtain data from them on acceptable terms or at all. Furthermore, we cannot provide assurance that we will be able to obtain data from alternative sources if our current sources become unavailable.

Actual or perceived failures to comply with applicable data protection, privacy and security laws, regulations, standards and other requirements could adversely affect our business, results of operations, and financial condition.

The global data protection landscape is rapidly evolving, and we are or may become subject to numerous state, federal and foreign laws, requirements and regulations governing the collection, use, disclosure, retention, and security of personal

information. Implementation standards and enforcement practices are likely to remain uncertain for the foreseeable future, and we cannot yet determine the impact future laws, regulations, standards, or perception of their requirements may have on our business. This evolution may create uncertainty in our business, affect our ability to operate in certain jurisdictions or to collect, store, transfer use and share personal information, necessitate the acceptance of more onerous obligations in our contracts, result in liability or impose additional costs on us. The cost of compliance with these laws, regulations and standards is high and is likely to increase in the future. Any failure or perceived failure by us to comply with federal, state or foreign laws or regulations, our internal policies and procedures or our contracts governing our processing of personal information could result in negative publicity, government investigations and enforcement actions, claims by third parties and damage to our reputation, any of which could have a material adverse effect on our operations, financial performance and business.

In the U.S., numerous state laws impose standards relating to the privacy, security, transmission and breach reporting of personal information. Such laws and regulations are subject to interpretation by various courts and other governmental authorities, thus creating potentially complex compliance issues for us, our customers and our strategic partners. For example, the CCPA went into effect on January 1, 2020. The CCPA creates individual privacy rights for California consumers and imposes privacy and security obligations on entities handling personal information. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches suffered as a result of the business's violation of the duty to implement and maintain reasonable security procedures and practices, and this may lead to breach litigation. Further, the CPRA, effective January 1, 2023, significantly amended the CCPA and imposes additional data protection obligations on covered businesses, including additional consumer rights processes, limitations on data uses, new audit requirements for higher risk data, and opt outs for certain uses of sensitive data. It also created a new California data protection agency authorized to issue substantive regulations, which could result in increased privacy and information security enforcement. Similar laws are now in effect and enforceable in Virginia, Colorado, Connecticut, and Utah, and will soon be enforceable in several other states as well. Additionally, state regulators may exercise greater scrutiny regarding the collection and processing of personal information for purposes of online advertising, marketing, and analytics. These laws and their requirements could have a material adverse effect on our financial performance, and any liability from failure to comply with the requirements of these laws could adversely affect our financial condition.

Furthermore, the Federal Trade Commission ("FTC") and many state Attorneys General continue to enforce federal and state consumer protection laws against companies for online collection, use, dissemination and security practices that appear to be unfair or deceptive. The FTC sees failure to take appropriate steps to keep consumers' personal information secure as constituting unfair acts or practices in or affecting commerce in violation of Section 5(a) of the Federal Trade Commission Act. The FTC expects a company's data security measures to be reasonable and appropriate in light of the sensitivity and volume of consumer information it holds, the size and complexity of its business, and the cost of available tools to improve security and reduce vulnerabilities. The FTC has recently conducted enforcement actions against other companies that created new precedents that may require us to adjust our business practices, although these changes have not produced material costs or loss of revenue for us. Future FTC enforcement actions against marketing companies could result in more material impacts to us. The FTC also has initiated a rulemaking regarding "Commercial Surveillance and Data Security," and although that rule is not expected to come into effect soon, it has resulted in increased regulatory attention and scrutiny regarding the collection and processing of personal information and online advertising, marketing and analytics services.

Our communications with consumers are also subject to certain laws and regulations, including the Controlling the Assault of Non-Solicited Pornography and Marketing ("CAN-SPAM") Act of 2003, the Telephone Consumer Protection Act of 1991 (the "TCPA"), and the Telemarketing Sales Rule and analogous state laws, that could expose us to significant damages awards, fines and other penalties that could materially impact our business. For example, the TCPA imposes various consumer consent requirements and other restrictions in connection with certain telemarketing activity and other communication with consumers by phone, fax or text message. Recently enacted state laws, for example in Connecticut and Maryland, create additional requirements and penalties for violations relating to telemarketing and SMS marketing. Numerous class-action suits under federal and state laws have been filed in recent years against companies who conduct telemarketing and/or SMS texting programs, with many resulting in multi-million-dollar settlements to the plaintiffs. Any future such litigation against us could be costly and time-consuming to defend. In particular, the TCPA and related state laws impose significant restrictions on the ability to make telephone calls or send text messages to mobile telephone numbers without the prior consent of the person being contacted. The CAN-SPAM Act and the Telemarketing Sales Rule and analogous state laws also impose various restrictions on marketing conducted using email, telephone, fax or text message. Additional laws, regulations, and standards covering marketing, advertising, and other activities conducted by telephone, email, mobile devices, and the internet may be or become applicable to our business, such as the Communications Act, the Federal Wiretap Act, the Electronic Communications Privacy Act, and similar state consumer protection and communication privacy laws, such as California's Invasion of Privacy Act. As laws and regulations, including FTC enforcement, rapidly evolve to govern the use of these communications and marketing platforms, the failure by us, our employees or third parties acting at our direction to abide by applicable laws and regulations could adversely impact our business, financial condition and results of operations or subject us to fines or other penalties.

New requirements relating to automated, browser-based, or one-stop opt-out mechanisms (OOMs) such as the Global Privacy Control, the forthcoming opt-out mechanism for data brokers established under the California Delete Act, or other OOMs that will be established in the future may result in significantly larger numbers of consumers opting out of having their data used for marketing purposes versus historical averages. This could result in Zeta having less access to consumer data, impacting performance of our services or resulting in loss of business.

Our operations abroad may also be subject to increased scrutiny or attention from data protection authorities. For example, in Europe, we are subject to the European Union General Data Protection Regulation (the “EU GDPR”) and the United Kingdom’s General Data Protection Regulation and the Data Protection Act 2018 (the “UK GDPR”) (the EU GDPR and UK GDPR, together referred to as the “GDPR”), which impose strict requirements for processing the personal data of individuals within the EEA. Companies that must comply with the GDPR face increased compliance obligations and risk, including more robust regulatory enforcement of data protection requirements and potential fines for noncompliance. Since we are subject to the supervision of relevant data protection authorities under both the EU GDPR and the UK GDPR, we could be fined under each of these regimes independently, in respect of the same breach. Penalties for certain breaches are up to €20 million / £17.5 million or 4% of the annual global revenues of the noncompliant company, whichever is greater.

Among other requirements, the GDPR also regulates transfers of personal data subject to the GDPR to third countries that have not been found to provide adequate protection to such personal data, including the U.S.; in July 2020, the Court of Justice of the EU (“CJEU”) limited how organizations could lawfully transfer personal data from the EU/European Economic Area (“EEA”) to the U.S. by invalidating the Privacy Shield for purposes of international transfers and imposing further restrictions on the use of standard contractual clauses (“SCCs”) by stating reliance on SCCs alone may not be sufficient in all circumstances and that transfers must be assessed on a case-by-case basis. European court and regulatory decisions subsequent to the CJEU decision have taken a restrictive approach to international data transfers. Further the European Commission published revised standard contractual clauses for data transfers from the EEA (mandatory for new transfers since September 27, 2021, and for existing transfers since December 27, 2022) and the UK Information Commissioner’s Office published its own new data transfer standard contracts for data transfers from the UK (mandatory for new transfers since September 21, 2022 and for existing transfers by March 21, 2024). We expect the existing legal complexity and uncertainty regarding international data transfers to continue and in particular, we expect international transfers to the U.S. and other jurisdictions more generally to continue to be subject to enhanced scrutiny by regulators. As supervisory authorities issue further guidance on personal data export mechanisms, and/or start taking enforcement action, we could suffer additional costs, complaints and/or regulatory investigations or fines, and/or if we are otherwise unable to transfer personal data between and among countries and regions in which we operate, it could affect the manner in which we provide our services, the geographical location or segregation of our relevant systems and operations, and could adversely affect our financial results. In addition, in February 2022, the Belgian data protection authority found that the Interactive Advertising Bureau’s (IAB) “Transparency and Consent Framework” (“TCF”), the primary consent management platform used in Europe for online advertising compliance, violates the GDPR. While this decision is being appealed, a subsequent loss of the TCF could result in increased legal risk, or a need to discontinue online advertising in Europe, which could impact our revenues.

For transfers from the EEA to the UK the European Commission has adopted an adequacy decision in favor of the United Kingdom, enabling data transfers from EU member states to the United Kingdom without additional safeguards. However, the UK adequacy decision will automatically expire in June 2025 unless the European Commission re-assesses and renews or extends that decision.

We are also subject to evolving EU and UK privacy laws on cookies, tracking technologies and e-marketing. The GDPR also imposes conditions on obtaining valid consent for cookies, such as a prohibition on pre-checked consents and a requirement to ensure separate consents are sought for each type of cookie or similar technology. Recent European court and regulator decisions are driving increased attention to cookies and tracking technologies. In light of the complex and evolving nature of EU, EU Member State and UK privacy laws on cookies and tracking technologies, there can be no assurances that we will be successful in our efforts to comply with such laws and violations of such laws could result in regulatory investigations, fines, orders to cease / change our use of such technologies, as well as civil claims including class actions, and reputational damage. In July 2021, we received a notice from Norwegian authorities of an intent to impose a fine for our alleged failure to adhere to the GDPR with respect to the collection of personal data via cookies in their country. We have challenged this allegation on a number of grounds and currently await a response from the Norwegian DPA. We are hopeful that the Norwegian DPA will close this case without enforcement action as we have not received any correspondence since July 2022.

Increased scrutiny regarding the use of such technologies and the use of personal data for online advertising practices, together with adverse rulings on these issues, even if not directly against us, may have a direct impact on our ability to continue to collect and process personal data for the services that we provide and could adversely impact our business activities. Changes proposed by providers of major browsers to eliminate or restrict the usage of third-party cookies to track user behaviors, and to allow users to limit the collection of certain data generally or from specified websites, could impair our ability to collect user information,

including personal data and usage information, that helps us provide more targeted advertising to our current and prospective consumers. The effectiveness of our platform relies in part on our ability to collect and use online data, so these changes could adversely affect our business.

In Canada, the Personal Information Protection and Electronic Documents Act (“PIPEDA”), and various provincial laws require that companies give detailed privacy notices to consumers, obtain consent to use personal information, with limited exceptions, allow individuals to access and correct their personal information, and report certain data breaches. Failure to comply with PIPEDA or other Canadian provincial privacy or data protection laws could result in significant fines and penalties or possible damage awards.

Our data-driven platform may also be subject to laws and evolving regulations regarding the use of artificial intelligence and machine learning, controlling for data bias, and antidiscrimination. For example, in addition to enforcing Section 5 of the FTC Act, the FTC enforces the Fair Credit Reporting Act, and the Equal Credit Opportunity Act. These laws prohibit unfair and deceptive practices, including use of biased algorithms in artificial intelligence. The European Commission also recently published its proposal for a regulation implementing harmonized rules on artificial intelligence and amending certain union legislative acts. The proposed regulation would impose additional restrictions and obligations on providers of artificial intelligence systems, including increasing transparency so consumers know they are interacting with an artificial intelligence system, requiring human oversight in artificial intelligence, and prohibiting certain practices of artificial intelligence that could lead to physical or psychological harm. If federal or state regulators were to determine that the type of data we collect, the process we use for collecting this data or how we use it unfairly discriminates against some groups of people, laws and regulations could be interpreted or implemented to prohibit or restrict our collection or use of this data. Additionally, existing and future laws, and evolving attitudes about privacy protection may impair our ability to collect, use, and maintain data points of sufficient type or quantity to develop and train our artificial intelligence algorithms.

Although we work to comply with applicable laws, regulations and standards, our contractual obligations and other legal obligations, these requirements are evolving and may be modified, interpreted and applied in an inconsistent manner from one jurisdiction to another, and may conflict with one another or other legal obligations with which we must comply. Any failure or perceived failure by us or our employees, representatives, contractors, consultants, collaborators, or other third parties to comply with such requirements or adequately address privacy and security concerns, even if unfounded, could result in the imposition of significant civil and/or criminal penalties, damage in our reputation, private litigation, and restrictions on data processing.

Any unfavorable publicity or negative public perception of current data collection practices could result in additional regulations which may impact the effectiveness of our data cloud and platform.

The growth of the digital marketing industry has led to increased scrutiny from consumer groups, government agencies and news organizations. Any future negative publicity about the digital marketing industry as a whole or about an individual actor could result in government agencies playing a more active role in regulating and enforcing rules that relate to the collection, use, sharing and disclosure of data. For example, in recent years, consumer advocates, mainstream media and elected officials have increasingly and publicly criticized the digital marketing industry for its collection, storage and use of data.

As we process transactions through our platform, we collect large amounts of data about consumers and advertisements that we place. We collect data on ad specifications (such as placement, size and format), pricing and auction activity (such as price floors, bid response behavior and clearing prices). Further, we collect data on consumers that does not directly identify the individual (although considered personal information under the CCPA and other U.S. laws, GDPR, and other laws), including browser, device location and characteristics, online browsing behavior, exposure to and interaction with advertisements, and inferential data about purchase intentions and preferences. Data providers also send us proprietary data, including data about consumers. We aggregate this data and analyze it in order to enhance our product, including the pricing, placement and scheduling of advertisements. Evolving regulatory standards could place restrictions on the collection, management, aggregation and use of the types of data we collect, 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 data. In addition, regulations such as the GDPR permit data protection authorities to impose penalties for violations. Any new and unforeseen regulatory limitations on our operations could impair our ability to deliver effective solutions to our customers, which could adversely affect our business, operating results and financial condition.

A significant inadvertent disclosure or breach of confidential and/or personal information we process, or a security breach of our or our customers', suppliers', or other partners' IT Systems could be detrimental to our business, reputation, financial performance and results of operations.

The nature of our business means that we process large databases of personal information, including maintaining and storing large databases of such information, not only on our own behalf, but also on our customers' and others' behalf. As a result, we face numerous and evolving cybersecurity risks that threaten the confidentiality, integrity and availability of our IT Systems, and

personal and confidential information. Such risks include the misappropriation of data by malicious insiders or unauthorized third parties, or other data breaches. Such parties could attempt to gain entry to our or our vendor's IT Systems (including by gaining employment at Zeta) for the purpose of stealing data, including confidential information or personal information, or breaching our security systems or other IT Systems. In particular, we (and certain of our third-party providers), like other organizations, especially in the digital marketing industry and marketing technology industry, are routinely subject to attempts by such threat actors (e.g., cybersecurity threats, attempted data privacy breaches, or other incidents), which if successful, may result in either threatened or actual exposure leading to unauthorized access, disclosure and misuse of confidential information, personal information or other information regarding customers, suppliers, partners, vendors, employees, or our company and business. Cyberattacks are expected to accelerate on a global basis in frequency and magnitude as threat actors are becoming increasingly sophisticated in using techniques and tools, including artificial intelligence, that circumvent security controls, evade detection and remove forensic evidence. As a result, we may be unable to detect, investigate, remediate or recover from future attacks or incidents, or to avoid a material adverse impact to our IT Systems or information.

Even where we have invested in industry standard security, a breach may be due to employee error, malfeasance, system errors or vulnerabilities, including vulnerabilities of our customers, vendors, suppliers, their products, or otherwise. Third parties may also attempt to fraudulently induce employees to disclose sensitive information or credentials that permit access to sensitive information through a process known as social engineering. This includes disclosing data such as usernames, passwords or other information to gain access to our customers' data or our data, including intellectual property and other confidential information. Employee-related risks are increased by remote and hybrid working arrangements at our company (and at third-party providers) which increase cybersecurity risks due to the challenges associated with managing remote computing assets and security vulnerabilities that are present in many non-corporate and home networks. Third parties and threat actors also may attempt to extort us through a ransomware or other similar form of attack by encrypting information IT Systems, rendering our IT Systems inoperable, or stealing intellectual property, confidential information, personal information, or other sensitive data, and demanding payment in return. Techniques used to obtain unauthorized access to, or sabotage IT Systems, change frequently, grow more complex over time, and often are not recognized until launched against a target. Given the unpredictability of the timing, nature and scope of cybersecurity attacks and other security-related incidents, our technology may fail to adequately secure the data, including confidential information and personal information we maintain, and we cannot entirely eliminate the risk of improper or unauthorized access to or disclosure of such data, other security events that impact the integrity or availability of such data, or our IT Systems and operations and any data contained in such systems and operations. We may incur significant costs in protecting against or remediating such events, including cyber-attacks. Any security breach could result in operational disruptions that impair our ability to meet our customers' requirements, which could result in decreased revenue. We carry insurance comparable to our industry. However, we cannot guarantee that our insurance coverage will be sufficient to cover all costs and liabilities incurred in relation to a security breach, or that applicable insurance will be available to us in the future on economically reasonable terms or at all.

Whether there is an actual or a perceived breach of our security, our reputation could suffer irreparable harm, causing our current and prospective customers to reject our products in the future, deterring data suppliers from supplying us data or customers from uploading their data on our platform, or changing customers' behaviors and use of our technology. Further, we could be forced to expend significant resources in response to a security breach, including those expended in notifying individuals and providing mitigating solutions, repairing system damage, increasing cyber security protection costs by deploying additional personnel and protection technologies, and litigating and resolving legal claims or governmental inquiries and investigations, all of which could divert the attention of our management and key personnel away from our business operations.

We depend on third-party data centers, systems and technologies to operate our business, the disruption of which could adversely affect our business, operating results and financial condition.

In addition to internal technology, including proprietary software, databases, and other intellectual property, we also rely on computer hardware purchased or leased from, software licensed from, content licensed from and services provided by a variety of third parties, which include databases, operating systems, virtualization software, tax requirement content and geolocation content and services (collectively, "IT Systems"). Any damage to or failure of our IT Systems generally would prevent us from operating our business. We rely on data centers and third-party technology vendors in order to operate our business, and we host our company-owned infrastructure at third-party data centers. We are also dependent on third-party providers to provide industry standard protection against potential damages such as cyber intrusions, natural disasters, criminal acts and technical maintenance. In the event of damage or interruption to IT Systems, it is unlikely that we would be appropriately compensated for the reputational harm that such an interruption would create regardless of any damages we may recover from such third parties or any insurance policy in place. This would in turn reduce our revenue, subject us to liability and may cause us to lose customers, any of which could materially adversely affect our business.

Additionally, improving our platform's infrastructure and expanding its capacity in anticipation of growth in new channels and formats, as well as implementing technological enhancements to our platform to improve its efficiency and

cost-effectiveness are key components of our business strategy, and if our third-party data centers are unable to keep up with our growing needs for capacity, this could have an adverse effect on our business. Any changes in the service levels at our third-party data centers or any errors, service interruptions, defects, disruptions, or other performance problems could adversely affect our reputation, expose us to liability, cause us to lose customers, or otherwise adversely affect our business, operating results and financial condition. Any errors, bugs or defects in such IT Systems could result in errors or a failure of our solutions, which could harm our business. Additionally, we cannot ensure that these third-party leases or licenses, or support for such leased or licensed products and technologies, will continue to be available to us on commercially reasonable terms, if at all. We cannot be certain that our suppliers or licensors are not infringing the intellectual property rights of others or that our suppliers and licensors have sufficient rights to the technology in all jurisdictions in which we may operate. In the future, we might need to license other hardware, software, content or services to enhance our products and meet evolving customer requirements. Any inability to license or otherwise obtain such hardware or software could result in a reduction in functionality, or errors or failures of our products, until equivalent technology is either developed by us or, if available, is identified, obtained through purchase or license, and integrated into our solutions, any of which may reduce demand for our solutions and increase our expenses. In addition, third-party licenses may expose us to increased risks, including risks associated with the integration of new technology, the diversion of resources from the development of our own proprietary technology, and our inability to generate revenue from new technology sufficient to offset associated acquisition and maintenance costs, all of which may increase our expenses and harm our results of operations.

If we fail to detect or prevent fraud or malware intrusion on our platform, devices, or systems, or into the systems or devices of our customers and their consumers, publishers could lose confidence in our platform, and we could face legal claims and regulatory investigations, any of which could adversely affect our business, operating results and financial condition.

We may be the target of fraudulent or malicious activities undertaken by persons seeking to use our platform for improper purposes. For example, someone may attempt to divert or artificially inflate customer purchases through our platform or attempt to disrupt or divert the operation of the systems and devices of our publishers and their consumers in order to misappropriate information, generate fraudulent billings or stage cyberattacks, or other unauthorized or illicit purposes. Those activities could also introduce malware through our platform in order to commandeer or gain access to confidential information or personal information. We use third-party tools and proprietary technology to identify non-human traffic and malware, and we may reduce or terminate relationships with customers that we find to be engaging in such activities. However, there can be no assurance that our policies, controls or procedures, will be fully implemented, complied with or effective in protecting our systems and information. Perpetrators of fraudulent impressions and malware frequently change their tactics and may become more sophisticated over time, requiring both us and third parties to improve processes for assessing the quality of publisher inventory and controlling fraudulent activity. In the meantime, new or changing data privacy laws (in particular outside the EU and the U.S.) could potentially interfere with the data collection required in order to detect fraud. If we fail to detect or prevent fraudulent or malicious activity of this sort, our reputation could be damaged, customers may contest payment, demand refunds or fail to give us future business, or we could face legal claims or investigations from customers or regulators. Even if we are not directly involved in fraud or malicious activity, any sustained failures of others in our industry to adequately detect and prevent fraud could generate the perception that digital marketing is unsafe and lead our customers to avoid digital marketing products like ours.

The standards that private entities and inbox service providers adopt in the future to regulate the use and delivery of email may interfere with the effectiveness of our platform and our ability to conduct business.

Our business is dependent on email services for promoting our customers' brands, products and services. Other private entities often advocate standards of conduct or practices that significantly exceed current legal requirements and classify certain solicitations that comply with current legal requirements as impermissible "spam." Some of these entities maintain "blacklists" of companies and individuals, and the websites, inbox service providers and IP addresses associated with those entities or individuals that do not adhere to those standards of conduct or practices for commercial solicitations that the blacklisting entity believes are appropriate. If a company's IP addresses are listed by a blacklisting entity, emails sent from those addresses may be blocked if they are sent to any internet domain or internet address that subscribes to the blacklisting entity's service or uses its blacklist.

From time to time, some of our IP addresses have become, and we expect will continue to be, listed with one or more blacklisting entities due to the messaging practices of our customers and other users. We may be at an increased risk of having our IP addresses blacklisted due to our scale and volume of emails processed, compared to our smaller competitors. While the overall percentage of such email solicitations that our individual customers send may be at or below reasonable standards, the total aggregate number of all emails that we process on behalf of our customers may trigger increased scrutiny from these blacklisting entities. There can be no guarantee that we will be able to successfully remove ourselves from those lists. Because we fulfill email delivery on behalf of our customers, blacklisting of this type could undermine the effectiveness of our customers' transactional email, email marketing programs and other email communications, all of which could have a material negative impact on our business, financial condition and results of operations.

Inbox service providers can also block emails from reaching their users. While we continually improve our own technology and work closely with inbox service providers to maintain our deliverability rates, the implementation of new or more restrictive policies by inbox service providers may make it more difficult to deliver our customers' emails, particularly if we are not given adequate notice of a change in policy or struggle to update our platform to comply with the changed policy in a reasonable amount of time. In addition, some inbox service providers categorize as "promotional" emails that originate from email service providers and, as a result, direct them to an alternate or "tabbed" section of the recipient's inbox. If inbox service providers materially limit or halt the delivery of our customers' emails, or if we fail to deliver our customers' emails in a manner compatible with inbox service providers' email handling or authentication technologies or other policies, or if the open rates of our customers' emails are negatively impacted by the actions of inbox service providers to categorize emails, then customers may question the effectiveness of our platform and cancel their accounts.

Additionally, changes in the laws or regulations that limit our ability to send such communications or impose additional requirements upon us in connection with sending such communications would also materially adversely impact our business. For example, Canada's Anti-Spam Legislation ("CASL") prohibits email marketing without the recipient's consent, with limited exceptions. In addition, electronic marketing and privacy requirements in the EU are highly restrictive and differ greatly from those currently in force in the U.S., which could cause fewer individuals in the EU to subscribe to our marketing messages and drive up our costs and risk of regulatory oversight and fines if we are found to be non-compliant. These restrictions could prevent us from obtaining enough data to produce effective marketing results for our customers in these markets. Our use of email and other messaging services to send communications to consumers may also result in legal claims against us, for which we may incur increased expenses, and if successful might result in fines and orders with costly reporting and compliance obligations or might limit or prohibit our ability to send emails or other messages. We also rely on social networking messaging services to send communications and to encourage consumers to send communications. Changes to the terms of these social networking services to limit promotional communications, any restrictions that would limit our ability or our customers' ability to send communications through their services, disruptions or downtime experienced by these social networking services or decline in the use of or engagement with social networking services by our customers' end consumers could materially and adversely affect our business, financial condition and operating results.

Any actual or perceived failure to comply with evolving regulatory frameworks around the development and use of artificial intelligence could adversely affect our business, results of operations, and financial condition.

We leverage new technologies and platforms to improve business effectiveness, including use of artificial intelligence, or AI, technologies. The AI regulatory landscape is rapidly evolving, and we are or may become subject to numerous state, federal and foreign laws, requirements and regulations governing the use of AI. Implementation standards and enforcement practices are likely to remain uncertain for the foreseeable future, and we cannot yet determine the impact future laws, regulations, standards, or perception of their requirements may have on our business.

In the United States and internationally, AI is the subject of evolving review by various governmental and regulatory agencies, including the SEC and the FTC, and changes in laws, rules, directives and regulations governing the use of AI may adversely affect the ability of our business to use or rely on AI. For example, California and other states have implemented, or are in the process of implementing, laws, rules, and regulations that impose obligations on the use of automated decision making. Further, in October 2023, the President of the United States issued an executive order on the Safe, Secure and Trustworthy Development and Use of AI, emphasizing the need for transparency, accountability and fairness in the development and use of AI Tools.

In Europe, on December 8, 2023, the European Union legislators reached a political agreement on the EU Artificial Intelligence Act ("EU AI Act"), which establishes a comprehensive, risk-based governance framework for artificial intelligence in the EU market. The EU AI Act is expected to enter into force in 2024, and the majority of the substantive requirements will apply two years later. The EU AI Act will apply to companies that develop, use and/or provide artificial intelligence in the EU and includes requirements around transparency, conformity assessments and monitoring, risk assessments, human oversight, security, accuracy, general purpose artificial intelligence and foundation models, and proposes fines for breach of up to 7% of worldwide annual turnover. In addition, on September 28, 2022, the European Commission proposed two Directives seeking to establish a harmonized civil liability regime for artificial intelligence in the EU, in order to facilitate civil claims in respect of harm caused by artificial intelligence and to include artificial intelligence-enabled products within the scope of the EU's existing strict liability regime. Once fully applicable, the EU AI Act will have a material impact on the way artificial intelligence is regulated in the EU, and together with developing guidance and/or decisions in this area, likely to affect our use of artificial intelligence and our ability to provide and to improve our services, require additional compliance measures and changes to our operations and processes, result in increased

compliance costs and potential increases in civil claims against us, and could adversely affect our business, operations and financial condition.

Failure to comply with industry self-regulation could adversely affect our business, operating results and financial condition.

In addition to complying with government regulations, we participate in trade associations and industry self-regulatory groups that promote best practices or codes of conduct addressing data privacy. We also have agreed to follow certain practices as contractual obligations to customers (e.g. marketing agencies). We are a member of the Digital Advertising Alliance's ("DAA") Self-Regulatory Principles for Online Behavioral Advertising in the U.S., as well as the Digital Advertising Alliance of Canada ("DAAC") in Canada and the European Interactive Digital Advertising Alliance ("EDAA") in Europe. Under the rules of these bodies, in addition to other compliance obligations, we are required to participate in the AdChoices program (and other similar programs), which provides consumers a single online interface to obtain information about and manage data collection by online third parties such as us. These bodies investigate non-compliance and report significant instances of non-compliance to regulatory authorities such as the FTC or data protection authorities in Europe. As new legislation comes into effect, self-regulatory programs may change their requirements based on such legislation, which adds complexity and costs for companies to maintain compliance. If we fail to keep up with or to properly implement such changes, we could become subject to regulatory investigations, fines and legally-mandated corrective actions.

Our intellectual property rights may be difficult to enforce and protect, which could enable others to copy or use aspects of our technology without compensating us, thereby eroding our competitive advantage and having an adverse effect on our business, operating results and financial condition.

Our success depends, in part, on our ability to protect the confidentiality of, and intellectual property rights in, our proprietary methods, technologies, and content that we develop or otherwise acquire, so that we can prevent others from using them. If we fail to protect such intellectual property rights adequately, or are otherwise required to disclose our proprietary methods, technologies and/or content, our competitors may gain access and our business might be adversely affected.

Policing unauthorized use of our technology is difficult and costly. In addition, the laws of some foreign countries may not be as protective of intellectual property rights as those of the U.S., and mechanisms for enforcement of our proprietary rights in such countries may be inadequate. If we are unable to protect our proprietary rights (including in particular, the proprietary aspects of our platform) we may find ourselves at a competitive disadvantage to others who have not incurred the same level of expense, time and effort to create, protect and enforce their intellectual property.

We rely upon a combination of trade secrets, third-party confidentiality and non-disclosure agreements, additional contractual protections including those in agreements with business partners and customers, and trademark, copyright, patent and other intellectual property laws to establish and protect our proprietary technology and intellectual property rights. Establishing, maintaining and enforcing intellectual property rights can be difficult, time consuming, and expensive and despite our efforts to establish and maintain our intellectual property, the applicable laws may provide only a limited scope of protection. It may be possible for unauthorized third parties to copy or reverse engineer aspects of our technology or otherwise obtain and use information that we regard as proprietary, or to develop technologies similar or superior to our technology or design around our proprietary rights, despite the steps we have taken to protect our proprietary rights. Our trade secrets, know-how and other proprietary information may be stolen, used in an unauthorized manner, or compromised through an intrusion by private parties or foreign actors into our computer systems. In addition, theft or misuse of our proprietary information could still occur by employees or contractors who have access to our technology despite the agreements we have in place with such employees and contractors that restrict the use and disclosure of our information and technology and although we enter into non-disclosure agreements with our customers, consultants, suppliers and other parties with whom we have strategic relationships and business alliances and enter into intellectual property assignment agreements with our consultants and suppliers, no assurance can be given that these agreements will not be breached.

While we have issued patents and have patent applications pending, we may be unable to obtain patent protection for the technology covered in our patent applications or such patent protection may not be obtained quickly enough to meet our business needs. Furthermore, the patent prosecution process is expensive, time-consuming and complex, and we may not be able to prepare, file, prosecute, maintain and enforce all necessary or desirable patent applications at a reasonable cost or in a timely manner. The scope of patent protection also can be reinterpreted after issuance and issued patents may be invalidated. Even if our patent applications do issue as patents, they may not issue in a form that is sufficiently broad to protect our technology, prevent competitors or other third parties from competing with us or otherwise provide us with any competitive advantage.

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

We operate in an industry with an extensive history of intellectual property litigation. There is a risk that our business, platform and solutions 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 trade secrets or other confidential information of their former employers or other third parties. Regardless of whether any of these claims have any merit, evaluating and defending these claims, including potentially challenging or attempting to invalidate the other party's patents, is costly, time consuming, and diverts management attention and financial resources. Results of these litigation matters are difficult to predict and we may not be successful in defending ourselves in such matters. If our defense is unsuccessful, or we are not successful in challenging or invalidating the patents of the third party claiming infringement, we may be required 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. Additionally, we may be obligated to indemnify our customers or inventory and data suppliers in connection with any such litigation. Any of these events could have an adverse effect on our business, operating results and financial condition.

Our failure to meet content and inventory standards and provide products that our customers and third-party suppliers trust, could harm our brand and reputation and negatively impact our business, operating results and financial condition.

We do not provide or control either the content of the advertisements we serve or that of the websites providing the inventory. Our customers provide the content and third-party suppliers provide the inventory. Both marketers and third-party suppliers are concerned about being associated with content they consider inappropriate, competitive or inconsistent with their brands, or illegal and they are hesitant to spend money without guaranteed brand security. Additionally, our customers may seek to display marketing campaigns in jurisdictions that do not permit such campaigns. Our customers and third-party suppliers will often include provisions in their contracts that restrict the type of content that can be run in marketing campaigns. Inadvertently, we may serve such restricted ad content, or the advertisements we serve may contain malware, which could harm our or our customers' brand and reputation, harm our relationships with our inventory suppliers and negatively impact our business, financial condition and operating results. Accordingly, a part of our business strategy is our ability to convince our customers that their brand and image are safe within our ecosystem. While we have established rules and guidance on how our platform is to be used, including prohibiting the display of content that is illegal, and we also utilize third party software that looks for malware in all of our marketing campaigns, we cannot guarantee that we will be able to capture all violating media before it is posted. It is therefore possible that our customers may run a campaign that does not conform to our standards. If this were to happen, we may be liable to the customer for damages and incur costs associated with remediating the issue. Further, if this were to happen it could harm our and/or our customers' brand and reputation, and negatively impact our business, financial condition and operating results.

Additionally, marketing may result in litigation relating to copyright or trademark infringement, public performance royalties or other claims based on the nature and content of advertising that is distributed through our platform. Though we contractually require our customers to represent to us that they have the rights necessary to serve advertisements through our platform, we do not independently review or verify whether we are permitted to deliver, such advertisements. If any of our customers' representations turn out to be inaccurate, we may be exposed to potential liability and our reputation may be damaged. While our customers are typically obligated to indemnify us, such indemnification may not fully cover us, or we may not be able to collect the amounts owed to us. In addition to settlement costs, we may be responsible for our own litigation costs, which can be extensive.

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 solution 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 require that proprietary source code combined with, linked to or distributed with such open source software be released to the public, and may also prohibit charging fees for the use of the software. If we

combine, link or distribute 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 could also preclude us from charging license fees. This would allow our competitors to create similar solutions with lower development effort and time and ultimately put us at a competitive disadvantage.

Risks Related to Our Indebtedness, Liquidity and Financial Position

Interest rate fluctuations may affect our results of operations and financial condition.

Because a substantial portion of our debt is variable-rate debt, fluctuations in interest rates could have a material effect on our business. We incur higher interest costs if interest rates increase. Interest rates were at historic lows during 2020 and 2021, when the United States Federal Reserve took several steps to protect the economy from the impact of the COVID-19 pandemic, including reducing interest rates to new historic lows. In 2022 and 2023, the United States Federal Reserve raised interest rates. Any such increase in interest costs could have a material adverse impact on our financial condition and the levels of cash we maintain for working capital.

We may need additional capital in the future to meet our financial obligations and to pursue our business objectives. Additional capital may not be available on favorable terms, or at all, which could compromise our ability to meet our financial obligations and grow our business.

We may need to raise additional capital to fund operations in the future or to finance acquisitions or other business objectives. Such additional capital may not be available on favorable terms or at all. Lack of sufficient capital resources could significantly limit our ability to meet our financial obligations or to take advantage of business and strategic opportunities. Any additional capital raised through the sale of equity or convertible debt securities would dilute stock ownership, and any new equity securities we issue could have rights, preferences and privileges superior to those of holders of our Class A common stock. Any debt financing we secure in the future could involve restrictive covenants relating to our capital raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions. If we are unable to obtain adequate financing or financing on terms satisfactory to us when we require it, we may be required to delay, reduce the scope of, or eliminate material parts of our business strategy, including potential additional acquisitions or development of new technologies and geographic expansion.

Our loan agreement contains operating and financial covenants that may restrict our business and financing activities.

As of the date hereof, we have \$185.0 million outstanding under our loan and security agreement (“Senior Secured Credit Facility”) with Bank of America, N.A., dated February 3, 2021. Borrowings under this agreement are secured by substantially all of our assets. For more information on our outstanding long-term borrowings, see Note 11 to our consolidated financial statements. This Senior Secured Credit Facility also restricts our ability, without the lender’s written consent, to, among other things:

- dispose of or sell our assets;
- make material changes in our business or management;
- consolidate or merge with other entities;
- incur additional indebtedness;
- create liens on our assets;
- pay dividends;
- make investments;
- enter into transactions with affiliates; and
- pay off or redeem subordinated indebtedness.

In addition, our Senior Secured Credit Facility contains customary minimum quarterly financial maintenance covenants.

The operating and financial restrictions and covenants in the Senior Secured Credit Facility, as well as any future financing arrangements that we may enter into, may restrict our ability to finance our operations, engage in, expand, or otherwise pursue our business activities and strategies. Our ability to comply with these or other covenants may be affected by events beyond our control, and future breaches of these or other covenants could result in a default under the Senior Secured Credit Facility. If not

waived, future defaults could cause all of the outstanding indebtedness under the Senior Secured Credit Facility to become immediately due and payable and our access to further credit under the Senior Secured Credit Facility may terminate. If we do not have or are unable to generate sufficient cash to repay our debt obligations when they become due and payable, either upon maturity or in the event of a default, we would be required to obtain additional debt or equity financing, which may not be available on favorable terms, or at all, which may negatively impact our ability to operate and continue our business as a going concern.

Risks Related to Certain Tax Matters

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 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 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.

Additionally, our future effective tax rates could be adversely affected by changes in tax laws (including tax treaties) or their interpretation. For example, the Inflation Reduction Act, passed on August 16, 2022, included a 15 percent corporate minimum tax applicable to tax years beginning after December 31, 2022. We do not believe the corporate minimum tax will materially impact our effective tax rate or tax liability. Also, on October 8, 2021, the Organization for Economic Co-operation and Development ("OECD") released a statement on the OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting, which agreed to a two-pillar solution to address tax challenges of the digital economy. On December 20, 2021, the OECD released Pillar Two model rules defining a 15 percent global minimum tax rate for large multinational corporations. The OECD continues to release additional guidance and countries are implementing legislation with widespread adoption of the Pillar Two Framework expected by calendar year 2024. Based on our current understanding of the minimum revenue thresholds contained in the proposed Pillar Two guidance, we are outside the scope of the implementation of the reporting requirements. However, we are continuing to evaluate the Pillar Two Framework and its potential impact on future periods.

We are currently unable to predict the ultimate impact of the Inflation Reduction Act and OECD requirements on our business, results of operations and financial condition. 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. 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 we will make reasonable estimates and judgments, 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.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

We have incurred substantial net operating losses ("NOLs") during our history. Under the rules of Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (the "Code"), if a corporation undergoes an "ownership change," generally defined as a greater than 50 percentage point change (by value) in its equity ownership over a rolling three-year period, the corporation's ability to use its pre-change NOLs and other pre-change tax attributes to offset its post-change taxable income may be limited. We may experience ownership changes in the future as a result of future changes in our stock ownership, some of which changes may be outside our control. Similar provisions of state tax law may also apply to our state NOLs. As a result, if we earn net taxable income, our ability to use our pre-change NOL carryforwards to offset post-change taxable income may be subject to limitations. For these reasons, we may not be able to utilize a material portion of our NOLs and other tax attributes, which could adversely affect our future cash flows.

Risks Related to Public Reporting Matters and An Investment in Our Class A Common Stock

Substantial future sales of shares of our Class A common stock could cause the market price of our Class A common stock to decline and we may also expend substantial funds to satisfy a portion of our tax withholding and remittance obligations that arise upon the vesting and/or settlement of certain of our restricted stock awards, which may have an adverse effect on our financial condition and results of operations.

Sales of a substantial number of shares of our Class A common stock, particularly sales by our directors, executive officers and significant stockholders, or the perception that these sales might occur, could depress the market price of our Class A common stock. On June 10, 2022, the lock-up agreements that previously restricted certain holders of our capital stock from transferring or selling our shares expired. Additionally, our directors, executive officers, employees and, in certain instances, service providers, hold shares of common stock subject to outstanding options, time-based and performance-based restricted stock awards and restricted stock units under our equity incentive plans. Those shares and the shares reserved for future issuance under our equity incentive plans are and will become eligible for sale in the public market, subject to certain legal and contractual limitations. We cannot be certain whether and how many restricted stock units will satisfy their performance-based vesting conditions. Further, certain holders of our common stock have rights, subject to certain conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or our stockholders. We are unable to predict the effect that such sales related to the foregoing may have on the prevailing market price of our Class A common stock.

In addition, on August 3, 2022, the Company's board of directors authorized withholding as an alternative to market sales by executives to satisfy tax withholding requirements upon vesting of restricted stock awards ("RSAs"). As such, beginning in the third quarter of 2022, we have used and may continue to use corporate cash to make required tax payments associated with the vesting of certain executive RSAs and withhold a corresponding number of shares from such executives. We anticipate that if we continue to utilize the withholding alternative, we will spend substantial funds to satisfy tax withholding and remittance obligations when we settle executive RSAs, which may have an adverse effect on our financial condition and results of operations.

We cannot guarantee that our share repurchase program will be fully consummated or that it will enhance long-term stockholder value. Share repurchases could also increase the volatility of the trading price of our common stock and could diminish our cash reserves.

In August 2022, our board of directors authorized a share repurchase program to repurchase shares of our outstanding Class A common stock through December 31, 2024. Although our board of directors has authorized this repurchase program, the program does not obligate us to repurchase any specific dollar amount or to acquire any specific number of shares. The actual timing and amount of repurchases remain subject to a variety of factors, including stock price, trading volume, market conditions and other general business considerations. In addition, the terms of our Senior Secured Credit Facility impose limitations on our ability to repurchase shares. The share repurchase program may be modified, suspended, or terminated at any time, and we cannot guarantee that the program will be fully consummated or that it will enhance long-term stockholder value. The program could affect the trading price of our stock and increase volatility, and any announcement of a termination of this program may result in a decrease in the trading price of our stock. In addition, this program could diminish our cash and cash equivalents and marketable securities.

The nature of our business requires the application of accounting guidance that requires management to make estimates and assumptions. Reported results under GAAP may vary from key metrics used to measure our business. Additionally, changes in accounting guidance may cause us to experience greater volatility in our quarterly and annual results.

We prepare our consolidated financial statements to conform to United States Generally Accepted Accounting Principles ("GAAP"). These accounting principles are subject to interpretation by the SEC, Financial Accounting Standards Board ("FASB"), and various bodies formed to interpret and create accounting rules and regulations. Accounting standards, such as ASC 606—Revenue from Contracts with Customers or ASC 842—Leases, or the guidance relating to interpretation and adoption of standards could have a significant effect on our financial results and could affect our business. Additionally, the FASB and the SEC are focused on the integrity of financial reporting, and our accounting policies are subject to scrutiny by regulators and the public.

We cannot predict the impact of future changes to accounting principles or our related accounting policies on our financial statements going forward. In addition, were we to change our accounting estimates, including those related to the timing of revenue recognition and those used to allocate revenue between various performance obligations, our reported revenue and results of operations could be significantly impacted. If we are unsuccessful in adapting to the requirements of any new standard, then we may experience greater volatility in our quarterly and annual results, which may cause our stock price to decline.

In addition, GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements. We base our estimates on historical experience and on various other assumptions that we believe to

be reasonable under the circumstances. Such estimates and assumptions are, by their nature, subject to substantial risks and uncertainties and factors may arise over time that lead us to change our methods, estimates, and judgments. Changes in those methods, estimates, and judgments could significantly affect our results of operations.

If we fail to maintain an effective system of disclosure controls and internal control over financial reporting, our ability to produce timely and accurate financial statements or comply with applicable regulations could be impaired.

Ensuring that we have adequate internal financial and accounting controls and procedures in place to produce accurate financial statements on a timely basis is a costly and time-consuming effort that needs to be re-evaluated frequently. The rapid growth of our operations in recent years and our initial public offering in 2021 have created a need for additional resources within the accounting and finance functions due to the increasing need to produce timely financial information and to ensure the level of segregation of duties customary for a U.S. public company. We continue to reassess the sufficiency of finance personnel in response to these increasing demands and expectations.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our management does not expect that our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within our company will have been detected.

We may experience material weaknesses in our internal controls over financial reporting in the future. Our failure to remediate these material weaknesses and maintain effective internal control over financial reporting could result in material misstatements in our financial statements, the inability to timely report our financial condition or results of operations, investors losing confidence in our reported financial information and our stock price being adversely affected.

We are a "controlled company" within the meaning of the NYSE rules and, as a result, expect to qualify for, and may rely on, exemptions from certain corporate governance requirements.

As of December 31, 2023, our Co-Founder and Chief Executive Officer, David Steinberg, beneficially owns a majority of the combined voting power of all classes of our outstanding voting stock. As a result, we continue to be a controlled company within the meaning of the applicable stock exchange corporate governance standards. Under the NYSE rules, a company of which more than 50% of the voting power is held by another person or group of persons acting together is a controlled company and may elect not to comply with certain corporate governance requirements, including the requirements that:

- a majority of the board of directors consist of independent directors as defined under the rules of the NYSE;
- the nominating and governance committee be composed entirely of independent directors with a written charter addressing the committee's purpose and responsibilities; and
- the compensation committee be composed entirely of independent directors with a written charter addressing the committee's purpose and responsibilities.

These requirements will not apply to us as long as we remain a controlled company. We have not elected to take advantage of the exemption from these requirements, but may elect to do so in the future so long as we remain a "controlled company." If we choose to rely on these exemptions, you may not have the same protections afforded to stockholders of companies that are subject to all of the corporate governance requirements of the NYSE.

The dual class structure of our common stock has the effect of concentrating voting control with those stockholders who held our capital stock prior to the completion of our initial public offering, including our Co-Founder and Chief Executive Officer and his affiliates. This will limit or preclude your ability to influence corporate matters, including the election of directors, amendments to our organizational documents and any merger, consolidation, sale of all or substantially all of our assets, or other major corporate transaction requiring stockholder approval.

Our Class B common stock is entitled to ten votes per share and our Class A common stock is entitled to one vote per share. The dual class structure of our common stock has the effect of concentrating voting control with our Co-Founder and Chief Executive Officer and his affiliates, which will limit your ability to influence the outcome of matters submitted to our stockholders for approval, including the election of our directors and the approval of any change in control transaction.

As of December 31, 2023, our current founder and chief executive officer and his affiliates held, in aggregate 65.4% of the voting power of our outstanding capital stock. As a result, these stockholders, acting together, will have control over most matters that require approval by our stockholders, including the election of directors and approval of significant corporate transactions. They may also have interests that differ from yours and may vote in a way with which you disagree and which may be adverse to your interests. Corporate action might be taken even if other stockholders oppose them. This concentration of ownership may have the effect of delaying, preventing or deterring a change of control or other liquidity event of our company, could deprive our stockholders of an opportunity to receive a premium for their shares of common stock as part of a sale or other liquidity event and might ultimately affect the market price of our common stock.

Anti-takeover provisions contained in our charter documents and Delaware law could prevent a takeover that stockholders consider favorable and could also reduce the market price of our stock.

Our amended and restated certificate of incorporation contains provisions that could delay or prevent a change in control of our company. These provisions could also make it more difficult for stockholders to elect directors and take other corporate actions. These provisions do the following:

- permit our board of directors to issue up to 200,000,000 shares of preferred stock, with any rights, preferences and privileges as they may designate;
- provide that the authorized number of directors may be changed only by resolution of our board of directors;
- provide that our board of directors will be classified into three classes of directors;
- limit the ability of stockholders to remove directors to permit removals only “for cause” once Class B common stock ceases to hold more than 50% of all our outstanding common stock;
- provide that all vacancies, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- prohibit stockholder action by written consent, subject to the terms of any series of preferred stock, if the holders of shares of Class B common stock no longer hold at least a majority of the voting power of the outstanding shares of our common stock;
- require advance notice for nominations of directors by stockholders and for stockholders to include matters to be considered at our annual meetings;
- provide certain limitations on convening special stockholder meetings;
- so long as any shares of Class B common stock remain outstanding, require the prior affirmative vote of the holders of a majority of the outstanding shares of Class B common stock, voting as a separate class to consummate a Change of Control Transaction (as defined in our amended and restated certificate of incorporation);
- provide that the restrictions set forth in Section 203 of the Delaware General Corporation Law (“DGCL”) shall be applicable to us in the event that no holder of Class B common stock owns shares of our capital stock representing at least fifteen percent of the voting power of all the then outstanding shares of our capital stock; and
- not provide for cumulative voting rights in election of directors.

These and other provisions in our amended and restated certificate of incorporation and under Delaware law could discourage potential takeover attempts, reduce the price investors might be willing to pay in the future for shares of our Class A common stock and result in the market price of our Class A common stock being lower than it would be without these provisions.

Our amended and restated certificate of incorporation provides, subject to certain exceptions, that (i) the Court of Chancery of the State of Delaware is the sole and exclusive forum for certain stockholder litigation matters and (ii) the federal district courts of the United States of America are the exclusive forum for the resolution of any complaint asserting a cause of action under the Securities Act, which could limit our stockholders’ ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or stockholders.

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware is, to the fullest extent permitted by law, the sole and exclusive forum for:

- any derivative action or proceeding brought on our behalf;
- any action asserting a claim of breach of a fiduciary duty owed by, or other wrongdoing by, any of our current or former directors, officers, employees or our stockholders;

- any action asserting a claim against us arising under the DGCL, our amended and restated certificate of incorporation, or our amended and restated bylaws (as either may be amended from time to time) or as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware; and
- any action asserting a claim against us that is governed by the internal-affairs doctrine.

This exclusive forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage lawsuits against us and our directors, officers and other employees. Although our amended and restated certificate of incorporation contains the exclusive forum provision described above, it is possible that a court could find that such a provision is inapplicable for a particular claim or action or that such provision is unenforceable. If a court were to find the exclusive forum provision in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving the dispute in other jurisdictions, which could seriously harm our business.

Under our amended and restated certificate of incorporation, the exclusive forum provision described above does not apply to claims arising under the Exchange Act. Accordingly, actions by our stockholders to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder must be brought in federal court. Our stockholders will not be deemed to have waived our compliance with the federal securities laws and the regulations promulgated thereunder.

We are a large accelerated filer and, subject to certain grace periods, may no longer provide scaled disclosures as an emerging growth company, which will increase our costs and demands on management.

As of December 31, 2023, we became a large accelerated filer, and are no longer an emerging growth company. As an emerging growth company, we had the option to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies, including, but not limited to, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements. Subject to certain grace periods, we may no longer provide scaled disclosure as an "emerging growth company" as defined under the Exchange Act, which will increase our costs and demands on management. In addition, as a non-accelerated filer and emerging growth company, we have availed ourselves of the exemption from the requirement that our independent registered public accounting firm attest to the effectiveness of our internal control over financial reporting under Section 404(b) of the Sarbanes Oxley Act. However, we may no longer avail ourselves of this exemption as a large accelerated filer, which will increase our expenses and require a significant amount of management time.

Item 1B. Unresolved Staff Comments.

None.

Item 1C. Cybersecurity.

Cybersecurity Risk Management and Strategy

We have developed and implemented a cybersecurity risk management program intended to protect the confidentiality, integrity, and availability of our critical systems and information. Our cybersecurity risk management program includes a cybersecurity incident response plan.

We design and assess our program based on multiple cybersecurity frameworks, such as the National Institute of Standards and Technology Cybersecurity Framework (NIST CSF) and ISO 27001. This does not imply that we meet any particular technical standards, specifications, or requirements, only that we use the NIST CSF, ISO 27001 and other frameworks as guides to help us identify, assess, and manage cybersecurity risks relevant to our business.

Our cybersecurity risk management program is integrated into our overall enterprise risk management program, and shares common methodologies, reporting channels and governance processes that apply across the enterprise risk management program to other legal, compliance, strategic, operational, and financial risk areas.

Our cybersecurity risk management program includes:

- risk assessments designed to help identify material cybersecurity risks to our critical systems, information, products, services, and our broader enterprise IT environment;

- a security team principally responsible for managing (1) our cybersecurity risk assessment processes, (2) our security controls, and (3) our response to cybersecurity incidents;
- the use of external service providers, where appropriate, to assess, test or otherwise assist with aspects of our security controls;
- cybersecurity awareness training of our employees, incident response personnel, and senior management;
- a cybersecurity incident response plan that includes procedures for responding to cybersecurity incidents; and
- a third-party risk management process for service providers, suppliers, and vendors.

We have not identified risks from known cybersecurity threats, including as a result of any prior cybersecurity incidents, that have materially affected or are reasonably likely to materially affect us, including our operations, business strategy, results of operations, or financial condition, however, there can be no assurance that our cybersecurity risk management program and processes, including our policies, controls or procedures, will be fully implemented, complied with or effective in protecting our systems and information.

Cybersecurity Governance

Our Board considers cybersecurity risk as part of its risk oversight function and has delegated to the Audit Committee (Committee) the oversight of cybersecurity and other information technology risks. The Committee oversees management's implementation of our cybersecurity risk management program.

The Committee receives regular reports from management on our cybersecurity risks. In addition, management updates the Committee, as necessary, regarding any material cybersecurity incidents, as well as any incidents with lesser impact potential.

The Committee reports to the full Board regarding its activities, including those related to cybersecurity. The full Board also receives briefings from management on our cyber risk management program. Board members receive presentations on cybersecurity topics from our Chief Information Officer (CIO), internal security staff or external experts as part of the Board's continuing education on topics that impact public companies.

Our management team, including our CIO, Chief Information Security Office (CISO) and General Counsel, is responsible for assessing and managing our material risks from cybersecurity threats. The team has primary responsibility for our overall cybersecurity risk management program and supervises both our internal cybersecurity personnel and our retained external cybersecurity consultants. Our CIO (to whom the CISO reports) regularly attends meetings of the Committee. Our management team's experience includes decades of experience working in information security, advanced education, and information security certifications.

Our management team supervises efforts to prevent, detect, mitigate, and remediate cybersecurity risks and incidents through various means, which may include briefings from internal security personnel; threat intelligence and other information obtained from governmental, public or private sources, including external consultants engaged by us; and alerts and reports produced by security tools deployed in the IT environment.

Item 2. Properties.

Our corporate headquarters is located in New York City, New York. It consists of approximately 23,000 square feet under a lease agreement that expires in March 2029. We have several offices in the U.S. and have operations in the UK, the EU and India, as well as other locations. Our New York office focuses on our go-to-market strategy, customer success, shared services and infrastructure. Our San Francisco and Silicon Valley offices serve as our innovation hubs. The European offices focus on go-to-market and customer success. The India offices concentrate on innovation, infrastructure and shared services.

All our offices are leased and we do not own any real property. We believe that our current facilities are sufficient to meet our present needs. As we grow, we expect that suitable additional space will be available to either expand existing offices or open new office locations.

Item 3. Legal Proceedings.

From time to time, we are involved in various legal proceedings arising from the normal course of business activities. We are not currently a party to any litigation the outcome of which, we believe, if determined adversely to us, would individually or

taken together have a material adverse effect on our business, operating results, cash flows, or financial condition. Defending any such proceedings is costly and can impose a significant burden on management and employees. The results of any current or future litigation cannot be predicted with certainty, and regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources, and other factors.

We and members of our senior executive team have received subpoenas from the SEC in connection with an investigation into Kubient, Inc., a company we worked with prior to our initial public offering, and from the United States Attorney's Office for the Southern District of New York, which is conducting a parallel investigation. The amount of business that we conducted with Kubient was quantitatively insignificant to Zeta and we have not worked with Kubient since 2020. We are cooperating with the investigation.

For a description of our legal proceedings, see Note 8 to our audited consolidated financial statements in the "Financial Statements and Supplementary Data" section of this Annual Report on Form 10-K.

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.

Market Information

On June 14, 2021, our Class A common stock began trading on the NYSE under the symbol "ZETA". Prior to that time, there was no public market for our Class A common stock. There is no established public trading market for our Class B common stock.

Stockholders

As of February 16, 2024, there were 108 holders of record of our Class A common stock and 10 holders of record of our Class B common stock.

Dividend Policy

We do not currently intend to pay any cash dividends on our Class A or Class B common stock. Any declaration and payment of future dividends to holders of our Class A common stock will be at the discretion of our board of directors and will depend on many factors, including our financial condition, earnings, operating results, contractual restrictions, capital requirements, business prospects and other factors our board of directors may deem relevant.

Purchases of Equity Securities by the Issuer or Affiliated Purchaser

Common stock repurchases during the quarter ended December 31, 2023 were as follows:

Period	(a) Total Number of Shares (or Units) Purchased	(b) Average Price Paid per Share (or Unit)	(c) Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs ⁽¹⁾	(d) Maximum Number (or Approximate Dollar Value) of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs (in millions) ⁽¹⁾
October 1, 2023 – October 31, 2023	—	—	—	\$ 28.9
November 1, 2023 – November 30, 2023	50,000	\$ 8.66	50,000	\$ 28.5
December 1, 2023 – December 31, 2023	399,033	\$ 8.76	399,033	\$ 25.0
Total	449,033		449,033	

(1) On August 3, 2022, the Company's Board of Directors authorized a stock repurchase and withholding program of up to \$50 million in the aggregate for (i) repurchases of the Company's outstanding Class A common stock through December 31, 2024 and (ii) the withholding of shares as an alternative to market sales by certain executives to satisfy tax withholding requirements upon vesting of restricted stock awards.

Recent Sales of Unregistered Securities

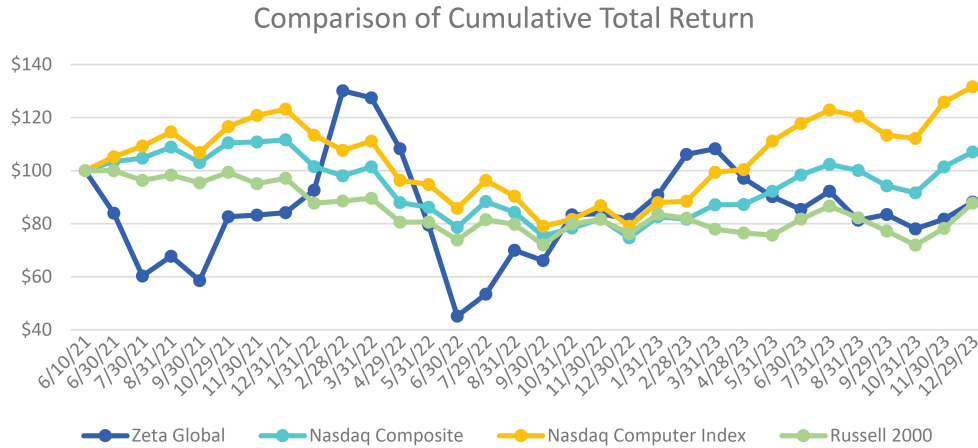
On October 11, 2023, the Company issued 40,274 shares of Class A common stock valued at \$8.07 per share, for an aggregate value of \$0.3 million, to certain individuals who provided services to the Company or their designated charitable organizations. We did not receive any proceeds from such issuance.

The securities described above were issued in reliance on the exemption from registration provided in Section 4(a)(2) of the Securities Act for transactions by an issuer not involving a public offering. Each acquirer of our securities in such transactions confirmed that it was an accredited investor and acknowledged that the securities must be acquired and held for investment.

Performance Graph

The following performance graph and related information shall not be deemed “soliciting material” or to be “filed” with the SEC, nor shall such information be incorporated by reference into any future filing under the Securities Act or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing, or otherwise subject to the liabilities under the Securities Act or Exchange Act, except to the extent that we specifically incorporate it by reference into such filing.

The following graph depicts the total cumulative stockholder return of our Class A common stock from June 10, 2021, the first day of trading of our Class A common stock on the NYSE, through December 31, 2023, relative to the performance of the Nasdaq Composite and the Russell 2000 indices. The graph assumes an initial investment of \$100.00 at the close of trading on June 10, 2021 and that all dividends paid by companies included in these indices have been reinvested. The performance shown in the graph below is not intended to forecast or be indicative of future stock price performance.



Item 6. Reserved.

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

The following discussion and analysis provides information which management believes is relevant to an assessment and understanding of our consolidated results of operations and financial condition. The discussion should be read in conjunction with our consolidated financial statements and notes thereto included elsewhere in this Annual Report on Form 10-K. This discussion contains forward-looking statements and involves numerous risks and uncertainties, including, but not limited to, those described under the heading “Risk Factors.” Actual results may differ materially from those contained in any forward-looking statements. Additionally, our historical results are not necessarily indicative of the results that may be expected for any period in the future. Our management’s discussion and analysis of financial condition and results of operations included in this document generally discusses 2023 and 2022 items and year-to-year comparisons between 2023 and 2022. Discussions of 2021 items and year-to-year comparisons between 2022 and 2021 that are not included in this document can be found in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Part II, Item 7 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2022, filed with the SEC on February 24, 2023.

Overview

Zeta is a leading omnichannel data-driven cloud platform that provides enterprises with consumer intelligence and marketing automation software. We empower our customers to target, connect and engage consumers through software that delivers personalized marketing across all addressable channels, including email, social media, web, chat, Connected TV (“CTV”) and video, among others. We believe our actionable insights derived from consumer intent enable our customers to acquire, grow and retain consumer relationships more efficiently and effectively than the alternative solutions available in the market.

Our Zeta Marketing Platform, or ZMP, is the largest omnichannel marketing platform with identity data at its core. The ZMP can analyze billions of structured and unstructured data points to predict consumer intent by leveraging sophisticated machine learning algorithms and the industry’s largest opted-in data set for omnichannel marketing. The ZMP acts on these insights by connecting with consumers through native integration of marketing channels and application programming interface (“API”) integration with third parties. The ZMP’s data-driven algorithms and processes learn and optimize each customer’s marketing program in real time, producing a ‘flywheel effect’ that enables our customers to test, learn and improve their marketing programs in real time.

The ZMP empowers our customers to personalize consumer experiences at scale across multiple touchpoints. Marketing programs are created and orchestrated by our customers through automated workflows and sophisticated dashboards. Our Consumer Data Platform (“CDP+”) ingests, analyzes and distills disparate data points to generate a single view of a consumer, encompassing identity, profile characteristics, behaviors and purchase intent, which is then made accessible through a single console. Our Agile Intelligence suite synthesizes Zeta’s proprietary data and data generated by our customers to uncover consumer insights that are translated into marketing programs designed for highly targeted audiences across digital channels, including email, SMS, websites, applications, social media, CTV and chat.

Factors Affecting Results of Operations

The following factors have been important to our business and we expect them to impact our results of operations and financial condition in future periods:

New Scaled Customer Acquisition

We are focused on increasing the number of scaled customers that adopt the ZMP in their enterprises. We define “scaled customers” as customers from which we generated at least \$100,000 in revenues in the trailing twelve months. Our long-term growth and operating results will depend on our ability to attract more scaled customers as we address their most pressing marketing automation needs. We will continue to focus on enterprises across multiple geographies. Between January 1, 2023 and December 31, 2023, our sales team increased by approximately 13 sales employees, and we expect to continue to invest in our go-to-market efforts in 2024. We have significantly enhanced our sales techniques in order to build a collaborative environment that encourages cross-selling and implemented a new learning and development program for our sales team. Our sales team productivity increases with tenure and our current management system gives us confidence that we are well positioned for sustainable growth. Our Agile Intelligence suite is a module that provides actionable insights to our customers and serves as an entry point into the ZMP. Agile Intelligence suite has been a proven way to land scaled customers, with minimal cost of implementation and high value adoption.

Drive Increase to Average Revenue Per User

During the year ended December 31, 2023, we experienced an increase in our scaled customer Average Revenue Per User (“ARPU”), which resulted in our revenues increasing for the year compared to the prior-year period. Our scaled customer ARPU growth resulted primarily from the initial effects of transitioning our sales team model to focus a dedicated team on new business development and a separate team on training and educating new and existing users on our platform capabilities. Our transition to this hunter/farmer sales model has included focusing more of our sales team on growth of existing scaled customers and aligning scaled customers with sellers that have specific industry expertise.

Expand Sales to Existing Customers

We adhere to a “land, expand, extend” sales model. After prospecting and landing new scaled customers, we focus on expanding sales to such scaled customers. This includes increasing their use of one product and/or embedding multiple products within an enterprise with our Agile Intelligence suite serving as the connective tissue across multiple products. We have scaled customers both in the U.S. and internationally and we believe we can achieve growth by cross-selling our existing solutions and introducing new features and functionalities within the platform. We expect that our ability to increase adoption of our products within existing scaled customers increases our future opportunities through additional sales. As part of this strategy, we expect to drive expansion in the number of channels per scaled customer. During the year ended December 31, 2023 and 2022, our channels per scaled customer were 2.1 and 2.0, respectively.

We use an annual net revenue retention (“NRR”) rate as a measure of our ability to retain and expand business generated from our existing customers base. We believe that many companies frequently use annual NRR rate as an indicator for determining customer loyalty. We calculate our annual NRR rate by dividing current year revenue earned from customers from which we also earned revenue in the prior year, by the prior year revenues. Our annual NRR rate was 110.9% and 111.5% for the years ended December 31, 2023 and 2022, respectively. We exclude political and advocacy customers, which represented 1.8% and 6.3% of revenue for 2023 and 2022, respectively, from our calculation of annual NRR rate because of the biennial nature of these customers.

Our customer loyalty is also reflected in the table below, which breaks down the tenure of our scaled customers for the year ended December 31, 2023.

Tenure for All Scaled Customers for Year Ended December 31, 2023

Customer Tenure	Number of Scaled Customers	% of Scaled Customers	% of Scaled Customer Revenue
3+ Years	236	52.2 %	68.9 %
1-3 Years	124	27.4 %	23.5 %
Under 1 Year	92	20.4 %	7.6 %
Total	452	100.0 %	100.0 %

Additionally, of our 131 super-scaled customers who generate at least \$1.0 million in revenue in the trailing twelve months, 87 have a tenure of 3+ years.

Adoption of Marketing Automation Products

Our ability to drive adoption of the ZMP will depend on the overall demand for marketing automation solutions. We expect continued strong investment in marketing technology by enterprise companies. Additionally, as enterprise marketing spend shifts towards digital from offline channels, we expect marketing automation technology will benefit. As a result, we expect our enterprise customer base to grow and propel greater platform deployment and usage. While we do not believe our competitors offer a comparable all-in-one platform solution for marketing automation, certain competitors offer point solutions that compete with specific tools and products we offer as part of the ZMP. Potential customers may also elect to build in-house solutions for marketing automation. While it is difficult to predict adoption rates and future product demand, we are focused on continuing to innovate and create marketing automation products that address the business requirements of our customers better than alternative solutions.

Investment in Innovation

We intend to invest in our business in order to drive long-term growth in an expanding market and capture economies of scale derived from a larger business base. For example, we plan to invest in our research and development activities to ensure we remain at the forefront of data management, AI development and marketing automation. We will also continue to invest in our sales and marketing capabilities. Lastly, we expect to invest in the expansion of markets including international and the B2B sector. We plan to incur additional general and administrative expenses to support our growth. Even as cost of revenues (excluding depreciation and amortization) and other expenses fluctuate over time and may be negatively impacted by factors beyond our control, we plan to remain focused on making necessary investments to drive long-term growth.

Seasonality

In general, the marketing industry experiences seasonal trends that affect the vast majority of participants in the digital marketing ecosystem. Historically, marketing activity is higher in the fourth quarter of the calendar year to coincide with the holiday shopping season as compared to the first quarter. As a result, the subsequent first quarter tends to reflect lower activity levels and lower performance. We generally expect these seasonality trends to continue and our ability to effectively manage our resources in anticipation of these trends may affect our operating results.

Key Performance Metrics

We review key performance metrics, discussed below, to evaluate our business, track performance, identify trends, formulate plans and make strategic decisions. We believe that the presentation of such metrics provides investors with effective ways to measure and model the performance of companies such as ours, with recurring revenue streams.

Scaled customers

We measure and track the number of scaled customers on a trailing twelve months basis because our ability to attract new scaled customers, grow our scaled customer base and retain or expand our business with existing scaled customers is both an important contributor to our revenue growth and an indicator to investors of our measurable success. We define scaled customers as customers from which we generated at least \$100,000 in revenues during the trailing twelve months. As a subset of scaled customers, we define super-scaled customers as customers from which we generated at least \$1.0 million in revenues during the trailing twelve months. We calculate the number of scaled and super-scaled customers at the end of each reporting period as the number of customers billed during each applicable period. In 2023, we had 452 scaled customers that representing 97% of total revenue, compared to 403 scaled customers representing 98% of total revenue in 2022.

	Year ended December 31,	
	2023	2022
Scaled customers	452	403

Scaled customers increased 12% for the year ended December 31, 2023, as compared to 2022, primarily due to growth in our customer base in the U.S. Of our scaled customers, 131 and 103 are super-scaled customers for the years ended December 31, 2023 and December 31, 2022, respectively.

Scaled customer ARPU

We believe that our ability to increase scaled customer ARPU is an indicator of our ability to grow the long-term value of existing customer relationships. We calculate the scaled customer ARPU as revenue for the corresponding period divided by the number of scaled customers during that period. We believe that scaled customer ARPU is useful for investors because it is an indicator of our ability to increase revenue and scale our business.

	Year ended December 31,	
	2023	2022
Scaled customer ARPU (in thousands)	\$ 1,572	\$ 1,431

Scaled customer ARPU increased 10% for the year ended December 31, 2023, as compared to 2022, primarily due to higher usage of our platform among scaled customers. ARPU for our super-scaled customers was \$4.5 million, across 131 customers for the year ended December 31, 2023 and was \$4.5 million, across 103 customers for the year ended December 31, 2022.

Description of Certain Components of Financial Data

Revenues

Our revenue primarily arises from use of our technology platform via subscription fees, volume-based utilization fees and fees for professional services. Our platform revenue comprised of a mix of direct platform revenue and integrated platform revenue, which leverages API integrations with third parties. For 2023 and 2022, we derived 72% and 77% of our revenues from direct platform revenue, respectively, and 28% and 23% of our revenues from integrated platform revenue, respectively. Revenues are recognized when control of these services is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those services. Sales and other taxes collected by us are excluded from revenue. Our revenue recognition policies are discussed in more detail under “Critical Accounting Estimates.”

Cost of revenues (excluding depreciation and amortization)

Cost of revenue excludes depreciation and amortization and consists primarily of media and marketing costs and certain employee-related costs. Media and marketing costs consist primarily of fees paid to third-party publishers, media owners or managers, and strategic partners that are directly related to a revenue-generating events. We pay these third-party publishers, media owners or managers and strategic partners on a revenue-share, a cost-per-lead, cost-per-click, or cost-per-thousand-impressions basis. Expenses related to “internet traffic” associated with the viewing of available impressions or queries per second and costs of providing support to our customers are also included in the cost of revenues (excluding depreciation and amortization). Employee-related costs included in cost of revenues (excluding depreciation and amortization) include salaries, bonuses, commissions, stock-based compensation and employee benefit costs primarily related to individuals directly associated with providing services to our customers. Our cost of revenues (excluding depreciation and amortization) are dependent on the revenue mix and therefore can slightly increase or decrease in the future as a percentage of revenue over the long term.

General and administrative expenses

General and administrative expenses primarily consist of computer and telecom expenses, employee-related costs, including salaries, bonuses, stock-based compensation and employee benefits costs associated with our executives, finance, legal, human resources and other administrative personnel, as well as accounting and legal professional services fees and platform and related infrastructure costs. We expect general and administrative expenses to increase in absolute dollars in future periods. We expect that general and administrative expenses to decrease as a percentage of revenue over the long term.

Selling and marketing expenses

Selling and marketing expenses primarily consist of employee-related costs, including salaries, bonuses, employee benefits costs, stock-based compensation and commission costs for our sales and marketing personnel. Selling and marketing expenses also include costs for market development programs, advertising, promotional and other marketing activities. We intend to continue to invest in marketing initiatives and as a result we expect selling and marketing expenses to increase in absolute dollars in future periods. Selling and marketing expenses as a percentage of revenue may fluctuate from period to period based on revenue levels and the timing of our investments in these functions over the long term.

Research and development expenses

Research and development expenses primarily consists of employee-related costs, including salaries, bonuses and employee benefit costs, stock-based compensation associated with engineering and IT services associated with the ongoing research and maintenance of internal use software. We expect to continue to invest in research and development in order to develop our technology platform to drive incremental value and growth and as a result we expect that research and development expenses may fluctuate from period to period as a percentage of revenue over the long term.

Depreciation and amortization

Depreciation and amortization relate to property and equipment, website and software development costs as well as acquisition-related and other acquired intangible assets. We record depreciation and amortization using straight-line method over the estimated useful life of the assets.

Acquisition-related expenses

Acquisition-related expenses primarily consists of legal fees associated with certain business combinations. We expect that acquisition-related expenses will be correlated with future acquisitions (if any), which could be greater than or less than our historic levels.

Restructuring expenses

Restructuring expenses consists primarily of employee termination costs due to internal restructuring. We expect that restructuring expenses will be correlated with future restructuring activities (if any), which could be greater than or less than our historic levels.

Interest expense

Interest expense primarily consists of interest payable on our long-term borrowings, net of interest earned on our short term investments in money market accounts and other short term deposits. We anticipate interest expense to be impacted by changes in variable interest rates.

Other expenses / (income)

Other expenses / (income) primarily consist of changes in fair value of acquisition-related liabilities, gains and losses on sale of assets and foreign exchange gains and losses. We expect that the magnitude of other income and expenses will depend on external factors such as foreign exchange rate and the remeasurement impact of acquisition related liabilities, which depends on the performance of our acquisitions and could be greater than or less than our historic levels.

Change in fair value of warrants and derivative liabilities

Change in fair value of warrants and derivative liabilities primarily relates to warrants to purchase shares of our common stock that we issued in connection with previous financing rounds, these warrants were converted into our Class A Common Stock upon IPO and as such there is no revaluation impact of warrant liabilities during the year ended on December 31, 2023. Historically, our derivative liability represented the conversion feature on our redeemable convertible preferred stock, which also extinguished upon our IPO. When we enter into transactions that include certain features that qualify to be embedded derivatives in accordance with ASC Topic 815, that requires to bifurcate such features from their host instruments and account for them as free-standing derivative financial instruments if certain criteria are met. Future changes in the fair value of warrants and derivative liabilities depends on the Company entering into transactions that contain warrants or derivative features.

Income tax provision / (benefit)

We account for income taxes in accordance with ASC 740, Income Taxes, which requires an asset and liability approach for the financial accounting and reporting of income taxes. Under this method, deferred tax assets and liabilities are determined based on temporary differences between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect on deferred tax assets and liabilities of a change in tax laws is recognized in the consolidated statements of operations in the period that includes the enactment date. A valuation allowance is established when we determine that it is more likely than not that some portion or all of the deferred tax assets will not be realized. We have concluded that the U.S. deferred tax assets are not realizable on a more-likely-than-not basis and that a full valuation allowance is required.

Stock-based compensation

The measurement of stock-based compensation for all stock-based payment awards, including restricted stock, performance stock units ("PSUs") and stock options granted to employees, consultants or advisors and non-employee directors, and shares purchased under the Company's employee stock purchase plan ("ESPP"), is based on the estimated fair value of the awards on the date of grant or date of modification of such grants. See Note 13 to our consolidated financial statements for further details.

We estimate the recognition of unrecognized stock-based compensation (in thousands) as follows, subject to future forfeitures:

Year ended December 31,					
2024	2025	2026	2027	2028	Total
\$ 151,931	\$ 66,024	\$ 25,252	\$ 7,556	\$ —	\$ 250,763

Results of Operations

We operate as a single reportable segment to reflect the way our Chief Operating Decision Maker (“CODM”) reviews and assesses the performance of the business. Our CODM is the Chief Executive Officer.

	Year ended December 31,	
	2023	2022
Revenues	\$ 728,723	\$ 590,961
Operating expenses:		
Cost of revenues (excluding depreciation and amortization)	274,482	215,466
General and administrative expenses	205,419	213,615
Selling and marketing expenses	288,441	299,238
Research and development expenses	73,869	69,454
Depreciation and amortization	51,149	51,878
Acquisition- related expenses	203	344
Restructuring expenses	2,845	—
Total operating expenses	\$ 896,408	\$ 849,995
Loss from operations	(167,685)	(259,034)
Interest expense	10,939	7,303
Other expenses	7,820	13,983
Change in fair value of warrants and derivative liabilities	—	410
Total other expenses	\$ 18,759	\$ 21,696
Loss before income taxes	(186,444)	(280,730)
Income tax provision/(benefit)	1,037	\$ (1,491)
Net loss	\$ (187,481)	\$ (279,239)

Comparison of the Years Ended December 31, 2023 and 2022

Revenues

	Year Ended December 31,		Change	
	2023	2022	Amount	%
Revenues	\$ 728,723	\$ 590,961	\$ 137,762	23.3 %

Revenues increased by \$137.8 million, or 23.3%, for the year ended December 31, 2023 as compared to the year ended December 31, 2022. The increase in revenues is attributable to incremental revenues of \$35.6 million from existing customers and \$102.2 million from new customers (including approximately \$5.5 million from the acquisitions made during the year ended December 31, 2023).

Cost of revenues (excluding depreciation and amortization)

	Year Ended December 31,		Change	
	2023	2022	Amount	%
Cost of revenues (excluding depreciation and amortization)	\$ 274,482	\$ 215,466	\$ 59,016	27.4 %

Cost of revenues (excluding depreciation and amortization) increased by \$59.0 million, or 27.4%, for the year ended December 31, 2023 as compared to the year ended December 31, 2022. This increase was primarily driven by \$61.2 million in incremental media costs and employee related costs of \$1.9 million. This increase was partially offset by lower stock-based compensation of \$4.1 million.

General and administrative expenses

	Year Ended December 31,		Change	
	2023	2022	Amount	%
General and administrative expenses	\$ 205,419	\$ 213,615	\$ (8,196)	(3.8)%

General and administrative expenses decreased by \$8.2 million, or 3.8%, for the year ended December 31, 2023 as compared to the year ended December 31, 2022. This decrease was primarily driven by lower stock-based compensation of \$24.9 million, which was partially offset by higher professional services fees of \$5.3 million, computer and telecom related expenses of \$8.8 million, employee related costs of \$0.9 million and an incremental provision for doubtful debt of \$1.6 million.

Selling and marketing expenses

	Year Ended December 31,		Change	
	2023	2022	Amount	%
Selling and marketing expenses	\$ 288,441	\$ 299,238	\$ (10,797)	(3.6)%

Selling and marketing expenses decreased by \$10.8 million, or 3.6%, for the year ended December 31, 2023 as compared to the year ended December 31, 2022. This decrease was primarily driven by lower stock-based compensation of \$27.6 million and other sales and marketing-related expenses of \$0.6 million, which was partially offset by higher employee-related costs of \$17.4 million.

Research and development expenses

	Year Ended December 31,		Change	
	2023	2022	Amount	%
Research and development expenses	\$ 73,869	\$ 69,454	\$ 4,415	6.4%

Research and development expenses increased by \$4.4 million, or 6.4%, for the year ended December 31, 2023 as compared to the year ended December 31, 2022. This increase was primarily driven by an increase in employee related costs of \$3.0 million, consulting fees of \$0.8 million and stock-based compensation of \$0.6 million.

Depreciation and amortization

	Year Ended December 31,		Change	
	2023	2022	Amount	%
Depreciation and amortization	\$ 51,149	\$ 51,878	\$ (729)	(1.4)%

Depreciation and amortization expense decreased by \$0.7 million, or 1.4%, for the year ended December 31, 2023 as compared to the year ended December 31, 2022. This decrease was driven by lower amortization expense of \$0.7 million related to intangible assets.

Acquisition-related expenses

	Year Ended December 31,		Change	
	2023	2022	Amount	%
Acquisition-related expenses	\$ 203	\$ 344	\$ (141)	(41.0)%

Acquisition-related expenses decreased by \$0.1 million, or 41%, for the year ended December 31, 2023 as compared to the year ended December 31, 2022, primarily driven by lower legal and professional fees incurred for our business combinations.

Restructuring expenses

	Year Ended December 31,		Change	
	2023	2022	Amount	%
Restructuring expenses	\$ 2,845	\$ —	\$ 2,845	100.0%

We recorded restructuring expenses of \$2.8 million during the year ended December 31, 2023 related to employee termination costs due to internal restructuring. We did not have any such restructuring expenses for the year ended December 31, 2022.

Interest expense

	Year Ended December 31,		Change	
	2023	2022	Amount	%
Interest expense	\$ 10,939	\$ 7,303	\$ 3,636	49.8%

Interest expense increased by \$3.6 million, or 49.8%, for the year ended December 31, 2023 as compared to the year ended December 31, 2022 primarily as a result of increases in interest rates in recent periods. This increase was partially offset by higher income earned on our money market accounts and short term deposits.

Other expenses

	Year Ended December 31,		Change	
	2023	2022	Amount	%
Other expenses	\$ 7,820	\$ 13,983	\$ (6,163)	(44.1)%

Other expenses decreased by \$6.2 million, or 44.1%, for the year ended December 31, 2023 as compared to the year ended December 31, 2022. This decrease was primarily driven by lower changes in fair value of acquisition-related liabilities recorded during the year ended December 31, 2023 as compared to the year ended December 31, 2022.

Change in fair value of warrants and derivative liabilities

	Year Ended December 31,		Change	
	2023	2022	Amount	%
Change in fair value of warrants and derivative liabilities	\$ —	\$ 410	\$ (410)	(100.0)%

We did not record any change in fair value of warrants and derivative liabilities during the year ended December 31, 2023. The change in fair value of warrants and derivative liabilities during the year ended December 31, 2022 was primarily due to the change in fair value of certain derivative instruments issued by the Company.

Income tax Provision / (benefit)

	Year Ended December 31,		Change	
	2023	2022	Amount	%
Income tax provision/(benefit)	\$ 1,037	\$ (1,491)	\$ 2,528	169.6%

Income tax provision increased by \$2.5 million, or 169.6%, for the year ended December 31, 2023 as compared to the year ended December 31, 2022. For the year ended December 31, 2023, we recorded an income tax provision of \$1,037, which primarily relates to an income tax provision for foreign taxes. For the year ended December 31, 2022, we recorded an income tax benefit of \$1,491, which primarily related to the partial release of our U.S. valuation allowance as a business combination consummated during 2022, which created a source of future taxable income, partially offset by an income tax provision for foreign taxes.

The effective tax rates for the years ended December 31, 2023 was negative 0.5% and for the years ended December 31, 2022 was 0.5%. For both 2023 and 2022, our effective tax rates differ from the U.S. federal statutory rate of 21% primarily related to changes in our U.S valuation allowance as we maintain a full valuation allowance against our U.S. net deferred tax assets based upon the weight of objective evidence.

Non-GAAP Financial Measures

We use the following non-GAAP financial information, collectively, to evaluate our ongoing operations and for internal planning and forecasting purposes. Non-GAAP financial information is presented for supplemental informational purposes only, should not be considered a substitute for financial information presented in accordance with generally accepted accounting principles, and may be different from similarly titled non-GAAP measures used by other companies. Whenever we use a non-GAAP financial measure, a reconciliation is provided to the most closely applicable financial measure stated in accordance with generally accepted accounting principles. We believe that these non-GAAP financial measures may be useful to investors in analyzing our financial and operational performance.

Adjusted EBITDA and adjusted EBITDA margin

Adjusted EBITDA is a non-GAAP financial measure defined as net loss adjusted for interest expense, depreciation and amortization, stock-based compensation, income tax (benefit) / provision, acquisition-related expenses, restructuring expenses, change in fair value of warrants and derivative liabilities, certain dispute settlement expenses, gain on extinguishment of debt, certain non-recurring IPO related expenses, including the payroll taxes related to vesting of restricted stock and restricted stock units upon the completion of our IPO, and other (income) / expenses. Acquisition-related expenses primarily consist of legal fees associated with certain business combinations and restructuring expenses are severance and other employee-related costs which we do not expect to incur in the future, which may distort the comparability of the results of operations. Change in fair value of warrants and derivative liabilities is a non-cash expense related to periodically recording “mark-to-market” changes in the valuation of derivatives and warrants. Other (income) / expenses consists of non-cash expenses such as changes in fair value of acquisition-related liabilities, gains and losses on sales of assets and foreign exchange gains and losses. In particular, we believe that the exclusion of stock-based compensation, certain dispute settlement expenses and non-recurring IPO related expenses that are not related to our core operations provides measures for period-to-period comparisons of our business and provides additional insight into our core controllable costs. Adjusted EBITDA margin is a non-GAAP metric defined as adjusted EBITDA divided by the total revenues for the same period. Adjusted EBITDA and adjusted EBITDA margin provide us with a useful measure for period-to-period comparisons of our business as well as comparison to our peers. Our use of adjusted EBITDA and adjusted EBITDA margin has limitations as an analytical tool, and you should not consider these measures in isolation or as a substitute for analysis of our financial results as reported under GAAP. Because of these and other limitations, you should consider our non-GAAP measures only as supplemental to other GAAP-based financial performance measures, including revenues and net loss.

The following table reconciles adjusted EBITDA and adjusted EBITDA margin to net loss and net loss margin, the most directly comparable financial measure calculated and presented in accordance with GAAP.

	Year ended December 31,	
	2023	2022
Net loss	\$ (187,481)	\$ (279,239)
Net loss margin	(25.7)%	(47.3)%
Add back:		
Depreciation and amortization	51,149	51,878
Restructuring expenses	2,845	—
Acquisition-related expenses	203	344
Stock-based compensation	242,881	298,992
Other expenses	7,820	13,983
Change in fair value of warrants and derivative liabilities	—	410
Interest expense	10,939	7,303
Income tax provision/(benefit)	1,037	(1,491)
Adjusted EBITDA	\$ 129,393	\$ 92,180
Adjusted EBITDA margin%	17.8 %	15.6 %

Liquidity and Capital Resources

We have financed our operations and capital expenditures primarily through utilization of cash generated from operations, as well as borrowings under our credit facilities. As of December 31, 2023, we had cash and cash equivalents of \$131.7 million and net working capital, consisting of current assets less current liabilities, of \$133.4 million. As of December 31, 2023, we had an accumulated deficit of \$958.5 million.

We believe our existing cash and anticipated net cash provided by operating activities, together with available borrowings under our credit facility, will be sufficient to meet our working capital requirements for at least the next 12 months and thereafter for the foreseeable future. However, if our operating performance during the next 12 months is below our expectations, our liquidity and ability to operate our business could be adversely affected. Our future capital requirements and the adequacy of available funds will depend on many factors, including those set forth under “Risk Factors.” In the future, we may attempt to raise additional capital through sales of equity securities or through equity linked or debt financing arrangements. Any future indebtedness we incur may result in terms that could be unfavorable to our equity investors. We cannot guarantee that we will be able to raise additional capital in the future on favorable terms, or at all. Any inability to raise capital could adversely affect our ability to achieve our business objectives.

Cash flows

The following table summarizes our cash flows for the periods presented:

	For year ended December 31,	
	2023	2022
Net cash provided by / (used for):		
Cash provided by operating activities	\$ 90,523	\$ 78,486
Cash used for investing activities	(54,215)	(48,445)
Cash used for financing activities	(25,652)	(12,625)
Effect of exchange rate changes on cash and cash equivalents	(34)	(165)
Net increase in cash and cash equivalents, including restricted cash	\$ 10,622	\$ 17,251

Net cash provided by operating activities

During the year ended December 31, 2023, net cash provided by operating activities of \$90.5 million resulted primarily from adjusted non-cash items of \$303.3 million, more than offsetting our net loss of \$187.5 million. Non-cash items include stock-based compensation of \$242.9 million, depreciation and amortization of \$51.1 million and a change in fair value of acquisition related liabilities of \$7.2 million. Changes in working capital were primarily driven by increases in accounts receivable of \$64.1 million and other assets of \$1.3 million, partially offset by increases in accounts payable of \$26.3 million and accrued expenses and other current liabilities of \$12.0 million and a decrease in prepaid expenses of \$1.1 million.

During the year ended December 31, 2022, net cash provided by operating activities of \$78.5 million resulted primarily from adjusted non-cash items of \$361.0 million, more than offsetting our net loss of \$279.2 million. Non-cash items include stock-based compensation of \$299.0 million, depreciation and amortization of \$51.9 million, and a change in fair value of acquisition related liabilities of \$13.0 million. Changes in working capital were primarily driven by an increase in accounts receivable of \$19.8 million and a decrease in deferred revenue of \$4.6 million, partially offset by increases in accounts payable of \$13.5 million and accrued expenses and other current liabilities of \$8.0 million.

Net cash used in investing activities

During the year ended December 31, 2023, we used \$54.2 million of cash in investing activities, primarily consisting of capital expenditures of \$20.5 million (including a \$16.2 million investment in data and partnership agreements), website and software development costs of \$15.5 million and business and asset acquisitions and other investments of \$18.2 million (net of cash acquired).

During the year ended December 31, 2022, we used \$48.4 million of cash in investing activities, primarily consisting of capital expenditures of \$22.2 million (including a \$18.6 million investment in data and partnership agreements), website and software development costs of \$17.0 million and business and asset acquisitions and other investments of \$9.2 million (net of cash acquired).

Net cash provided by financing activities

During the year ended December 31, 2023, we used \$25.7 million of cash in financing activities, primarily due to the repurchase of \$13.4 million of common stock repurchased under our repurchase and RSA withholdings program and payment of acquisition related liabilities of \$15.5 million, partially offset by \$3.1 million paid by certain employees under the Company's employee stock purchase plan.

During the year ended December 31, 2022, we used \$12.6 million of cash in financing activities, primarily due to the repurchase of \$9.6 million of common stock repurchased under our repurchase and RSA withholdings program and payment of

acquisition related liabilities of \$6.0 million, partially offset by \$2.7 million paid by certain employees under the Company's employee stock purchase plan.

Debt

As of December 31, 2023, we have \$184.1 million (net of \$0.9 million of unamortized debt acquisition costs) of outstanding long-term borrowings.

On February 3, 2021, we entered into a \$222.5 million Senior Secured Credit Facility which was used to fully repay and terminate our previous credit agreement. On March 22, 2023, we entered into a \$25.0 million incremental revolving facility commitment (the “2023 Incremental Revolving Commitment”) pursuant to an amendment to the Senior Secured Credit Facility, thereby increasing our total credit facility to \$247.5 million. Borrowings under the debt were \$185.0 million and bear interest payable quarterly ranging from SOFR plus 2.125% to SOFR plus 2.625% based on our consolidated net leverage ratio stated in the credit agreement. We are required to repay the principal balance and any unpaid accrued interest on the Senior Secured Credit Facility on February 3, 2026.

We are currently in compliance with our financial maintenance covenants under the Senior Secured Credit Facility and, based upon our current expectations, believe that we will continue to comply with our financial maintenance covenants for the next 12 months. The Senior Secured Credit Facility contains restrictive covenants that place restrictions on us and may limit our ability to, among other things, incur additional debt and liens, purchase our securities, undertake transactions with affiliates, make other investments, pay dividends or distribute excess cash flow.

During the year ended December 31, 2023, we borrowed \$11.3 million against the revolver facility and repaid the same amount against the term loan under the credit facility.

We do not engage in off-balance sheet financing arrangements.

Contractual obligations

As of December 31, 2023, our material contractual obligations were as follows:

	Total	<1 Year	1-3 Years	3-5 Years	> 5 Years
Long-term borrowings	\$ 185,000	\$ 11,250	\$ 173,750	\$ —	\$ —
Operating leases	10,056	2,660	3,871	3,259	266
Purchase obligations	48,480	30,401	17,459	620	—
Total contractual obligations	\$ 243,536	\$ 44,311	\$ 195,080	\$ 3,879	\$ 266

Acquisition-related contingent consideration payables and holdback payables are contractual obligations for which the timing of cash out flow cannot be estimated. Contingent consideration estimates may change based on actual results and may differ from management's current expectations. For more information refer to Note 7 and Note 8 to our consolidated financial statements and notes thereto included in the “Financial Statements and Supplementary Data” section of this Annual Report on Form 10-K.

Share Repurchase and RSA Withholding Program

In August 2022, the Company's Board of Directors authorized a share repurchase and withholding program (the “2022 SRP”) authorizing the repurchase of up to \$50.0 million of our outstanding Class A common stock through December 31, 2024 and authorizing withholding as an alternative to market sales by executives to satisfy tax withholding requirements upon vesting of restricted stock awards (“RSAs”). As such, we may use corporate cash to make required tax payments associated with the vesting of certain executive RSAs and withhold a corresponding number of shares from such executives. The actual timing, number and value of shares repurchased will be determined by the Company at its discretion and will depend on a number of factors, including market conditions, applicable legal requirements, our capital needs, and whether there is a better alternative use of capital. Repurchases and withholdings during any given fiscal period under the 2022 SRP will reduce the number of weighted-average common shares outstanding for the period. See Item 5 “Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities—Purchases of Equity Securities by the Issuer or Affiliated Purchaser” for more information on the 2022 SRP.

Quarterly Financial Information (Unaudited)

The following table sets forth the Company's quarterly consolidated statement of operations data for each of the four quarters in the one-year period ended December 31, 2023. The Company has prepared the quarterly unaudited consolidated statements of operations data on a basis consistent with the audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K. In the opinion of management, the financial information in these tables reflects all adjustments, consisting only of normal recurring adjustments, which management considers necessary for a fair statement of this data. This information should be read in conjunction with the audited consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K. The results of historical periods are not necessarily indicative of the results for any future period.

	Quarter ended			
	March 31, 2023	June 30, 2023	September 30, 2023	December 31, 2023
Revenues	\$ 157,602	\$ 171,817	\$ 188,984	\$ 210,320
Operating expenses:				
Cost of revenues (excluding depreciation and amortization)	54,350	62,037	73,480	84,615
General and administrative expenses	52,601	50,715	50,706	51,397
Selling and marketing expenses	72,549	72,496	70,669	72,727
Research and development expenses	18,519	17,343	18,062	19,945
Depreciation and amortization	11,825	12,596	13,233	13,495
Acquisition-related expenses	203	—	—	—
Restructuring expenses	—	2,845	—	—
Total operating expenses	\$ 210,047	\$ 218,032	\$ 226,150	\$ 242,179
Loss from operations	(52,445)	(46,215)	(37,166)	(31,859)
Interest expense	2,448	2,797	2,894	2,800
Other expenses	1,864	2,838	2,436	682
Total other expenses	\$ 4,312	\$ 5,635	\$ 5,330	\$ 3,482
Loss before income taxes	(56,757)	(51,850)	(42,496)	(35,341)
Income tax provision/(benefit)	198	309	590	(60)
Net loss	\$ (56,955)	\$ (52,159)	\$ (43,086)	\$ (35,281)
Other comprehensive (income) / loss:				
Foreign currency translation adjustment	(147)	(58)	283	(113)
Total comprehensive loss	\$ (56,808)	\$ (52,101)	\$ (43,369)	\$ (35,168)
Net loss per share				
Net loss available to common stockholders	\$ (56,955)	\$ (52,159)	\$ (43,086)	\$ (35,281)
Basic loss per share	\$ (0.38)	\$ (0.34)	\$ (0.27)	\$ (0.22)
Diluted loss per share	\$ (0.38)	\$ (0.34)	\$ (0.27)	\$ (0.22)
Weighted average number of shares used to compute net loss per share				
Basic	150,045,840	154,597,506	158,055,789	163,922,676
Diluted	150,045,840	154,597,506	158,055,789	163,922,676

The Company recorded total stock-based compensation as follows:

	Quarter ended			
	March 31, 2023	June 30, 2023	September 30, 2023	December 31, 2023
Cost of revenues (excluding depreciation and amortization)	\$ 858	\$ 694	\$ 546	\$ 404
General and administrative expenses	24,182	20,816	21,223	22,244
Selling and marketing expenses	33,036	30,631	29,266	31,799
Research and development expenses	6,386	5,471	6,637	8,688
Total	\$ 64,462	\$ 57,612	\$ 57,672	\$ 63,135

Critical Accounting Policies and Estimates

Our financial statements are prepared in accordance with U.S. GAAP. The preparation of our financial statements in conformity with U.S. GAAP requires us to make estimates and assumptions that affect reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and reported amounts of revenues and expenses during the reporting period. Estimates are based on management judgment and the best available information, and as such actual results could differ from those estimates.

While our significant accounting policies are described in more detail in Note 2 in our consolidated financial statements included in the "Financial Statements and Supplementary Data" section of this this Annual Report on Form 10-K, we believe that the following accounting policies are those most critical to the judgments and estimates used in the preparation of our financial statements.

Revenue recognition

Revenue arises primarily from our technology platform via subscription fees, volume-based utilization fees and fees for professional services designed to increase our customers' usage of our technology platform. Sales and other taxes collected by us concurrent with revenue-producing activities are excluded from revenues.

We may incur third-party costs on behalf of customers, including direct costs and incidental costs. Third-party direct costs incurred in connection with the delivery of advertising or marketing services include, among others: purchased media, data, cost of physical mailers, and procurement cost of Internet Protocol Addresses ("IPs") used in the emailing services. The inclusion of billings related to third-party direct costs in revenues depends on whether we act as a principal or as an agent in the customer arrangement. In certain contracts, we contract with customers to provide access to our software platform available through different pricing options to tailor to multiple customer types and customer needs. These options include fixed or minimum monthly subscription fees, fixed cost per mile and percentage of spend on third-party costs. We generate revenue when the software platform is used on a self-service basis by charging a platform fee that is either a percentage of spend or a flat monthly subscription fee as well as fees for additional features such as data and advanced reporting. As we do not obtain control of the ad spots prior to transfer to the customer in these arrangements, revenue is recognized on a net basis. We may also act as principal when contracting for third-party services on behalf of our customers, because we control the specified goods or services before they are transferred to the customer and we are responsible for providing the specified goods or services, or we are responsible for directing and integrating third-party vendors to fulfill our performance obligation at the agreed upon contractual price. In such arrangements, we also take pricing risk under the terms of the customer contract. In certain media buying businesses, we act as principal when we control the buying process for the purchase of the media and contract directly with the media vendor. In these arrangements, we assume the pricing risk under the terms of the customer contract. In such cases, we include billable amounts related to third-party costs in the transaction price and record revenues at the gross amount billed, consistent with the manner that revenues are recognized for the underlying services contract.

Revenues from certain contracts with customers are subject to variability due to cash incentives and credit notes, therefore, revenues are recognized but subject to the constraint on the variable consideration, i.e. only to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

Contracts with customers may include multiple services. We determine whether those services are distinct from each other, and therefore performance obligations are to be accounted for separately, or not distinct from each other, and therefore part of a single performance obligation.

We determine the standalone selling price for various performance obligations in the customer contracts that require significant judgment.

We have certain revenue contracts with our vendors that involve both the purchase and sale of services with a single counterparty. We perform an assessment of the services transferred to determine the independent nature of both the transactions and accordingly revenue and expense are based on the fair value of the services provided or received.

Website and software development costs

We capitalize the cost of internally developed software that has a useful life in excess of one year. These costs consist of the salaries and benefits of employees working on such software development to customize it to our needs. Capitalization begins during the application development stage, once the preliminary project stage has been completed. We assess whether an enhancement creates additional functionality to the software, and qualifies the costs incurred for capitalization. Once a project is available for general release, capitalization ceases and we estimate the useful life of the asset and begin amortization using the straight-line method. We annually assess whether triggering events are present to review internal-use software for impairment. The estimated useful life of our website and software development costs is three years.

We determine the amount of internal software costs to be capitalized based on the amount of time spent by our developers on projects in the application stage of development. There is judgment involved in estimating the time allocated to a particular project in the application stage. A significant change in the time spent on each project could have a material impact on the amount capitalized and the related amortization expense in subsequent periods.

Intangible assets, net

We record intangible assets at cost less accumulated amortization. Cost of intangible assets acquired through business combinations represents their fair market value at the date of acquisition. Amortization is calculated using the straight-line method which is consistent with the realization of cash flows over the weighted average useful lives of the intangible assets.

We also purchase and license data content from multiple data providers to develop the proprietary databases of information for client use. This data content sometime consists of consumer information like name, address, phone numbers, zip codes, gender, age group, etc. and it may also consist of business information industry, sales volume, physical address, financial information, credit score, etc. We capitalize the intangible assets as the data contents are received from the third parties as we expect those assets to provide future economic benefit via the generation of our revenue and margins. The intangible assets are amortized on a straight-line basis over the estimated useful life of the data asset. We review the carrying value of our definite-lived intangible assets for impairment whenever events and circumstances indicate that the carrying value of an asset may not be recoverable from the estimated future cash flows expected to result from its use and eventual disposition. If these future undiscounted cash flows are less than the carrying value of the asset, then the carrying amount of the asset is written down to its fair value, based on the related estimated discounted future cash flows. Factors considered by management in performing this assessment include current operating results, trends and prospects, the manner in which the intangible assets are used, and the effects of obsolescence, demand, competition and other economic factors.

Fair value

We grant stock-based payment awards including restricted stock, Performance Stock Units (“PSU”) and stock options to employees, contractors or advisors and non-employee directors. We also maintain an ESPP pursuant to which participants may purchase shares of our Class A common stock through payroll contributions. We account for all stock-based payment awards using a fair value-based method. The fair value of restricted stock is based on the Company's closing stock price as of the day prior to the date of the grants. The fair value of each stock option granted to employees is estimated on the date of the grant using the Black-Scholes-Merton option pricing model, and the related stock-based compensation is recognized over the expected life of the option. The fair value of shares purchased under our ESPP was determined using the Black-Scholes-Merton model and PSU was determined using the Monte-Carlo Simulation Method, and the related stock-based compensation is recognized over the expected vesting term.

Key assumptions used to determine the fair value of stock options, shares purchase under our ESPP and PSUs were as follows:

- Risk-free interest rate: The risk-free interest rate is based on the U.S. Treasury rates at the time of grant that approximate the expected term of the option.
- Expected dividend yield: We have never declared or paid any dividends and do not expect to pay any dividends in the foreseeable future.
- Expected term: We estimate the expected term using the “simplified method” as we do not have sufficient historical exercise data.
- Current value of the underlying asset: This is based on the VWAP (volume weighted average price) of our stock as of the date of issuance of PSUs.
- Expected volatility: Expected volatility is estimated by considering the historical volatility of similar publicly-traded companies for which share price information is available.

Business combination and goodwill

We utilize the purchase method of accounting in accordance with ASC 805, Business Combinations. This standard requires that the total cost of an acquisition be allocated to the tangible and intangible assets acquired and liabilities assumed based on the fair value of the tangible and intangible assets acquired and liabilities assumed at the acquisition date. Our estimates and assumptions used in assessing fair value are inherently uncertain and subject to refinement. During the measurement period, which may be up to one year from the acquisition date, we may record adjustments to the fair value of these tangible and intangible assets acquired and liabilities assumed, with the corresponding offset to goodwill. In addition, uncertain tax positions and tax-related valuation allowances are initially recorded in connection with a business combination as of the acquisition date. The fair value of contingent consideration is recalculated each reporting period with any resulting gains or losses recorded on the Consolidated Statements of Operations and Comprehensive Loss.

We perform an annual goodwill impairment test on October 1 every year based on financial statements as of September 30. Goodwill impairment is assessed based on a comparison of the fair value of our reporting units to the underlying carrying value of

the reporting unit's net assets, including goodwill. As of December 31, 2023, we have four reporting units. If the carrying value of the reporting unit exceeds its fair value, an impairment loss shall be recognized, in an amount equal to that excess, limited to the total amount of goodwill allocated to that reporting unit. For the years ended December 31, 2023 and 2022, annual goodwill impairment test, we elected to bypass the qualitative assessment for the four reporting units and proceeded directly to the quantitative impairment test using a discounted cash flow method to estimate the fair value of the reporting units. As a result of this assessment, it was concluded that there was no impairment loss because the fair value of the reporting units significantly exceeded the respective carrying value of each reporting unit.

Recently Issued Accounting Pronouncements

A description of recently issued accounting pronouncements that may potentially impact our financial condition and results of operations is disclosed in Note 2 to our consolidated financial statements and notes thereto included in the "Financial Statements and Supplementary Data" section of this Annual Report on Form 10-K.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

We are exposed to market risk in the ordinary course of business. Market risk represents the risk of loss that may impact our financial condition due to adverse changes in financial market prices and rates. Our market risk exposure is primarily a result of fluctuations in interest rates and foreign currency exchange risks. We do not hold or issue financial instruments for speculative or trading purposes.

Interest Rate Risk

We are exposed to market risk from changes in interest rates on our long-term borrowings, which accrue interest at a variable rate. As of December 31, 2023, we have not entered into any derivative financial instrument contracts to mitigate the interest rate risk on our \$185.0 million debt, and as a result, we are subject to the potential impact of rising interest rates, which could negatively impact our profitability and cash flows. Based upon the principal balance owed on our long-term borrowings as of December 31, 2023, a hypothetical one percentage point increase or decrease in the rate of interest would result in an increase or decrease in our annual interest expenses by \$1.9 million. There were no material changes in market risk exposures as of December 31, 2023. For more information, see Note 11 to our audited consolidated financial statements and notes thereto included in the Financial Statements and Supplementary Data section of this Annual Report on Form 10-K.

Foreign Currency Risk

We have foreign currency risks related to a certain number of our foreign subsidiaries, in the UK, France, Belgium and India. We do not believe that a 10% change in the relative value of the U.S. dollar to other foreign currencies would have a material effect on our cash flows and operating results in currencies other than the U.S. dollar.

Inflation Risk

In 2023, inflation increased significantly in the United States and overseas, resulting in rising wages and other costs. We do not believe that inflation has had a material effect on our business, financial condition or results of operations. However, if our costs were to become subject to significant inflationary pressures, we may not be able to fully offset higher costs through price increases and our inability or failure to do so could potentially harm our business, financial condition, and results of operations.

Item 8. Financial Statements and Supplementary Data.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of Zeta Global Holdings Corp.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Zeta Global Holdings Corp. and subsidiaries (the "Company") as of December 31, 2023 and 2022, the related consolidated statements of operations and comprehensive loss, changes in redeemable convertible preferred stock and stockholders' equity / (deficit) and cash flows for each of the three years in the period ended December 31, 2023, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2023 and 2022 and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2023, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2023, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 28, 2024, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's 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 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 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 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Revenue Recognition- Refer to Note 2 to the financial statements

Critical Audit Matter Description

When the Company enters into contracts with third parties in which the Company is acting as both a vendor and a customer, the Company performs an assessment of the services transferred to determine the independent nature of both the transactions. The Company presents the revenue and expense based on the fair value of the services provided or received.

We identified revenue recognition on contracts with third parties in which the Company is acting as both a vendor and customer as a critical audit matter because of the judgments necessary for management to evaluate whether goods or services are distinct and to estimate the fair value of the goods or services provided or received. Performing audit procedures related to revenue recognition for these contracts required more extensive audit effort and a higher degree of auditor judgment.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to revenue recognition on contracts with third parties in which the Company is acting as both a vendor and a customer included the following:

- We tested the effectiveness of controls implemented by management related to the identification of the population of contractual arrangements in which the Company is acting as a vendor and a customer that require certain accounting considerations as well as the controls over establishing revenue recognition policies for these types of contracts, including the identification of the contract, identification of performance obligations, determination of the transaction price, allocation of the transaction price, and determination of when performance obligations are satisfied.
- We selected a sample of contracts for detailed testing wherein the Company is acting as both a vendor and customer and performed the following:
 - o Analyzed the contract to determine if all arrangement terms were considered and independently evaluated management's accounting by reading the contract and making inquiries of management regarding the nature of the arrangement, the services to be performed and the obligations under the contract in order to evaluate the contracts' commercial substance.
 - o Tested management's identification of distinct performance obligations by evaluating whether the underlying goods, services, or both were capable of being distinct and were distinct within the context of the contract.
 - o Tested the standalone selling price (SSP) established by management by obtaining supporting evidence for management's determination of the SSP and tested the allocation of the contract value to performance obligations based on the SSP.
 - o Tested the timing of revenue recognition by evaluating whether revenue should be recognized over time or at a point in time, and whether the revenue was recognized in the appropriate period by examining evidence of delivery or access to support the timing of revenue recognition based on the product type.
 - o Tested the mathematical accuracy of management's calculation of revenue.
- Tested the completeness of management's listing of contracts with third parties in which the Company is acting as a vendor and a customer by separately obtaining a listing of active vendors and a listing of active customers, cross referencing these listings and comparing our analysis to the population identified by management.

/s/ Deloitte & Touche LLP

Baltimore, Maryland

February 28, 2024

We have served as the Company's auditor since 2020.

Consolidated Balance Sheets
(In thousands, except share and per share amounts)

	As of December 31,	
	2023	2022
Assets		
Current assets:		
Cash and cash equivalents	\$ 131,732	\$ 121,110
Accounts receivable, net of allowance of \$3,564 and \$1,882 as of December 31, 2023 and December 31, 2022, respectively	170,131	106,322
Prepaid expenses	6,269	7,150
Other current assets	1,622	1,866
Total current assets	309,754	236,448
Non-current assets:		
Property and equipment, net	7,452	5,981
Website and software development costs, net	32,124	36,713
Right-to-use asset - operating leases, net	6,603	7,388
Intangible assets, net	48,781	44,358
Goodwill	140,905	133,069
Deferred tax assets, net	728	745
Other non-current assets	4,367	1,800
Total non-current assets	240,960	230,054
Total assets	\$ 550,714	\$ 466,502
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 63,572	\$ 33,668
Accrued expenses	85,455	72,364
Acquisition-related liabilities	17,234	14,743
Deferred revenue	3,301	2,228
Other current liabilities	6,823	5,707
Total current liabilities	176,385	128,710
Non-current liabilities:		
Long-term borrowings	184,147	183,953
Acquisition-related liabilities	3,060	17,932
Other non-current liabilities	6,602	7,877
Total non-current liabilities	193,809	209,762
Total liabilities	370,194	338,472
Commitments and contingencies (See Note 12)		
Stockholders' equity:		
Class A common stock \$ 0.001 per share par value, up to 3,750,000,000 shares authorized, 188,631,432 and 175,266,917 shares issued and outstanding as of December 31, 2023 and December 31, 2022, respectively	189	175
Class B common stock \$ 0.001 per share par value, up to 50,000,000 shares authorized, 29,055,489 and 32,099,302 shares issued and outstanding as of December 31, 2023 and December 31, 2022, respectively	29	32
Additional paid-in capital	1,140,849	900,924
Accumulated deficit	(958,537)	(771,056)
Accumulated other comprehensive loss	(2,010)	(2,045)
Total stockholders' equity	180,520	128,030
Total liabilities and stockholders' equity	\$ 550,714	\$ 466,502

See accompanying notes to consolidated financial statements.

Consolidated Statements of Operations and Comprehensive Loss
(In thousands, except share and per share amounts)

	Year ended December 31,		
	2023	2022	2021
Revenues	\$ 728,723	\$ 590,961	\$ 458,338
Operating expenses:			
Cost of revenues (excluding depreciation and amortization)	274,482	215,466	174,720
General and administrative expenses	205,419	213,615	189,606
Selling and marketing expenses	288,441	299,238	229,343
Research and development expenses	73,869	69,454	64,474
Depreciation and amortization	51,149	51,878	45,922
Acquisition-related expenses	203	344	1,953
Restructuring expenses	2,845	—	727
Total operating expenses	\$ 896,408	\$ 849,995	\$ 706,745
Loss from operations	(167,685)	(259,034)	(248,407)
Interest expense	10,939	7,303	7,033
Other expenses / (income)	7,820	13,983	(279)
Gain on extinguishment of debt	—	—	(10,000)
Change in fair value of warrants and derivative liabilities	—	410	5,000
Total other expenses	\$ 18,759	\$ 21,696	\$ 1,754
Loss before income taxes	(186,444)	(280,730)	(250,161)
Income tax provision/(benefit)	1,037	(1,491)	(598)
Net loss	\$ (187,481)	\$ (279,239)	\$ (249,563)
Other comprehensive (income) / loss:			
Foreign currency translation adjustment	(35)	(56)	64
Total comprehensive loss	\$ (187,446)	\$ (279,183)	\$ (249,627)
Net loss per share			
Net loss	\$ (187,481)	\$ (279,239)	\$ (249,563)
Cumulative redeemable convertible preferred stock dividends	—	—	7,060
Net loss available to common stockholders	\$ (187,481)	\$ (279,239)	\$ (256,623)
Basic loss per share	\$ (1.20)	\$ (2.01)	\$ (2.95)
Diluted loss per share	\$ (1.20)	\$ (2.01)	\$ (2.95)
Weighted average number of shares used to compute net loss per share			
Basic	156,697,308	138,985,265	86,932,191
Diluted	156,697,308	138,985,265	86,932,191

The Company recorded stock-based compensation under respective lines of the above consolidated statements of operations and comprehensive loss:

	Year ended December 31,		
	2023	2022	2021
Cost of revenues (excluding depreciation and amortization)	\$ 2,502	\$ 6,634	\$ 2,589
General and administrative expenses	88,465	113,401	100,160
Selling and marketing expenses	124,732	152,377	129,577
Research and development expenses	27,182	26,580	26,833
Total	\$ 242,881	\$ 298,992	\$ 259,159

See accompanying notes to consolidated financial statements.

Consolidated Statements of Changes in Redeemable Convertible Preferred Stock and Stockholders' Equity / (Deficit)
Years Ended December 31, 2023, 2022 and 2021
(In thousands, except shares)

	Redeemable Convertible Preferred Stock		Series A common stock		Series B common stock		Class A common stock		Class B common stock		Additional Paid-in Capital	Accumulate d Deficit	Accumulated Other Comprehensive Loss	Total
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount				
Balance as of January 1, 2021	39,223,194	\$ 154,210	112,012,693	\$ 112	3,054,318	\$ 3	—	—	—	—	\$ 4,956	\$ (242,254)	\$ (2,037)	\$ (239,220)
Conversion of Series A and Series B common stock into Class A and Class B common stock, respectively	—	—	(96,830,836)	(97)	(3,054,318)	(3)	60,421,367	61	39,463,787	39	—	—	—	—
Conversion of redeemable convertible preferred stock to common stock	(39,223,194)	(154,210)	—	—	—	—	73,813,713	74	—	—	193,136	—	—	193,210
Warrants and options exercised	—	—	—	—	—	—	8,392,316	8	—	—	24,230	—	—	24,238
Shares issued in connection with the Initial Public Offering, net of issuance cost	—	—	—	—	—	—	14,773,939	15	—	—	126,523	—	—	126,538
Shares repurchased	—	—	—	—	—	—	(4,138,866)	(4)	(2,307,692)	(2)	(64,462)	—	—	(64,468)
Restricted stock cancellation	—	—	(17,853,416)	(18)	—	—	—	—	—	—	18	—	—	—
Shares issued in connection with certain agreements	—	—	613,497	1	—	—	4,124,914	4	—	—	29,645	—	—	29,650
Restricted stock grants	—	—	3,687,431	4	—	—	5,989,392	6	700,000	1	(11)	—	—	—
Restricted stock forfeitures	—	—	(1,629,369)	(2)	—	—	(3,736,010)	(4)	—	—	6	—	—	—
Common shares cancellation	—	—	—	—	—	—	(37,679)	—	—	—	—	—	—	—
Restricted stock units vesting	—	—	—	—	—	—	219,072	—	—	—	—	—	—	—
Shares issued in connection with employee stock purchase plan	—	—	—	—	—	—	152,689	—	—	—	809	—	—	809
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	269,358	—	—	269,358
Foreign currency translation adjustment	—	—	—	—	—	—	—	—	—	—	—	—	(64)	(64)
Net loss	—	—	—	—	—	—	—	—	—	—	—	(249,563)	—	(249,563)
Balance as of December 31, 2021	—	\$ —	—	\$ —	—	\$ —	159,974,847	\$ 160	37,856,095	\$ 38	\$ 584,208	\$ (491,817)	\$ (2,101)	\$ 90,488
Shares issued in connection with certain agreements	—	—	—	—	—	—	2,065,833	2	—	—	19,003	—	—	19,005
Restricted stock grants	—	—	—	—	—	—	9,054,271	9	—	—	(9)	—	—	—
Shares issued with employee stock purchase plan	—	—	—	—	—	—	409,997	—	—	—	2,742	—	—	2,742
Shares repurchased	—	—	—	—	—	—	(1,209,015)	(1)	—	—	(9,606)	—	—	(9,607)
Restricted stock forfeitures	—	—	—	—	—	—	(1,328,744)	(1)	—	—	1	—	—	—
Class B common stock transferred to Class A common stock	—	—	—	—	—	—	5,756,793	6	(5,756,793)	(6)	—	—	—	—
Options exercised	—	—	—	—	—	—	315,430	—	—	—	199	—	—	199
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	304,386	—	—	304,386
Restricted stock units vesting	—	—	—	—	—	—	227,505	—	—	—	—	—	—	—
Foreign currency translation adjustment	—	—	—	—	—	—	—	—	—	—	—	—	56	56
Net loss	—	—	—	—	—	—	—	—	—	—	—	(279,239)	—	(279,239)

Balance as of December 31, 2022	—	\$	—	—	\$	—	—	\$	—	175,266,917	\$	175	32,099,302	\$	32	\$	900,924	\$	(771,056)	\$	(2,045)	\$	128,030
Shares issued in connection with certain agreements	—	—	—	—	—	—	—	—	—	651,369	—	1	—	—	—	5,386	—	—	—	—	—	—	5,387
Restricted stock grants	—	—	—	—	—	—	—	—	—	11,467,755	—	11	—	—	—	(11)	—	—	—	—	—	—	—
Shares issued with connection with employee stock purchase plan	—	—	—	—	—	—	—	—	—	424,654	—	—	—	—	—	3,058	—	—	—	—	—	—	3,058
Shares repurchased	—	—	—	—	—	—	—	—	—	(1,360,153)	—	—	(325,923)	—	—	(15,421)	—	—	—	—	—	—	(15,421)
Restricted stock forfeitures	—	—	—	—	—	—	—	—	—	(1,241,675)	—	(1)	—	—	—	1	—	—	—	—	—	—	—
Class B common stock transferred to Class A common stock	—	—	—	—	—	—	—	—	—	2,717,890	—	3	(2,717,890)	—	(3)	—	—	—	—	—	—	—	—
Performance stock units vesting	—	—	—	—	—	—	—	—	—	142,500	—	—	—	—	—	—	—	—	—	—	—	—	—
Options exercised	—	—	—	—	—	—	—	—	—	63,500	—	—	—	—	—	241	—	—	—	—	—	—	241
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	246,671	—	—	—	—	—	—	246,671
Restricted stock units vesting	—	—	—	—	—	—	—	—	—	498,675	—	—	—	—	—	—	—	—	—	—	—	—	—
Foreign currency translation adjustment	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	35	—	35
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(187,481)	—	—	—	(187,481)
Balance as of December 31, 2023	—	\$	—	—	\$	—	—	\$	—	188,631,432	\$	189	29,055,489	\$	29	\$	1,140,849	\$	(958,537)	\$	(2,010)	\$	180,520

1. Includes 115,456,543 outstanding Class A common stock, 18,419,260 outstanding Class B common stock, 44,518,304 unvested Class A restricted stock and 19,436,835 unvested Class B restricted stock.

2. Includes 132,909,894 outstanding Class A common stock, 15,512,217 outstanding Class B common stock, 42,357,023 unvested Class A restricted stock and 16,587,085 unvested Class B restricted stock.

3. Includes 150,989,571 outstanding Class A common stock, 17,886,352 outstanding Class B common stock, 37,641,861 unvested Class A restricted stock and 11,169,137 unvested Class B restricted stock.

See accompanying notes to consolidated financial statements.

Consolidated Statements of Cash Flows
(In thousands)

	Year ended December 31,		
	2023	2022	2021
Cash flows from operating activities:			
Net loss	\$ (187,481)	\$ (279,239)	\$ (249,563)
Adjustments to reconcile net loss to net cash provided by operating activities:			
Depreciation and amortization	51,149	51,878	45,922
Stock-based compensation	242,881	298,992	259,159
Gain on extinguishment of debt	—	—	(10,000)
Deferred income taxes	11	(2,668)	(2,475)
Change in fair value of warrant and derivative liabilities	—	410	5,000
Change in fair value of acquisition-related liabilities	7,200	12,990	(1,823)
Others, net	2,015	(592)	1,868
Change in non-cash working capital (net of acquisitions):			
Accounts receivable	(64,052)	(19,826)	(1,155)
Prepaid expenses	1,061	(270)	(3,067)
Other current assets	243	(214)	5,725
Other non-current assets	(1,526)	63	(592)
Deferred revenue	807	(4,566)	2,813
Accounts payable	26,262	13,530	(22,243)
Accrued expenses and other current liabilities	12,443	10,001	14,618
Other non-current liabilities	(490)	(2,003)	105
Net cash provided by operating activities	90,523	78,486	44,292
Cash flows from investing activities:			
Capital expenditures	(20,483)	(22,232)	(9,482)
Website and software development costs	(15,487)	(17,004)	(17,274)
Acquisitions and other investments, net of cash acquired	(18,245)	(9,209)	(20,093)
Net cash used for investing activities	(54,215)	(48,445)	(46,849)
Cash flows from financing activities:			
Cash paid for acquisition-related liabilities	(15,508)	(5,959)	(9,850)
Proceeds from credit facilities, net of issuance cost	11,250	5,625	183,311
Proceeds from initial public offering, net of issuance cost	—	—	126,538
Issuances under employee stock purchase plan	3,058	2,742	809
Exercise of options	241	199	137
Repurchase of shares	(13,443)	(9,607)	(64,468)
Repayments against the credit facilities	(11,250)	(5,625)	(180,745)
Net cash (used for) / provided by financing activities	(25,652)	(12,625)	55,732
Effect of exchange rate changes on cash and cash equivalents	(34)	(165)	(41)
Net increase in cash and cash equivalents	10,622	17,251	53,134
Cash and cash equivalents, beginning of period	121,110	103,859	50,725
Cash and cash equivalents, end of period	\$ 131,732	\$ 121,110	\$ 103,859
Supplemental cash flow disclosures including non-cash activities:			
Cash paid for interest, net	\$ 10,481	\$ 5,673	\$ 7,004
Cash paid for income taxes, net	\$ 1,900	\$ 1,611	\$ 1,758
Liability established in connection with acquisitions	\$ 8,189	\$ 20,529	\$ 10,185
Capitalized stock-based compensation as website and software development	\$ 3,790	\$ 5,394	\$ 10,196
Shares issued in connection with acquisitions and other agreements	\$ 5,387	\$ 19,005	\$ 29,650
Dividends on redeemable convertible preferred stock settled in Company's equity	\$ —	\$ —	\$ 60,082
Non-cash settlement of warrants and derivative liabilities	\$ —	\$ 410	\$ 63,100
Right-to-use asset established	\$ 165	\$ 9,559	\$ —
Operating lease liabilities established	\$ 165	\$ 12,050	\$ —
Non-cash consideration for website and software development	\$ 963	\$ 1,654	\$ 1,551

See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements
(In thousands, except share and per share amounts)

NOTE 1—Organization and Background

(a) Nature of Business

Zeta Global Holdings Corp., a Delaware Corporation ("Zeta" or "Zeta Global Holdings") and Zeta Global Corp., a Delaware Corporation and the operating company ("Zeta Global" individually, or collectively with Zeta Global Holdings Corp. and its consolidated entities, as context dictates, the "Company") is a marketing technology company that uses proprietary data, artificial intelligence and software to create a technology platform that enables marketers to acquire, retain and grow customer relationships. The Company's technology platform powers data-driven marketing programs for enterprises across a wide range of industries and utilizes all digital distribution channels including email, search, social, mobile, display and connected TV. Zeta Global was incorporated and began operations in October 2007.

(b) Initial Public Offering ("IPO")

On June 9, 2021, the Company's registration statement on Form S-1 relating to the IPO of its Class A common stock was declared effective by the Securities and Exchange Commission ("SEC"). In connection with the IPO, on June 14, 2021, the Company issued and sold 14,773,939 shares of Class A common stock at a public offering price of \$10 per share for net proceeds of \$132.7 million, after deducting underwriters' discounts and commissions (but excluding other offering expenses and reimbursements of \$6.2 million). The Company used a portion of proceeds from its IPO (i) to satisfy the tax withholding and remittance obligations of holders of its outstanding restricted stock and restricted stock units that vested in connection with the offering by repurchasing and canceling 1,799,650 shares of Class A restricted stock, 197,490 shares of Class B restricted stock and 92,671 restricted stock units (the "Tax Withholding Repurchase"); (ii) to repurchase and cancel 2,158,027 shares of Class A restricted stock and 88,518 restricted units at the election of certain holders (the "Class A Stock Repurchase"); (iii) to repurchase and cancel 1,767,692 shares of Class B common stock and 342,510 shares of restricted Class B common stock from its Chief Executive Officer and Co-Founder, David Steinberg (the "Class B Stock Repurchase"); and (iv) for general corporate purposes, including working capital, operating expenses and capital expenditures, although the Company did not designate any specific uses. The Company has used and may also use in future a portion of the net proceeds to fund possible investments in, or acquisitions of, complementary businesses, services or technologies.

(c) Reorganization Transactions

In connection with the IPO, the Company completed the following transactions ("Reorganization Transactions"):

- As per the amended and restated certificate of incorporation, the authorized capital stock consists of 3,750,000,000 shares of Class A common stock, par value \$0.001 per share, 50,000,000 shares of Class B common stock, par value \$0.001 per share, and 200,000,000 shares of preferred stock, par value \$0.001 per share.

The number of shares outstanding as of June 14, 2021 was 152,270,401 shares of Class A common stock and 37,856,095 shares of Class B common stock after giving effect to the following transactions upon the Company's IPO:

- the conversion of 39,223,194 outstanding shares, and unpaid dividends on such outstanding shares, of its Series A preferred stock, Series B-1 preferred stock, Series B-2 preferred stock, Series C preferred stock, Series E preferred stock, Series E-1 preferred stock, Series F preferred stock, Series F-1 preferred stock, Series F-2 preferred stock, Series F-3 preferred stock and Series F-4 preferred stock into 73,813,713 shares of its Class A common stock immediately prior to the completion of the IPO (the "Preferred Conversion");
- 8,360,331 shares of its Class A common stock issued in connection with the exercise of outstanding warrants (the "Warrants Exercise");
- the reclassification of 3,054,318 shares of its existing Series B common stock and 26,722,208 shares of Series A common stock into shares of Class A common stock and the reclassification of 70,108,628 shares of restricted Series A common stock into shares of restricted Class A common stock (of which 8,734,893 have vested in connection with the IPO and 4,138,866 shares were repurchased by the Company);

- the exchange of 39,463,787 shares of Class A common stock (after giving effect to the Preferred Conversion and the Reclassification) held by the Co-Founder and Chief Executive Officer and his affiliates for an equivalent number of shares of Class B common stock, which went into effect upon the filing and effectiveness of our amended and restated certificate of incorporation pursuant to the terms of the exchange agreement entered into between the Co-Founder and Chief Executive Officer and his affiliates and us (the “Class B Exchange”); and
- the repurchase of an aggregate of 4,138,866 shares of restricted Class A common stock and 2,307,692 shares of Class B common stock (of which 540,000 shares are restricted Class B common stock) as a result of the Stock Repurchase and the Tax Withholding Repurchase.

NOTE 2—Basis of Presentation and Significant Accounting Policies

(a) Principles of consolidation:

The accompanying consolidated financial statements of the Company have been prepared in accordance with accounting principles generally accepted in the United States (“GAAP”). The accompanying consolidated financial statements include the accounts of Zeta and its wholly owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

The Company’s management considers events or transactions that occur after the balance sheet date but before the financial statements are issued to provide additional evidence relative to certain estimates or to identify matters that require additional disclosure. Subsequent events have been evaluated through the date of issuance of these financial statements.

(b) Use of estimates:

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and reported amounts of revenues and expenses during the reporting period. In these consolidated financial statements, accounts receivable, free standing and embedded financial instruments, acquired assets and liabilities (including goodwill and intangible assets) and their useful lives, website and software development costs, acquisition-related liabilities including contingent purchase price payable and holdback payable, stock-based compensation, impairment of indefinite and long-lived assets, and valuation allowance on income taxes involve reliance on management’s estimates. Estimates are based on management judgment and the best available information, as such actual results could differ from those estimates.

(c) Net loss per share attributable to common stockholders:

Basic net loss per share attributable to common stockholders is calculated by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period, without consideration of potentially dilutive securities. The Company’s diluted net loss per common share is the same as basic net loss per common share for all periods presented, since the effect of potentially dilutive securities is anti-dilutive. Refer to Note 20 for further discussion.

(d) Revenue recognition:

Revenues arise primarily from the Company’s technology platform via subscription fees, volume-based utilization fees and fees for professional services designed to maximize the customers usage of the technology.

Revenues are recognized when control of these services is transferred to the customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those services. Sales and other taxes collected by the Company concurrent with revenue-producing activities are excluded from revenues.

The Company determines revenue recognition through the following steps:

- Identification of the contract, or contracts, with a customer.
- Identification of the performance obligations in the contract.

- (iii) Determination of the transaction price.
- (iv) Allocation of the transaction price to the performance obligations in the contract.
- (v) Recognition of revenue when, or as, we satisfy a performance obligation.

At contract inception, the Company assesses the services promised in the contracts with customers and identifies a performance obligation for each promise to transfer to the customer a service (or bundle of services) that is distinct. To identify the performance obligations, the Company considers all the services promised in the contract regardless of whether they are explicitly stated or are implied by customary business practices.

The transaction price is the amount of consideration that the Company is entitled to in exchange for transferring services to a customer. Certain customer contracts give rise to variable consideration, including rebates and allowances that generally decrease the transaction price and therefore reduce revenues. These variable amounts are generally credited to the customer, based on achieving certain levels of activity. Variable consideration is estimated and included in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved. Variable consideration is estimated based upon historical experience and known trends.

Further, for the contracts having multiple performance obligations, the total transaction price for a contract is allocated amongst the various performance obligations based on their relative stand-alone selling prices. The relative standalone selling price (“SSP”) is determined based on the terms of the contract and requires judgment. Typically, the best estimate of SSP is the contractual price of each obligation. The transaction price for a contract excludes any amounts collected on behalf of third parties, in cases where the Company acts as an agent. Payment terms are typically 30 to 90 days. As such, the Company does not have any significant financing components.

Generally, the Company’s contracts contain a series of separately identifiable and distinct services that represent performance obligations that are satisfied over time, revenue for such contracts is recognized using the right to invoice practical expedient because the right to invoice corresponds directly with the value transferred to the customer. The Company also derives revenues from subscription fees for the use of its platforms. The Company recognizes the corresponding revenues over time on a ratable basis over the customer agreement term.

When the Company enters into multiple contracts with a single counterparty, the Company will combine contracts and account for them as a single contract when one or more of the following criteria are met: (i) the contracts are negotiated with a single commercial objective, (ii) consideration to be paid in one contract depends on the terms of the other contract, and (iii) services promised are a single performance obligation.

When the Company enters into contracts with third parties in which the Company is acting as both a vendor and a customer, the Company performs an assessment of the services transferred to determine the independent nature of both the transactions. The Company presents the revenue and expense based on the fair value of the services provided or received.

Principal vs. Agent

In substantially all its businesses, the Company incurs third-party costs on behalf of customers, including direct costs and incidental costs. Third-party direct costs incurred in connection with the delivery of advertising or marketing services include, among others: purchased media, data, cost of physical mailers, and procurement cost of Internet Protocol Addresses (“IPs”), used in the emailing services. However, the inclusion of billings related to third-party direct costs in revenues depends on whether the Company acts as a principal or as an agent in the customer arrangement.

In certain businesses the Company may act as a principal when contracting for third-party services on behalf of its customers because it controls the specified goods or services before they are transferred to the customer and the Company is responsible for providing the specified goods or services, or it is responsible for directing and integrating third-party vendors to fulfil its performance obligation at the agreed upon contractual price. In such arrangements, the Company also takes pricing risk under the terms of the customer contract. In certain media buying businesses, the Company acts as a principal when it controls the buying process for the purchase of the media and contracts directly with the media vendor. In these arrangements, it assumes the pricing risk under the terms of the customer contract. In such cases, the Company includes billable amounts related to third-party costs in the transaction price and record revenues at the gross amount billed, consistent with the manner that revenues are recognized for the underlying services contract.

In certain arrangements the Company may act as an agent of the customers when contracting for third-party services on behalf of its customers because the Company does not control the specified goods or services before they are transferred to the customer. In these contracts with customers, the Company provides access to its software platform available through different pricing options to tailor to multiple customer types and customer needs. These options consist of a percentage of spend, a subscription fee or a

fixed cost per impression. In such arrangements, any direct costs incurred on behalf of the customers are netted down from the revenues and revenue is recognized on net basis.

Contract assets and liabilities

Contract assets represent revenue recognized for contracts that have not been invoiced to customers. Total contract assets were \$5,346 and \$2,325 as of December 31, 2023 and 2022, respectively, and are included in the account receivables, net, in the consolidated balance sheets.

Contract liabilities consists of deferred revenues that represents amounts billed to the customers in excess of the revenue recognized. Deferred revenues are subsequently recorded as revenues when earned in accordance with the Company's revenue recognition policies. During the years ended on December 31, 2023 and 2022, the Company billed and collected \$5,243 and \$10,572 in advance, respectively, and recognized \$4,170 and \$15,210, respectively, as revenues. As of the years ended on December 31, 2023 and 2022, the deferred revenues are \$3,301 and \$2,228, respectively.

Practical expedients and exemptions

The Company applies the optional exemptions and does not disclose: a) transaction price allocated to unsatisfied performance obligations for which variable consideration is allocated entirely to a wholly unsatisfied performance obligation or to a wholly unsatisfied promise to transfer a distinct good or service that forms part of a single performance obligation in accordance with the series guidance; b) Further, in certain contracts, the Company utilizes the right to invoice practical expedient because the right to invoice corresponds directly with the value transferred to the customer.

Significant judgments

The recognition of revenues requires the Company to make judgments, estimates and assumptions that affect the reported amounts of revenues, expenses, contract assets and contract liabilities.

- (a) Revenues from certain contracts with customers are subject to variability due to cash incentives and credit notes, therefore, revenues are recognized but subject to the constraint on the variable consideration, i.e. only to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved.
- (b) When revenue arrangements include components of third-party goods and services, for example in transactions which involve resale, fulfillment or providing advertising impressions to the end customer, the Company evaluates whether it is a principal, and reports revenues on a gross basis, or an agent, and reports revenues on a net basis. In this assessment, it is considered if the control of the specified goods or services is obtained before they are transferred to the customer by evaluating indicators such as which party is primarily responsible for fulfilling the promise to provide the goods or services, which party has discretion in establishing price and the underlying terms and conditions between the parties to the transaction.
- (c) Contracts with customers may include multiple services. Determining whether those services are distinct from each other, and therefore performance obligations to be accounted for separately, or not distinct from each other, and therefore part of a single performance obligation, may require significant judgment.
- (d) Contracts with the Company's vendors that involve both the purchase and sale of services with a single counterparty. Assessing each contract to determine if the revenue and expense should be presented gross or net, may require significant judgement.
- (e) Determining the standalone selling price for various performance obligations in the customer contracts requires significant judgement.

Remaining Performance Obligations

Remaining performance obligations represents contractual obligations that are not yet fulfilled. Revenues for such contractual obligations will be recognized in future periods. The remaining performance obligations are influenced by several factors, including seasonality, the timing of renewals, average contract terms and foreign currency exchange rates. The remaining performance obligations are subject to future economic risks including counterparty risks, bankruptcies, regulatory changes and other market factors.

As of December 31, 2023, the Company's remaining performance obligations for the next twelve months and thereafter were approximately \$98,400 and \$116,200, respectively.

Disaggregation of revenues from contract with customers

The Company reports disaggregation of revenues based on primary geographical markets and delivery channels / platforms. Revenues by delivery channels / platforms are based on whether the customer requirements necessitate integration with platforms or delivery channels owned by the Company. When the Company generates revenues entirely through the Company platform, the Company considers it Direct Platform Revenue.

When the Company generates revenue by leveraging its platform's integration with third parties, it is considered Integrated Platform Revenue.

The following table summarizes disaggregation for the years ended December 31, 2023, December 31, 2022 and December 31, 2021:

	Year ended December 31,		
	2023	2022	2021
Direct Platform Revenue	72 %	77 %	76 %
Integrated Platform Revenue	28 %	23 %	24 %

Refer to the Company's accounting policy on "Segments" below for more information about disaggregation based on primary geographical markets.

(e) Operating expenses:

Operating expenses including cost of revenues (excluding depreciation and amortization), general and administrative expenses, selling and marketing expenses and research and development expenses, are recognized as these costs are incurred.

Depreciation and amortization:

The Company records depreciation and amortization using a straight-line method over the estimated useful life of the assets.

Acquisition-related expenses:

Acquisition-related costs primarily consist of legal fees associated with certain business combinations.

Restructuring expenses:

Restructuring costs consists primarily of employee termination costs due to internal restructuring. The Company recognizes these costs as they are incurred. There are no incomplete restructuring plans as of December 31, 2023 and 2022.

(f) Cash, cash equivalents and restricted cash:

Highly liquid investments with an original maturity of three months or less when purchased are considered to be cash equivalents. The Company maintains cash balances with banks which at times may be in excess of Federal Deposit Insurance Corporation ("FDIC") insurance limits. As of December 31, 2023 and 2022, approximately 0.4% and 0.9% of cash and cash equivalents, respectively, was held in accounts outside the United States and not protected by FDIC insurance.

As of December 31, 2023 and 2022, the Company did not have any amounts in restricted cash.

(g) Accounts receivable and allowance for doubtful accounts:

Accounts receivable are carried at original invoice amount less an allowance for doubtful accounts. Allowances for doubtful accounts are established through an evaluation of accounts receivable aging and prior collection experience to estimate the ultimate collectability of receivables. Management considers the following factors when determining the collectability of specific customer accounts: past transaction history with the customers, current economic industry trends, and changes in customer payment terms. If the financial conditions of the Company's customers were to deteriorate, adversely affecting their ability to make payments, additional allowances would be required. Past due balances over 90 days and over a specified amount are reviewed individually for collectability.

Account balances are charged off against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote. The Company does not have any off-balance-sheet credit exposure related to its customers.

The following table reconciles the changes in the allowance for doubtful accounts for the years ended December 31, 2023 and 2022:

Balance as of January 1, 2022	\$	1,295
Bad debt expense		650
Write offs		(63)
Balance as of December 31, 2022	\$	1,882
Bad debt expense		2,272
Write offs		(590)
Balance as of December 31, 2023	\$	3,564

Accounts receivable includes unbilled accounts receivable which represent revenues on contracts to be billed, in subsequent periods, as per the terms of the related contracts. As of December 31, 2023, and 2022, the Company had \$5,346 and \$2,325 of unbilled accounts receivable, respectively.

(h) Property and equipment, net:

Property and equipment are carried at cost less accumulated depreciation. Expenditures for maintenance and repairs are expensed when incurred, while renewals and betterments that materially extend the life of an asset are capitalized. The cost of assets sold, retired, or otherwise disposed of, and the related accumulated depreciation, are eliminated from the accounts, and any resulting gain or loss is recognized.

Depreciation is computed using the straight-line method over the estimated useful lives of assets, which are as follows:

	Estimated Useful Life (Years)
Computer equipment	3-6
Office equipment and furniture	5-7
Purchased software	3-5
Leasehold improvements	Shorter of useful life and lease term

The Company reviews the carrying value of property and equipment for impairment whenever events and circumstances indicate that the carrying value of an asset may not be recoverable. The factors considered by management in performing this assessment include current operating results, trends and prospects, the manner in which the property and equipment are used, and the effects of obsolescence, demand, competition and other economic factors. Based on this assessment, no impairment for assets held and used was recorded for the years ended December 31, 2023 and 2022.

(i) Website and software development costs, net:

The Company capitalizes the cost of internally developed software that has a useful life in excess of one year. These costs consist of the salaries, bonuses, stock-based compensation and other employee benefits costs of employees working on such software development. Capitalization begins during the application development stage, following completion of the preliminary project stage. If a project constitutes an enhancement to previously developed software, it is assessed whether the enhancement creates additional functionality to the software, thus qualifying the work incurred for capitalization. Once the project is available for general release, capitalization ceases, and the Company estimates the useful life of the asset and begins amortization using the straight-line method. The estimated useful life of the Company's website and software development costs is three years. The Company annually assesses whether triggering events are present to review developed software for impairment. Based on this assessment, there was no event during the year ended December 31, 2023 that required the Company to perform such impairment analysis.

(j) Intangible assets, net:

Intangible assets are recorded at cost less accumulated amortization. Cost of intangible assets acquired through business combinations represents their fair market value at the date of acquisition. Amortization is calculated using the straight-line method

which is consistent with the realization of cash flows over the weighted average useful lives of the intangible assets, which are as follows:

	Estimated Useful Life (Years)
Tradenames	4-5
Data supply relationships	2-5
Completed technologies	3-10
Customer relationships	3-12

The Company purchases and licenses data content from multiple data providers to develop the proprietary databases of information for client use. This data content sometime consists of consumer information like name, address, phone numbers, zip codes, gender, age group, etc. and it may also consist of business information industry, sales volume, physical address, financial information, credit score, etc. License agreement terms vary by vendor. In some instances, the Company retains perpetual rights to this information after the contract ends; in other instances, the information and data are licensed only during the fixed term of the agreement. Additionally, certain data license agreements provide for uneven payment amounts throughout the life of the contract term. The Company capitalizes the intangible assets as the data contents are received from the third parties, as it expects those assets to provide future economic benefit via the generation of Company's revenue and margins. These intangibles assets are amortized on a straight-line basis over the estimated useful life of the data asset. The Company evaluates data content contracts for potential capitalization at the inception of the arrangement as well as each time periodic payments to third parties are made.

The amortization period for the capitalized purchased content is based on the Company's best estimate of the useful life of the asset, which ranges from two to five years. The determination of the useful life includes consideration of a variety of factors including, but not limited to, assessment of the expected use of the asset and contractual provisions that may limit the useful life, as well as an assessment of when the data is expected to become obsolete based on the Company's estimates of the diminishing value of the data over time.

Under certain other data agreements, the underlying data is obtained on a subscription basis with consistent monthly recurring payment terms over the contractual period. Upon the expiration of such arrangements, the Company no longer has the right to access the related data, and therefore, the costs incurred under such contracts are not capitalized and are expensed as payments are made. The Company will immediately lose rights to data under these arrangements if it cancels the subscription and/or cease making payments under the subscription arrangements.

The Company reviews the carrying value of its definite-lived intangible assets for impairment whenever events and circumstances indicate that the carrying value of an asset may not be recoverable from the estimated future cash flows expected to result from its use and eventual disposition. If these future undiscounted cash flows are less than the carrying value of the asset, then the carrying amount of the asset is written down to its fair value, based on the related estimated discounted future cash flows. Factors considered by management in performing this assessment include current operating results, trends and prospects, the manner in which the intangible assets are used, and the effects of obsolescence, demand, competition and other economic factors. For the year ended December 31, 2023 and 2022, no such events and circumstances were noticed that would trigger such assessment and therefore no impairment was recorded.

(k) Goodwill:

Goodwill represents the excess of the purchase price in a business combination over the fair value of net assets acquired. Goodwill is not amortized but rather tested for impairment at least annually or more often if and when circumstances indicate that goodwill may not be recoverable. The Company performs an annual goodwill impairment test on October 1 of every year at a reporting unit level based on the financial statements as of September 30. A reporting unit is an operating segment or one level below an operating segment (referred to as a component) to which goodwill is assigned when initially recorded. As of December 31, 2023, the Company has four reporting units.

The Company assesses qualitative factors to determine whether it is necessary to perform a more detailed quantitative impairment test for goodwill and other indefinite-lived intangible assets. It may also elect to bypass the qualitative assessment and proceed directly to the quantitative test for any reporting units. Qualitative factors that are considered as part of this assessment include a change in the Company's equity valuation and its implied impact on reporting unit fair value, a change in its weighted average cost of capital, industry and market conditions, macroeconomic conditions, trends in product costs and financial performance of the businesses. For the quantitative test, the Company generally uses a discounted cash flow method to estimate fair value.

The discounted cash flow method is based on the present value of projected cash flows. Assumptions used in these cash flow projections are generally consistent with the Company's internal forecasts. The estimated cash flows are discounted using a rate that represents its weighted average cost of capital. The weighted average cost of capital is based on a number of variables, including the equity-risk premium and risk-free interest rate. If the carrying amount of a reporting unit exceeds its fair value, an impairment loss is recognized to the extent the carrying amount of the reporting unit's goodwill exceeds the implied fair value of the goodwill.

For the years ended December 31, 2023 and 2022 annual goodwill impairment test, the Company elected to bypass the qualitative assessment for its four reporting units and proceeded directly to the quantitative impairment test using a discounted cash flow method to estimate the fair value of the reporting units. As a result of this assessment, it was concluded that there was no impairment loss because the fair value of the reporting units significantly exceeded their respective carrying value as of each of the dates. Specifically, for the year ended December 31, 2023, the difference between the fair value and the book value of the reporting units was in the range of \$51,770-\$785,079.

(l) Income taxes:

The Company accounts for income taxes in accordance with ASC 740, Income Taxes, which requires an asset and liability approach for the financial accounting and reporting of income taxes. Under this method, deferred tax assets and liabilities are determined based on temporary differences between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect on deferred tax assets and liabilities of a change in tax laws is recognized in the Consolidated Statements of Operations and Comprehensive Loss in the period that includes the enactment date. A valuation allowance is established when management determines that it is more likely than not that some portion or all of the deferred tax assets will not be realized. Income taxes are more fully discussed in Note 18.

From time to time, the Company engages in transactions in which the tax consequences may be subject to uncertainty. Significant judgment is required in assessing and estimating the tax consequences of these transactions including determining the Company's uncertain tax position. The Company recognizes tax benefits from uncertain tax positions only if it believes 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 the Company believes that it has adequately reserved for its uncertain tax positions, it can provide no assurance that the final tax outcome of these matters will not be materially different.

The Company's policy is to recognize, when applicable, interest and penalties on uncertain tax positions as part of income tax expense.

The Company's policy is to account for income taxes for global intangible low taxed income ("GILTI") as a period cost when incurred.

(m) Foreign currency translations:

The Company operates in multiple countries through its legal entities and it performs the functional currency assessment for these entities periodically to determine whether the respective local country currency or United States Dollars ("USD") is their functional currency. Once this determination is made, transactions in foreign currencies are initially recorded into functional currency at the rates of exchange prevailing on the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are remeasured into functional currency at the rates of exchange prevailing at the balance sheet date. Non-monetary assets and liabilities are remeasured to the functional currency at exchange rates that prevailed on the date of inception of the transaction. All foreign exchange gains and losses arising on re-measurement are recorded in the Company's consolidated statement of operations and comprehensive loss.

The assets and liabilities of the subsidiaries for which the functional currency is other than the U.S. dollar are translated into U.S. dollars, the reporting currency, at the rate of exchange prevailing on the balance sheet date. Revenues and expenses are translated into U.S. dollars at the exchange rates prevailing on the last business day of each month, which approximates the average monthly exchange rate. Share capital and other equity items are translated at exchange rates that prevailed on the date of inception of the transaction. Resulting translation adjustments are included in "Accumulated other comprehensive loss" in the consolidated balance sheets.

(n) Financial instruments:

The Company's financial instruments consist of cash and cash equivalents, accounts receivable, accounts payable, accrued expenses, warrants and derivative liabilities, acquisition-related liabilities, which are primarily denominated in U.S. dollars. The carrying amounts of some of these instruments approximate their fair values principally due to the short-term nature of these items. The Company uses a third-party valuation firm to determine the fair value of warrants and derivative and acquisition related

liabilities periodically and such valuations are calculated using a variety of methods including market multiples, comparable market transactions and discounted cash flows. Unless otherwise noted, it is management's opinion that the Company is not exposed to significant interest rate, currency or credit risk arising from these financial instruments.

With respect to accounts receivable, the Company is exposed to credit risk arising from the potential for counterparties to default on their contractual obligations to the Company. The Company generally does not require collateral to support accounts receivable. The Company establishes an allowance for doubtful accounts that corresponds with the specific credit risk of its customers, historical trends, and economic circumstances.

Fair value is the price that would be received from the sale of an asset or paid to transfer a liability assuming an orderly transaction in the most advantageous market at the measurement date. U.S. GAAP establishes a hierarchical disclosure framework which prioritizes and ranks the level of observability of inputs used in measuring fair value. These tiers include:

Level 1 is defined as observable inputs such as quoted prices in active markets for identical assets;

Level 2 is defined as observable inputs other than Level 1 prices such as quoted prices for similar assets; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and

Level 3 is defined as unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions.

See Note 16 for additional information regarding fair value.

(o) Redeemable convertible preferred stock:

The redeemable convertible preferred stock as of December 31, 2020 were converted into Class A common stock upon the IPO and as such there were no such redeemable convertible preferred stock as of December 31, 2023 and 2022.

(p) Warrants and derivative liabilities:

When warrants or similar instruments are issued, the Company applies the guidance in ASC Topic 815 to determine if the warrants should be classified as equity instruments or as derivative instruments. Generally, warrants that are indexed to the Company's own stock would be classified as equity instruments and are not classified as derivative instruments under this guidance. A key element to consider in determining if a warrant would be considered indexed to the Company's own stock is if the warrants settlement amount is equal to the difference between the fair value of a fixed number of equity shares and a fixed monetary amount. This criterion is sometimes known as the "fixed-for fixed" criteria. In cases where the fixed for fixed criteria are not met, the warrants are classified as derivative instruments.

When the Company enters into transactions, that include certain features that qualify to be embedded derivatives in accordance with ASC Topic 815, applicable GAAP requires the Company to bifurcate such features from their host instruments and account for them as free-standing derivative financial instruments according to certain criteria. The criteria include circumstances in which (a) the economic characteristics and risks of the embedded derivative instrument are not clearly and closely related to the economic characteristics and risks of the host contract, (b) the hybrid instrument that embodies both the embedded derivative instrument and the host contract is not re-measured at fair value under other GAAP with changes in fair value reported in earnings as they occur and (c) a separate instrument with the same terms as the embedded derivative instrument would be considered a derivative instrument. During the year ended December 31, 2022, the Company entered into certain transactions that included features that qualified to be embedded derivatives. However, as of December 31, 2023 and 2022, there were no such open transactions and the effect of the changes in the fair value of embedded derivative from the initial recording date through the date of settlement was recorded in the consolidated statements of operations and comprehensive loss.

(q) Stock-based compensation and other stock-based payments:

The measurement of stock-based compensation for all stock-based payment awards, including restricted stock, performance stock units ("PSUs"), and stock options granted to the employees, consultants or advisors and non-employee directors, as well as shares purchased under our ESPP, is based on the estimated fair value of the awards on the date of grant or date of modification of such grants. The Company accounts for the modification to already issued awards as per guidance in ASC 718-20-35-3 (Refer to "Note 13. Stock-Based Compensation").

The Company accounts for all stock-based payments awards using fair value-based method. The fair value of each stock option granted to employees is estimated on the date of the grant using the Black-Scholes-Merton option pricing model, and the related stock-based compensation is recognized over the vesting term of the option. The fair value of the restricted shares granted prior to IPO was determined using the Monte-Carlo simulation method and for the restricted shares granted post-IPO is based on the Company's closing stock price as of the day prior to the date of the grants.

The Company accounts for its PSU awards based on the fair value determined using the Monte Carlo simulation method and for shares purchased under its ESPP using the Black-Scholes-Merton model, by a third-party valuation firm engaged by the Company. The Company accounts for the forfeitures, as they occur. The Company uses the graded vesting attribution method to recognize the stock-based compensation related to restricted stock awards and straight-line over the term method for all the other awards.

(r) Segments:

The Company operates as one operating segment. Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the Chief Operating Decision Maker ("CODM") in deciding how to allocate resources and in assessing performance. The Company's CODM is the Chief Executive Officer. Since it operates as one operating segment, all required financial segment information can be found in the consolidated financial statements.

Revenues and long-lived assets by geographical region are based on the physical location of the customers being served or the assets are as follows:

Revenues by geographical region consisted of the following:

	Year ended December 31,		
	2023	2022	2021
US	\$ 700,060	\$ 566,694	\$ 428,941
International	28,663	24,267	29,397
Total revenues	\$ 728,723	\$ 590,961	\$ 458,338

Total long-lived assets (including right-to-use asset) by geographical region consisted of the following:

	Year ended December 21,	
	2023	2022
US	\$ 44,039	\$ 47,858
International	2,140	2,224
Total long-lived assets	\$ 46,179	\$ 50,082

(s) Operating leases:

On January 1, 2022, the Company adopted ASC 842, Leases, and recognized right to use assets and operating lease liabilities in its consolidated balance sheets. The Company holds an emerging growth company status for fiscal year 2022, therefore it elected the option to present the impact of adoption within the annual financial statements for the year ended December 31, 2022 and interim statements thereafter.

The Company determines if an arrangement is, or contains, a lease at inception, and whether lease and non-lease components are combined or not. A contract is or contains a lease when, (1) the contract contains an identified asset and (2) the customer obtains substantially all of the economic benefits from the use of that underlying asset and directs how and for what purpose the asset is used during the term of the contract in exchange for consideration.

Right-to-use assets and lease liabilities are initially recorded based on the present value of lease payments over the lease term, which includes the minimum unconditional term of the lease, and may include options to extend or terminate the lease when it is reasonably certain at the commencement date that such options will be exercised.

As the rate implicit for each of the Company's leases is not readily determinable, the Company uses its incremental borrowing rate at commencement date in determining the present value of lease payments. Right-of-use assets also include any initial direct costs and any lease payments made prior to the lease commencement date and are reduced by any lease incentives received. Lease expense is recognized on a straight-line basis over the term of the lease. Lease expense is a combination of interest on lease

liability and amortization of Right-of-use assets. Operating lease expenses are included in general and administrative expenses in the consolidated statements of operations and comprehensive loss. Refer to Note 15 - Leases for additional information.

New accounting pronouncements

Recently adopted:

In October 2021, the FASB released Accounting Standards Updates ("ASU") No. 2021-08, Business Combinations (Topic 805)- Accounting for Contract Assets and Contract Liabilities from Contracts with Customers. The amendments in this update require that an entity (acquirer) recognize, and measure contract assets and contract liabilities acquired in a business combination in accordance with Topic 606. At the acquisition date, an acquirer should account for the related revenue contracts in accordance with Topic 606 as if it had originated the contracts. For public business entities, the amendments in this update are effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years and require application of the new accounting guidance at the beginning of the earliest comparative period presented in the year of adoption, however early adoption is permitted. The guidance is applicable and as such adopted by the Company beginning from January 1, 2023. The adoption of ASU 2021-08 did not have any material impact on the Company's audited consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, "Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments," which was subsequently amended in November 2018 through ASU No. 2018-19, "Codification Improvements to Topic 326, Financial Instruments—Credit Losses." ASU No. 2016-13 will require entities to estimate lifetime expected credit losses for trade and other receivables, net investments in leases, financing receivables, debt securities and other instruments, which will result in earlier recognition of credit losses. Further, the new credit loss model will affect how entities in all industries estimate their allowance for losses for receivables that are current with respect to their payment terms. ASU No. 2018-19 further clarifies that receivables arising from operating leases are not within the scope of Topic 326. Instead, impairment from receivables of operating leases should be accounted for in accordance with Topic 842, Leases. As per the latest ASU 2020-02, FASB deferred the timelines for certain small public and private entities, thus the Company adopted the new guidance for the annual reporting period beginning January 1, 2023 and interim periods within that reporting period. The standard applied as a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is adopted. The adoption of new ASU did not have any material impact on the Company's audited consolidated financial statements.

Not yet adopted:

In December 2023, the FASB issued ASU 2023-09, "Income Taxes (Topic 740): Improvements to Income Tax Disclosures". ASU 2023-09 is intended to enhance the transparency and decision usefulness of income tax disclosures. The amendments in ASU 2023-09 address investor requests for enhanced income tax information primarily through changes to the rate reconciliation and income taxes paid information. Early adoption is permitted. A public entity should apply the amendments in ASU 2023-09 prospectively to all annual periods beginning after December 15, 2024. The Company is currently evaluating the impact of this standard on its consolidated financial statements and related disclosures.

In November 2023, the FASB issued ASU No. 2023-07, "Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures" ("ASU 2023-07"). ASU 2023-07 requires disclosure of significant segment expenses regularly presented to the Chief Operating Decision Maker ("CODM") and incorporated into each reported segment profit or loss measure. Entities are required to provide both the amount and a detailed description of the composition of other segment items to reconcile them with the segment profit or loss. Furthermore, organizations must disclose the title and position of their CODM. ASU 2023-07 will be effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024. Early adoption is permitted and the amendments in this update are required to be applied on a retrospective basis. The Company is currently evaluating the impact of incorporating ASU 2023-07 guidance on its consolidated financial statements.

NOTE 3—Property and Equipment, Net

The details of property and equipment, net and related accumulated depreciation, are set forth below:

	December 31, 2023	December 31, 2022
Computer equipment and purchased software	\$ 25,553	\$ 21,955
Office equipment and furniture	1,170	1,639
Leasehold improvements	2,409	2,306
Property and equipment – gross	29,132	25,900
Less: Accumulated depreciation	(21,680)	(19,919)
Property and equipment, net	\$ 7,452	\$ 5,981

Depreciation expense for the years ended December 31, 2023 and 2022 was \$3,744 and \$3,186, respectively.

During the year ended December 31, 2023, gross amount of certain fully depreciated property and equipment, no longer in use, was off-set with an equal amount of accumulated depreciation of \$1,983.

NOTE 4—Website and Software Development Costs, Net

The details of website and software development costs, net and the related accumulated amortization are set forth below:

	December 31, 2023	December 31, 2022
Website and software development costs	\$ 114,931	\$ 154,015
Less: Accumulated amortization	(82,807)	(117,302)
Website and software development costs, net	\$ 32,124	\$ 36,713

Website and software development costs capitalized during the years ended December 31, 2023 and 2022 were \$19,965 and \$23,398, respectively. Amortization expense for website and software development costs for the years ended December 31, 2023 and 2022 was \$24,163 and \$24,723, respectively.

During the year ended December 31, 2023, gross amount of certain fully amortized website and software development costs, no longer in use, was off-set with an equal amount of accumulated amortization of \$58,658.

NOTE 5—Intangible Assets, Net

The details of intangible assets and related accumulated amortization are set forth below:

	December 31, 2023			December 31, 2022		
	Gross value	Accumulated amortization	Net Value	Gross value	Accumulated amortization	Net Value
Data supply relationships	\$ 43,484	\$ 20,350	\$ 23,134	\$ 25,314	\$ 8,242	\$ 17,072
Tradenames	2,720	2,706	14	2,720	2,650	70
Completed technologies	34,932	26,164	8,768	28,792	22,320	6,472
Customer relationships	74,453	57,588	16,865	71,099	50,355	20,744
Total intangible assets	\$ 155,589	\$ 106,808	\$ 48,781	\$ 127,925	\$ 83,567	\$ 44,358

Amortization expense of intangibles for the years ended 2023 and 2022 was \$23,242 and \$23,969, respectively.

Weighted average useful life of the unamortized intangibles as of December 31, 2023 was 2.76 years. Based on the amount of intangible assets subject to amortization, the Company's estimated future amortization over the next five years and beyond are as follows:

Year ending December 31,	
2024	\$ 21,739
2025	15,738
2026	7,280
2027	2,542
2028	1,482
2029 and thereafter	—
Total	\$ 48,781

NOTE 6—Goodwill

The following is a summary of the carrying amount of goodwill:

Balance as of January 1, 2022	\$	114,509
Acquisition of ArcaMax		18,588
Foreign currency translation		(28)
Balance as of December 31, 2022	\$	133,069
Acquisition of WhatCounts		7,824
Foreign currency translation		12
Balance as of December 31, 2023	\$	140,905

Based on the annual quantitative assessment performed by the Company the fair value of each reporting unit exceeded the respective carrying value by more than 100%, as such there was no impairment loss.

NOTE 7—Acquisitions

The Company uses the purchase method of accounting in accordance with ASC 805, Business Combinations. This standard requires that the total cost of an acquisition be allocated to the tangible and intangible assets acquired and liabilities assumed based on the fair value of the tangible and intangible assets acquired and liabilities assumed at the acquisition date. The Company's estimates and assumptions used in assessing fair value are inherently uncertain and subject to refinement. During the measurement period, which may be up to one year from the acquisition date, the Company may record adjustments to the fair value of these tangible and intangible assets acquired and liabilities assumed, with the corresponding offset to goodwill. In addition, uncertain tax positions and tax-related valuation allowances are initially recorded in connection with a business combination as of the acquisition date. Acquisition-related expenses are expensed when incurred.

The Company may also agree to pay a portion of the purchase price for certain acquisitions in the form of contingent consideration, the unpaid amounts of these liabilities are included in the acquisition-related liabilities on the consolidated balance sheets as of December 31, 2023 and 2022.

(a) WhatCounts, Inc.

On March 1, 2023, the Company entered into an asset purchase agreement with the Output Services Group, Inc. to purchase certain assets of WhatCounts, Inc. ("WhatCounts"), including customer contracts, technology assets and certain employees who were engaged in these businesses.

The Company concluded the transaction represents an acquisition of a business under ASC 805, Business Combinations. The total consideration of WhatCounts acquisition is \$15,990, including \$1,011 as estimated earn-outs based on the achievement of certain operating targets of the acquired businesses, and \$128 as working capital adjustment. During the year ended December 31, 2023, the Company finalized the purchase price allocations for its WhatCounts acquisition. Accordingly, the Company has recognized \$960 as customer relationships intangibles, \$6,140 as completed technologies, \$7,824 as goodwill and \$1,066 as other net assets associated with this acquisition. The Company amortizes the intangible assets over the weighted average life of 3.0 years.

Prior to the acquisition, WhatCounts' technology asset was being used as an Email Service Provider ("ESP"). Therefore, the Company paid a premium to acquire these assets, which is represented as Goodwill in the above purchase price allocation. The Company incurred \$203 as acquisition-related expenses related to this acquisition.

Goodwill acquired by the Company in its WhatCounts acquisition is deductible for tax purposes.

(b) ArcaMax Publishing, Inc.

On March 11, 2022, the Company entered into a stock purchase agreement with the seller of ArcaMax Publishing, Inc., ("ArcaMax") to purchase all of its issued and outstanding shares of common stock. The stock purchase agreement was effective March 1, 2022. The fair value of the aggregate purchase consideration for the ArcaMax acquisition was \$26,925. The Company paid cash consideration of \$9,386 (including a working capital adjustment of \$386), issued 926,785 shares of Class A common stock with a fair value of \$10,000, and agreed to pay certain earn-outs valued at \$6,577 based on the operating performance of the acquired business after the closing date in cash and in shares of the Company, \$962 in cash holdback. During the year ended December 31, 2022, the Company finalized the purchase price allocation for its ArcaMax acquisition. Accordingly, the Company has recognized

\$5,100 as customer relationships intangibles, \$5,700 as completed technologies, \$18,588 as goodwill, \$2,850 as deferred tax liability and \$387 as other net assets associated with this acquisition. The Company amortizes the intangible assets over the weighted average life of 5 years.

Prior to the acquisition, ArcaMax was a leader in the development and distribution of more than 400 interest-based newsletters to consumers in the United States, distributing news and syndicating features to a growing opted-in subscriber audience of four million readers. Therefore, the Company paid a premium to acquire ArcaMax assets, which is represented as Goodwill in the above purchase price allocation. The Company incurred \$344 as acquisition-related expenses related to this acquisition.

Goodwill acquired by the Company in its ArcaMax acquisition is not deductible for tax purposes

Pro Forma Information—The unaudited pro forma consolidated revenues of the Company for the year ended December 31, 2023 and 2022 were approximately \$730,311 and \$603,737, respectively, as if the business combinations had taken place on January 1, 2022. The unaudited pro forma earnings of these acquired businesses were insignificant to consolidated net loss from January 1, 2023 to December 31, 2023.

NOTE 8—Acquisition-Related Liabilities

The following is a summary of acquisition-related liabilities:

	eBay CRM	Sizmek	IgnitionOne	Kinetic	Vital	Apptness	ArcaMax	WhatCounts	Total
Balance as of January 1, 2022	\$ 8,000	\$ 1,927	\$ 1,360	\$ 24	\$ 2,840	\$ 8,806	\$ —	\$ —	\$ 22,957
Additions	—	—	—	—	—	—	7,539	—	7,539
Payments made during the year	—	(2,168)	—	(205)	(1,105)	(7,333)	—	—	(10,811)
Change in fair value of earn-out	—	241	—	1,073	565	8,828	2,283	—	12,990
Balance as of December 31, 2022	\$ 8,000	\$ —	\$ 1,360	\$ 892	\$ 2,300	\$ 10,301	\$ 9,822	\$ —	\$ 32,675
Additions	—	—	—	—	—	—	—	1,139	1,139
Payments made during the year	(4,225)	—	(1,116)	(638)	(1,495)	(8,783)	(4,313)	—	(20,570)
Change in fair value of earn-out	450	—	(244)	(9)	195	4,341	827	1,490	7,050
Balance as of December 31, 2023	\$ 4,225	\$ —	\$ —	\$ 245	\$ 1,000	\$ 5,859	\$ 6,336	\$ 2,629	\$ 20,294

During the year ended December 31, 2023, the businesses acquired by the Company in its Apptness, ArcaMax and WhatCounts acquisitions have performed better than the estimates used for the initial purchase price allocation, as such the Company recorded the changes in the fair value of the earn-outs, which are included in "other expenses" on the consolidated statements of operations and comprehensive loss.

During the year ended December 31, 2023, the Company settled the litigation in relation to certain acquisition related liabilities for its eBay CRM and recorded an additional liability of \$450 and paid \$4,225. The Company expects to pay the remaining amount of \$4,225 within the next 12 months and included this amount in acquisition-related liabilities (current) in the audited consolidated balance sheet as of December 31, 2023.

NOTE 9—Accrued expenses

The details of accrued expenses are set forth below:

	December 31, 2023	December 31, 2022
Accrued expenses	\$ 43,071	\$ 31,267
Payroll related liabilities	41,712	40,338
Others	672	759
Accrued expenses	<u>\$ 85,455</u>	<u>\$ 72,364</u>

NOTE 10—Concentration of Credit Risk

No customer accounted for more than 10% of the Company's total revenues during the years ended December 31, 2023 and 2022.

Financial instruments that potentially subject the Company to concentration risk consist primarily of accounts receivable from customers. As of December 31, 2023, there was one customer that represented more than 10% of accounts receivables balance. As of December 31, 2022, there was no customer that represented more than 10% of accounts receivables balance as of December 31, 2023. The Company continuously monitors whether there is an expected credit loss arising from customers, and accordingly make provisions as warranted.

NOTE 11—Credit Facilities

The Company's long-term borrowings are as follows:

	December 31, 2023	December 31, 2022
Credit facility	\$ 185,000	\$ 185,000
Less:		
Unamortized deferred financing cost	(853)	(1,047)
Long-term borrowings	\$ 184,147	\$ 183,953

On February 3, 2021, the Company entered into a \$222,500 Senior Secured Credit Facility ("Senior Secured Credit Facility") with a syndicate of financial institutions and institutional lenders, which consists of (i) a \$73,750 initial revolving facility, (ii) a \$111,250 term loan facility, and (iii) a \$37,500 in incremental revolving facility commitment. On March 22, 2023, the Company entered into a \$25,000 incremental revolving facility commitment pursuant to an amendment to the Senior Secured Credit Facility (the "2023 Incremental Revolving Commitment"), thereby increasing the total credit facility of the Company to \$247,500. Out of the total credit facility \$45,625 remains undrawn as of December 31, 2023. The Company has an outstanding letter of credit amounting to \$1,244 against the available revolving credit facility. The credit facility was fully secured by the financial institution with a first lien on the Company's assets.

Interest on the current outstanding balances is payable quarterly and calculated using a SOFR rate of no lower than SOFR+2.125% and no higher than SOFR+2.625% based on the Company's consolidated net leverage ratio stated in the credit agreement. The effective interest rate on this debt for the year ended on December 31, 2023 was 7.3%. The extensions of credit may be used solely (a) to refinance existing indebtedness, (b) to pay any expenses associated with this line of credit agreement, (c) for acquisitions, and (d) for other general corporate purposes. The Company is required to repay the principal balance and any unpaid accrued interest on the Senior Secured Credit Facility on February 3, 2026. During the year ended December 31, 2023, the Company borrowed \$11,250 against the revolver facility and repaid the same amount against the term loan under the credit facility. The initial debt issuance costs of \$1,902 incurred in the form of the legal fee, underwriter's fee, etc., are recognized as a reduction in long-term borrowings in the consolidated balance sheets, and are being amortized over the term of the contract on a straight-line basis.

The Senior Secured Credit Facility contains certain financial maintenance covenants including consolidated net leverage ratio and consolidated fixed charge coverage ratio. In addition, this agreement contains restrictive covenants that may limit the Company's ability to, among other things, acquire equity interests of the Company from its stockholders, repurchase / retire any of the Company's securities, and pay dividends or distribute excess cash flow. Additionally, the Company is required to submit periodic financial covenant letters that would include current net leverage ratio and fixed charge coverage ratio, among others. As of December 31, 2023, the applicable total leverage ratio and fixed charge coverage ratio were 2.50 and 1.25, respectively, and the Company was in compliance with these covenants.

The Company determined that the Term Loan is classified as Level 3 and the relevant fair values as of the year ended on December 31, 2023 and 2022 was approximately \$195,201 and \$189,092, respectively.

As of December 31, 2023, the repayment schedule for the long-term borrowings was as follows:

Year ended December 31,	
2024	\$ 11,250
2025	16,875
2026	156,875
Total*	\$ 185,000

* Includes \$11,250 repayable against the term loan facility within the twelve-month period ending December 31, 2024. The Company intends to draw against the available revolving facility to pay off term loan installments and therefore the total borrowings are included in "Long-term borrowings" on the consolidated balance sheets as of December 31, 2023.

NOTE 12—Commitments and Contingencies

Purchase obligations

The Company entered into non-cancelable vendor agreements to purchase services. As of December 31, 2023, the Company was party to outstanding purchase contracts as follows:

Year ended December 31,	
2024	\$ 30,401
2025	12,892
2026	4,567
2027	620
2028	—
2029 and thereafter	—
Total	\$ 48,480

Lease commitments

Refer to "Note 15. Leases" for Company's future lease commitments.

Other contingencies

The Company is a party to various litigation and administrative proceedings related to claims arising from its operations in the ordinary course of business including in relation to certain contingent purchase price obligations noted above. The Company records provisions for losses when claims become probable, and the amounts are estimable. Although the outcome of these matters cannot be predicted with certainty, the Company's management believes that the resolution of the matters will not have a material impact on the Company's business, results of operations, financial condition, or cash flows. See "Note 8. Acquisition-Related Liabilities" for additional information.

NOTE 13—Stock-Based Compensation

Stock-based compensation plan

In 2008, the Company adopted its 2008 Stock Option/Stock Issuance Plan, and, in 2017, adopted the Zeta Global Holdings Corp. 2017 Incentive Plan (collectively, the "Plans").

The Plans permit the issuance of stock options, restricted stock and restricted stock units to employees, directors, and officers, consultants or advisors and non-employee directors of the Company. Options granted under the Plans expire no later than ten years from the grant date. Prior to the IPO, the restricted stock and restricted stock units granted under the Plans generally did not vest until a change in control. Upon a change in control, restricted stock and restricted stock units vest as to 25% of the shares with the balance of the shares vesting in equal quarterly installments following the change in control over the remainder of a five-year term from the original date of grant. The restricted stock and restricted stock units fully vest upon a change in control to the extent five years has passed from the original date of grant of the restricted stock or restricted stock units. Since the vesting of these awards was contingent upon the change of control event, which was not considered probable until it occurred, the Company did not record any stock-based compensation for such awards prior to the IPO, a change in control event. The stock-based compensation has been recognized following the vesting of restricted stock, restricted stock units and options as described below. The Company ceased granting awards under the Plans following its adoption of the 2021 Plan (as defined below) in connection with the IPO.

In connection with the IPO, the Company adopted the Zeta Global Holdings Corp. 2021 Incentive Award Plan (the "2021 Plan"), which was effective as of the day prior to the first public trading date of our Class A common stock and under which restricted stock, restricted stock units and options have been granted to service providers. With certain exceptions, the equity awards granted under the 2021 Plan generally vest over four years, with 25% of the shares vesting upon the first anniversary of the grant date and the remainder of the shares vesting in equal quarterly installments thereafter.

During the year ended December 31, 2023, 2022 and 2021, the Company recognized stock-based compensation expense of \$242,881, \$298,992 and \$259,159, respectively.

Restricted Stock and Restricted Stock Units

As noted above, the Company's restricted stock and restricted stock units granted prior to the IPO did not vest until a change of control. On March 24, 2021, the Company's board of directors approved a modification in the vesting terms of its restricted stock and restricted stock unit awards. This modification was accounted for under the guidance in ASC 718-20-35-3. Given the

vesting of the modified awards contained a performance condition associated with the IPO, the Company had determined that the modification was considered improbable-to-improbable under ASC 718-20-55-118 through 119. The Company recognized compensation expense over the modified vesting terms, based on the fair value as of the date of modification.

During the year ended December 31, 2023, the Company's board of directors approved the modification of the vesting schedule of certain awards, to accelerate the vesting of those grants. These modifications were accounted for in accordance with ASC 718-20-35-3 and did not have any material impact on the stock-based compensation during the year ended December 31, 2023.

Following is the activity of restricted stock and restricted stock units granted by the Company:

	Shares	Weighted-Average Grant date fair value
Non-vested as of January 1, 2022	65,208,870	\$ 10.86
Granted	9,267,655	9.45
Vested	(12,964,063)	10.55
Forfeited	(1,405,187)	10.41
Non-vested as of December 31, 2022	60,107,275	\$ 10.72
Granted ⁽¹⁾	11,718,672	9.15
Vested	(20,857,865)	10.37
Forfeited ⁽²⁾	(1,269,753)	9.02
Non-vested as of December 31, 2023 ⁽³⁾	49,698,329	\$ 10.54

- (1) During the year ended December 31, 2023, the Company granted 11,467,755 restricted stock and 250,917 restricted stock units to its employees, advisors and non-employee directors.
- (2) During the year ended December 31, 2023, 1,241,675 restricted stock and 28,078 restricted stock units were forfeited.
- (3) Includes 37,641,861 unvested Class A restricted stock, 11,169,137 unvested Class B restricted stock and 887,331 unvested restricted stock units as of December 31, 2023.

Stock options

Following is the summary of transactions under the Company's stock option plan:

	Number of options	Weighted average exercise price	Weighted average remaining contractual life (years)	Aggregate intrinsic value (per share)
Outstanding options as of January 1, 2022	887,662	\$ 3.53	4.19	\$ 5.28
Granted	575,250	10.82		
Exercised	(315,430)	0.63		
Forfeited	(30,990)	10.83		
Outstanding options as of December 31, 2022	1,116,492	\$ 7.90	6.67	\$ 0.59
Granted	1,714,555	8.63		
Exercised	(63,500)	3.79		
Forfeited	(147,610)	7.65		
Outstanding options as of December 31, 2023	2,619,937	\$ 8.49	4.97	\$ 0.57

As of December 31, 2023, the Company had 683,055 outstanding exercisable options with a weighted-average exercise price of \$6.27. Options granted by the Company expire no later than ten years from the grant date.

The Company granted 1,714,555 options during the year ended December 31, 2023. The Company engaged a third-party valuation firm to determine the estimated fair value of the options using the Black-Scholes-Merton method, which was determined as \$4.57 for the options issued during the year ended December 31, 2023 using the following assumptions:

	Year ended December 31, 2023
Dividend yield	0.0%
Volatility	51.0%
Risk free rate of interest	3.6%

Performance Stock Unit (“PSU”) Award

On April 19, 2023, the Compensation Committee of the Board of Directors approved the grant of 1,538,925 PSUs under the Company’s 2021 Plan. Upon achievement of the conditions described below, the PSUs could result in the issuance of up to 4,616,775 shares of Class A common stock. Each PSU represents the right to receive shares of Class A common stock as set forth in the PSU grant agreement or, at the option of the Company, an equivalent amount of cash. Participants have no right to the distribution of any shares or payment of any cash until the time (if ever) the PSUs are earned and have vested. Each PSU provides for the right to receive a dividend equivalent to the value of any ordinary cash dividends paid on substantially all the outstanding shares of Class A common stock if the PSUs are earned and vested. The PSUs may be earned at the end of each fiscal quarter beginning with the three-month period ending on December 31, 2023 and ending with, and including, the three month period ending on December 31, 2027. The PSUs shall be earned as set forth in the table below, based on the 20-day volume-weighted average closing price per share (“VWAP”) for such quarter. The number of PSUs earned for such quarter shall be reduced by the number of PSUs, if any, earned in any prior quarter.

20 Day VWAP of Class A common stock	Below \$13.66	\$ 13.66	\$ 16.13	\$ 18.60	\$ 22.05	\$ 25.01	\$ 37.60
Percentage of target PSUs	0%	25%	50%	100%	150%	200%	300%

Earned PSUs vest in three equal annual installments, with the first installment vesting on the date the Company determines the number of PSUs that are eligible to vest for such quarter, and the second and third installments vesting on the first and second anniversaries of such determination date, subject to accelerated vesting in connection with certain qualifying terminations of employment or a change in control.

Following is the summary of PSUs under the Company’s 2021 Plan:

	Number of PSUs	Weighted Average Grant Date Fair Value
Outstanding as of January 1, 2022	1,500,000	\$ 1.95
Granted	1,979,500	20.29
Outstanding as of December 31, 2022	3,479,500	\$ 12.38
Granted	1,538,925	21.04
Vested	(142,500)	5.17
Forfeited	(120,250)	14.76
Outstanding as of December 31, 2023 ⁽¹⁾	4,755,675	\$ 15.34

(1) Includes 275,500 PSUs with a fair value of \$5.17, that are earned as based on the 20 day VWAP of our Class A common stock as discussed above.

The Company engaged a third-party valuation firm to determine the estimated fair value of the PSUs using the Monte Carlo simulation method, which was determined as \$21.04 per PSU issued during the year ended December 31, 2023 using the following assumptions:

	Year ended December 31, 2023
Dividend yield	0.0%
Volatility	55.0%
Risk free interest rate	3.6%

2021 Employee Stock Purchase Plan (“ESPP”)

The Company maintains the 2021 Employee Stock Purchase Plan, or the 2021 ESPP. The 2021 ESPP permits participants to purchase the Company’s Class A common stock through contributions up to a specified percentage of their eligible compensation. The maximum number of shares that may be purchased by a participant during any offering period is capped at 10,000. In addition, no employee will be permitted to accrue the right to purchase shares under the Section 423 component at a rate in excess of \$25 worth of shares during any calendar year during which such a purchase right is outstanding (based on the fair market value per share of our Class A common stock as of the first day of the offering period).

The 2021 ESPP has consecutive offering periods of approximately six months in length commencing each year on December 1 and June 1 and ending on each May 31 and November 30, as applicable.

During the year ended December 31, 2023, the Company issued 210,096 shares of Class A common stock related to the 2021 ESPP offering that ended on May 31, 2023 and 214,558 shares of Class A common stock related to the 2021 ESPP offering that ended on November 30, 2023.

The Company determined the estimated fair value of the shares purchased under the 2021 ESPP using the Black-Scholes-Merton method. The fair value of shares for the offering that commenced on December 1, 2023 was estimated at \$2.28 per share using the following assumptions, and expected to result in an issuance of approximately 189,480 shares of Class A common stock under this offering that will end on May 31, 2024.

	Year ended December 31, 2023
Dividend yield	0.0%
Risk free interest rate	5.33%
Volatility	39.6%

Unrecognized stock-based compensation

The Company has \$250,763 of unrecognized compensation expense related to its 49,698,329 unvested restricted stock and restricted stock units, 4,898,175 performance stock units, 1,936,882 unvested options and approximately 189,480 shares of Class A common stock to be issued under the 2021 ESPP. This unrecognized stock-based compensation will be recognized over a weighted average period of 1.04 years.

NOTE 14—Stockholders' Equity

Share repurchase plan

On August 3, 2022, the Company's Board of Directors authorized a stock repurchase and withholding program of up to \$50,000 in the aggregate for (i) repurchases of the Company's outstanding Class A common stock through December 31, 2024 (the "2022 SRP") and (ii) the withholding of shares as an alternative to market sales by certain executives to satisfy tax withholding requirements upon vesting of restricted stock awards (the "RSA Withholding Program").

During the year ended December 31, 2023, the Company repurchased 1,686,076 shares for a value of \$15,421, including shares repurchased in conjunction with tax withholdings for the executives. Out of the repurchased amount, \$1,978 was settled by the company subsequent to December 31, 2023 and is included in other current liabilities in the consolidated balance sheet. As of December 31, 2023, approximately \$24,986 worth of shares remained available for purchase under this discretionary plan.

Conversion of Common Class B to Class A

During the year ended December 31, 2023, 2,717,890 shares of Class B common stock (including restricted shares of Class B that were fully vested during the year ended December 31, 2023) were converted into shares of Class A common stock upon transfer pursuant to the terms of our amended and restated certificate of incorporation.

Issuance of Class A common stock

During the year ended December 31, 2023, the Company issued following Class A common stock for earnout payments related to its certain acquisitions.

	Number of shares issued	Fair value
Acramax	76,627	\$ 667
Kinetic	26,502	229
Vital	57,515	500
Apptness	450,451	3,666
Total	611,095	\$ 5,062

On October 11, 2023, the Company issued 40,274 shares of Class A common stock valued at \$8.07 per share, for an aggregate value of \$325, to certain individuals who provided services to the Company or their designated charitable organizations. The Company did not receive any proceeds from such issuance.

NOTE 15—Leases

The Company maintains leased offices in the United States of America, United Kingdom, India, Belgium and France.

The balance for Right-to-use asset and lease liabilities are as follows:

Operating Leases	As on December 31, 2023	As on December 31, 2022
Right-to-use asset, net	\$ 6,603	\$ 7,388
Current liabilities	\$ 1,789	\$ 2,137
Non-Current liabilities	\$ 6,602	\$ 7,877

Supplemental information related to operating leases is as follows:

Particulars	During the year ended December 31, 2023
Long term Operating lease cost	\$ 2,476
Other Short-term lease cost	\$ 256
Cash paid for amounts included in the measurement of lease liabilities	\$ 2,811
Right-to-use assets obtained in exchange for new operating lease liabilities	\$ 165
Weighted-average remaining lease term (years) — operating leases	2.4
Weighted-average discount rate — operating leases	6.5 %

Minimum lease obligations - Future minimum payments under all operating leases (including leases with a duration of one year or less) as of December 31, 2023 are as follows:

2024	\$ 2,660
2025	2,028
2026	1,843
2027	1,660
2028 and thereafter	1,865
Total undiscounted lease commitments	\$ 10,056
Less: Short term leases and interest component	(1,665)
Total discounted operating lease liabilities	\$ 8,391

NOTE 16—Fair Value Disclosures

Fair value is the price that would be received from the sale of an asset or paid to transfer a liability assuming an orderly transaction in the most advantageous market at the measurement date. U.S. GAAP establishes a hierarchical disclosure framework which prioritizes and ranks the level of observability of inputs used in measuring fair value. These tiers include Level 1, Level 2 and Level 3 (See Note 2).

Level 1 is defined as observable inputs such as quoted prices in active markets for identical assets;

Level 2 is defined as observable inputs other than Level 1 prices such as quoted prices for similar assets; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and

Level 3 is defined as unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions.

The following table represents the fair value of the financial instruments measured at fair value on a recurring basis:

	As of December 31, 2023			
	Level 1	Level 2	Level 3	Total
Assets				
Cash and cash equivalents*	\$ 113,271			\$ 113,271
Total assets measured at fair value	\$ 113,271	\$ —	\$ —	\$ 113,271
Liabilities				
Acquisition-related liabilities			\$ 20,294	\$ 20,294
Total liabilities measured at fair value	\$ —	\$ —	\$ 20,294	\$ 20,294

	As of December 31, 2022			
	Level 1	Level 2	Level 3	Total
Assets				
Cash and cash equivalents*	\$ 107,354	\$ —	\$ —	\$ 107,354
Total assets measured at fair value	\$ 107,354	\$ —	\$ —	\$ 107,354
Liabilities				
Acquisition-related liabilities	\$ —	\$ —	\$ 32,675	\$ 32,675
Total liabilities measured at fair value	\$ —	\$ —	\$ 32,675	\$ 32,675

* Includes cash invested by the Company in certain money market accounts with a financial institution.

The following table reconciles the changes in the fair value of the liabilities categorized within Level 3 of the fair value hierarchy for the years ended December 31, 2023 and 2022:

	Acquisition-related liabilities
Balance as of January 1, 2022	\$ 22,957
Additions	7,539
Payments made during the year	(10,811)
Change in fair value	12,990
Balance as of December 31, 2022	\$ 32,675
Additions	1,139
Payments made during the year	(20,570)
Change in fair value	7,050
Balance as of December 31, 2023	\$ 20,294

In connection with certain business combinations, the Company may owe additional purchase consideration (contingent consideration included in the acquisition-related liabilities) based on the financial performance of the acquired entities after their acquisition. The fair value of the contingent consideration was determined using an unobservable input such as projected revenues, collections of accounts receivables. Changes in any of the assumptions related to the unobservable inputs identified above may change the fair value of the contingent consideration.

NOTE 17—Related Party Transactions

(a) Casting Made Simple Corp. (“CMS”) is an entity owned by the Caivis Group (the Company's Chief Executive Officer owns a controlling interest in the Caivis Group) and the Chief Executive Officer’s spouse. On December 28, 2018, the Company entered into an agreement with CMS to monetize traffic generated through websites owned by CMS and give a profit share to CMS. The profit shared by the Company with CMS, amounted to \$219 and \$207 for the year ended December 31, 2023 and December 31, 2022, respectively, was recognized as direct cost of revenues (excluding depreciation and amortization) in the consolidated statements of operations and comprehensive loss. As of December 31, 2023 and December 31, 2022, the Company had outstanding payables of \$43 and \$25, respectively, to CMS and included in the “accounts payable and accrued expenses” in the consolidated balance sheets.

(b) Our Chief Financial Officer’s spouse is an executive officer at DailyPay, Inc. (“DailyPay”). On August 31, 2023, the Company entered into an agreement with DailyPay to provide certain marketing related services. During the year ended December 31,

2023, the Company generated \$137 of revenues from DailyPay and as of December 31, 2023, the Company had outstanding receivables of \$48, which was included in the “accounts receivables” in the consolidated balance sheets.

NOTE 18—Income Taxes

The components of loss before the provision / (benefit) for income taxes is as follows;

	Year ended December 31,		
	2023	2022	2021
Domestic operations	\$ (187,763)	\$ (281,895)	\$ (253,462)
Foreign operations	1,319	1,165	3,301
Loss before income taxes	\$ (186,444)	\$ (280,730)	\$ (250,161)

Current and deferred income taxes / (benefits) on loss from continuing operations are as follows;

	Year ended December 31,	
	2023	2022
Current		
Federal	\$ (74)	\$ (17)
State and local	95	69
Foreign	994	1,170
Total current income taxes	\$ 1,015	\$ 1,222
Deferred:		
Federal	\$ —	\$ (2,114)
State and local	—	(736)
Foreign	22	137
Total deferred income benefits	22	(2,713)
Income tax provision/(benefit)	\$ 1,037	\$ (1,491)

Significant components of the Company’s net deferred tax assets/(liabilities) are as follows:

	Year ended December 31,	
	2023	2022
Deferred tax assets:		
Accounts receivable reserve	\$ 832	\$ 403
Accrued payroll	6,088	6,802
Net operating loss carry forward	33,931	32,171
Stock-based compensation	45,696	48,010
Interest limitation carry forward	6,148	3,154
Tax credit	5,236	—
Intangible assets	15,391	11,329
Capital losses	—	1,187
Research and development costs	28,350	19,951
Accrued expenses and other	2,788	3,575
	144,460	126,582
Less: Valuation allowance	(129,661)	(112,330)
Deferred tax assets	\$ 14,799	\$ 14,252
Deferred tax liabilities:		
Fixed assets	(4,921)	(7,135)
Right-to-use asset	(1,838)	—
Deferred state income tax and other	(7,312)	(6,372)
Deferred tax liabilities:	(14,071)	(13,507)
Net deferred tax assets	\$ 728	\$ 745

Deferred income taxes reflect 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, as well as operating loss and tax credit carry forwards. The recognition of a valuation allowance for deferred taxes requires management to make estimates and judgments about the Company’s future profitability which is inherently uncertain. The Company assesses all available positive and negative evidence

to determine if its existing deferred tax assets are realizable on a more-likely-than-not basis. In making such an assessment, the Company considered the reversal of existing taxable temporary differences, projected future taxable income, tax planning strategies and recent financial operating results. The ultimate realization of a deferred tax asset is dependent on the Company's generation of sufficient taxable income within the available net operating loss carryback and/or carryforward periods to utilize the deductible temporary differences.

A significant piece of objective negative evidence was the cumulative loss incurred in the U.S and certain foreign jurisdictions including Belgium and France over three-year period ended December 31, 2023. Such objective evidence limits the Company's ability to consider other subject evidence, such as the Company projections for future growth. On the basis of this evaluation, the Company continued to conclude that its U.S., Belgium and France deferred tax assets are not realizable on a more-likely-than-not basis and that a full valuation allowance is required. The amount of deferred tax asset considered realizable, however, could be adjusted if estimates of future income during the carryforward period are reduced or increased or if objective negative evidence in the form of cumulative losses is no longer present and additional weight is given to subjective evidence such as our projections for future growth. During 2023, the Company's valuation allowance increased by \$17,331.

The following table reconciles the changes in the valuation allowance for the years ended December 31, 2023 and 2022:

Balance as of January 1, 2022	\$ (86,210)
Increase due to current year pre-tax loss	(26,111)
Others	(9)
Balance as of December 31, 2022	(112,330)
Increase due to current year pre-tax loss	(17,274)
Others	(57)
Balance as of December 31, 2023	\$ (129,661)

The difference between the federal statutory rate of 21% and the Company's effective tax rate is summarized as follows:

	December 31, 2023	December 31, 2022
U.S. federal statutory rate	21.0%	21.0%
State income taxes	2.8%	4.4%
Other permanent differences	(0.4)%	(0.5)%
Global intangible low-taxed income (GILTI)	—%	(1.2)%
Non-deductible stock-based compensation	(2.6)%	(2.0)%
Non-deductible officer's compensation	(12.8)%	(11.9)%
Research and development credit	2.0%	—%
Change in valuation allowance	(9.3)%	(9.3)%
State change in tax rate	(0.6)%	0.2%
Other	(0.6)%	(0.2)%
Effective tax rate	(0.5)%	0.5%

For the year ended December 31, 2023, the income tax provision of \$1,037 relates primarily to an income tax provision for foreign taxes. For the year ended December 31, 2022, the income tax benefit of \$1,491 relates primarily to (i) the partial release of the Company's U.S. valuation allowance as certain business combinations consummated during 2022 created a source of future taxable income, offset by (ii) an income tax provision for foreign taxes.

As of December 31, 2023, the Company had U.S. federal net operating loss carryforwards of approximately \$113,428 of which \$7,211 are subject to an annual limitation pursuant to IRC Section 382. Approximately, \$69,314 of U.S. federal net operating loss carryforwards expire in varying amounts during 2035 to 2037, if not utilized. These net operating losses are available to offset 100% of future taxable income. The remaining \$44,114 of U.S. federal net operating loss may be carried forward indefinitely but are only available to offset 80% of future taxable income.

In addition, the Company had state net operating losses of \$119,896 which will expire in varying amounts during 2026 through 2043, if not utilized. The Company also had federal research tax credit carryforwards of \$3,640 as of December 31, 2023, which expire in varying amounts during 2042 to 2043, if not utilized. The Company also had state research tax credit carryforwards of \$1,595 as of December 31, 2023, of which \$1,410 may be carried forward indefinitely. The remaining \$185 will expire in varying amounts from 2029 to 2043 if not utilized.

As of December 31, 2023, the Company had federal deferred interest carryforwards under IRC Section 163(j) of \$18,107. This deferred interest may be carried forward indefinitely but is limited to 30% of future tax adjusted EBIT.

The Company plans to continue to reinvest foreign earnings indefinitely outside the United States. If these future earnings are repatriated to the United States, or if the Company determines that such earnings will be remitted in the foreseeable future, the Company may be required to accrue applicable withholding taxes. However, it does not expect to incur any significant additional taxes related to such amounts.

A reconciliation of the beginning and ending amount of unrecognized tax benefits, excluding interest and penalties, is as follows:

Balance as of January 1, 2022	\$	223
Increase in tax positions for current / prior periods		(223)
Balance as of December 31, 2022		—
Increase in tax positions for current / prior periods		—
Balance as of December 31, 2023	\$	—

As of December 31, 2023 and 2022, there were no amounts accrued for interest and penalties. The Company's accounting policy is to record both accrued interest and penalties related to income tax matters in the income tax provision in the accompanying consolidated statements of operations and comprehensive loss. The Company does not expect its unrecognized benefits to materially change over the next 12 months.

The Company, or one of its subsidiaries, files its tax returns in the U.S. and certain state and foreign income tax jurisdictions with varying statutes of limitations. The earliest years' tax returns filed by the Company that are still subject to examination by the tax authorities in the major jurisdictions are as follows.

Jurisdiction	Tax Year
U.S	2020
Czech Republic	2020
India	2021

NOTE 19—401(k) Defined Contribution Plan

The Company maintains a tax-qualified 401(k) retirement plan that provides eligible U.S. employees with an opportunity to save for retirement on a tax advantaged basis. During the years ended December 31, 2023 and 2022, the Company accrued employees' eligible contributions according to the 401(k)-plan document which totaled to \$1,675 and \$1,438, respectively. The amount of contributions related to the year ended December 31, 2023 was fully paid during 2024.

NOTE 20—Net Loss Per Share Attributable to Common Stockholders

Basic net loss per share is computed using the two-class method, by dividing the net loss by the weighted-average number of shares of common stock of the Company outstanding during the period. Diluted net loss per share is computed by giving effect to all potential shares of common stock of the Company, outstanding stock options, warrants, to the extent dilutive. However, the unvested restricted stock, restricted stock units and performance stock units as of December 31, 2023 and 2022 of 54,454,004 and 63,586,775, respectively, are not considered as participating securities and are anti-dilutive and as such are excluded from the weighted average number of shares used for calculating basic and diluted net loss per share. Basic and diluted net loss per share was the same for each period presented as the inclusion of all potential shares of common stock of the Company outstanding would have been anti-dilutive.

The following table sets forth the calculation of basic and diluted net loss per share attributable to common stockholders during the periods presented:

	Year ended December 31,		
	2023	2022	2021
Numerator:			
Net loss	\$ (187,481)	\$ (279,239)	\$ (249,563)
Cumulative redeemable convertible preferred stock dividends	—	—	7,060
Numerator for Basic and Dilutive loss per share – loss available to common stockholders	\$ (187,481)	\$ (279,239)	\$ (256,623)
Denominator:			
Class A common stock	140,593,656	122,455,432	61,972,951
Class B common stock	16,103,652	16,529,833	10,143,209
Series A common stock	—	—	11,904,161
Series B common stock	—	—	1,372,351
Warrants	—	—	1,539,519
Denominator for Basic and Dilutive loss per share – weighted-average common stock	156,697,308	138,985,265	86,932,191
Basic loss per share	\$ (1.20)	\$ (2.01)	\$ (2.95)
Dilutive loss per share	\$ (1.20)	\$ (2.01)	\$ (2.95)

Since the Company was in a net loss position for all periods presented, the inclusion of all potential common equivalent shares outstanding would have been anti-dilutive. Therefore net loss per share attributable to common stockholders was the same on a basic and diluted basis.

Anti-dilutive weighted-average common equivalent shares were as follows:

	Year ended December 31,		
	2023	2022	2021
Options	2,065,316	1,096,894	940,653
Restricted stock and restricted stock units	56,915,993	66,224,013	70,650,049
Performance stock units	4,370,543	3,186,642	558,904

NOTE 21—Other Expenses / (Income)

The components of other expenses / (income) are detailed as follows:

	Year ended December 31,		
	2023	2022	2021
Change in the fair value of acquisition-related liabilities	\$ 7,200	\$ 12,990	\$ (1,828)
Loss on sale of assets	—	—	266
Foreign currency translation loss	620	993	1,283
Total other expenses / (income)	\$ 7,820	\$ 13,983	\$ (279)

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Control and Procedures.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer (“CEO”) and Chief Financial Officer (“CFO”), evaluated the effectiveness of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act of 1934, as amended (the “Exchange Act”), as of December 31, 2023.

Our disclosure controls and procedures are designed to provide reasonable assurance that information we are required to disclose in the reports we file or submit under the Exchange Act is accumulated and communicated to our management, including our

CEO and CFO, as appropriate to allow timely decisions regarding required disclosures, and is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms. Based on this evaluation, our CEO and CFO have concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of December 31, 2023.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting in connection with the evaluation required by Rules 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the quarter ended December 31, 2023 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Annual 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). Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with GAAP.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework set forth in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on our evaluation under the framework set forth in Internal Control – Integrated Framework (2013), our management concluded that our internal control over financial reporting was effective as of December 31, 2023.

Attestation Report on Internal Control over Financial Reporting

The effectiveness of our internal control over financial reporting as of December 31, 2023, has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which appears in Part II, Item 9A of this Annual Report on Form 10-K.

Inherent Limitations on Effectiveness of Controls

Management recognizes that a control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are 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 and instances of fraud or error, if any, have been detected. These inherent limitations include the realities that judgments in decision making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of Zeta Global Holdings Corp.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Zeta Global Holdings Corp. and subsidiaries (the "Company") as of December 31, 2023, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2023, based on criteria established in Internal Control — Integrated Framework (2013) issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2023, of the Company and our report dated February 28, 2024, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Deloitte & Touche LLP

Baltimore, Maryland

February 28, 2024

Item 9B. Other Information.

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The following information with respect to our board of directors and executive officers is presented as of February 28, 2024:

Name	Age	Position at Zeta	Principal Employment
David Steinberg	54	Chief Executive Officer and Chairman of the Board	Chief Executive Officer of Zeta
Christopher Greiner	48	Chief Financial Officer	Chief Financial Officer of Zeta
Steven Gerber	53	President and Chief Operating Officer	President and Chief Operating Officer of Zeta
Satish Ravella	50	Principal Accounting Officer	Principal Accounting Officer of Zeta
Jené Elzie	50	Director	Managing Director, Investment Team of Dunes Point Capital, a private equity firm
William Landman	71	Director	Co-founder and Managing Principal of MainLine Investment Partners, LLC, an investment firm
Robert Niehaus	68	Director	Chairman and Founder of GCP Capital Partners LLC, an investment firm
William Royan	56	Director	Managing Partner and Chair of the Investment Committee of GPI Capital, an investment firm
John Sculley	84	Director	Director of Zeta
Jeanine Silberblatt	46	Director	Principal of JKBS Consulting, a consulting firm

The other information required by this item will be set forth in our Proxy Statement and is incorporated herein by reference. The Proxy Statement will be filed with the SEC within 120 days of the fiscal year ended December 31, 2023.

Item 11. Executive Compensation.

The information required by this item will be set forth in our Proxy Statement and is incorporated herein by reference. The Proxy Statement will be filed with the SEC within 120 days of the fiscal year ended December 31, 2023.

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

The information required by this item will be set forth in our Proxy Statement and is incorporated herein by reference. The Proxy Statement will be filed with the SEC within 120 days of the fiscal year ended December 31, 2023.

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

The information required by this item will be set forth in our Proxy Statement and is incorporated herein by reference. The Proxy Statement will be filed with the SEC within 120 days of the fiscal year ended December 31, 2023.

Item 14. Principal Accountant Fees and Services.

The information required by this item will be set forth in our Proxy Statement and is incorporated herein by reference. The Proxy Statement will be filed with the SEC within 120 days of the fiscal year ended December 31, 2023.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

(a)(1) Financial Statements

See Index to Financial Statements in Item 8 of this Annual Report on Form 10-K.

(a)(2) Financial Statement Schedules

All financial statement schedules have been omitted as the information is not required under the related instructions or is not applicable or because the information required is already included in the financial statements or the notes to the financial statements.

(a)(3) Exhibits

The following documents listed in the Exhibit Index of this Annual Report on Form 10-K are incorporated by reference or are filed with this Annual Report on Form 10-K, in each case as indicated therein.

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith	Furnished Herewith
		Form	File No.	Exhibit	Filing Date		
3.1	<u>Amended and Restated Certificate of Incorporation of Zeta Global Holdings Corp.</u>	8-K	001-40464	3.1	6/15/2021		
3.2	<u>Amended and Restated Bylaws of Zeta Global Holdings Corp.</u>	8-K	001-40464	3.2	6/15/2021		
4.1	<u>Specimen Stock Certificate evidencing the shares of Class A common stock.</u>	S-1/A	333-255499	4.1	5/7/2021		
4.2	<u>Amended and Restated Registration Rights Agreement, dated May 8, 2017, by and among, Zeta Global Holdings Corp. and the Investors party thereto</u>	S-1/A	333-255499	4.2	5/7/2021		
4.3	<u>Description of Registrant's Securities</u>	10-K	001-40464	4.3	2/25/2022		
10.1	<u>Form of Indemnification Agreement by and between the Registrant and Each of its Directors and Executive Officers.</u>	S-1/A	333-255499	10.2	5/7/2021		
10.2#	<u>Zeta Global Holdings Corp. 2008 Stock Option/Stock Issuance Plan</u>	S-1/A	333-255499	10.3	5/7/2021		
10.3#	<u>Form of restricted stock agreement under 2008 Stock Option/Stock Issuance Plan</u>	S-1/A	333-255499	10.4	5/7/2021		
10.4#	<u>Form of option agreement under 2008 Stock Option/Stock Issuance Plan</u>	S-1/A	333-255499	10.5	5/7/2021		

Incorporated by Reference

Exhibit Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Filed Herewith	Furnished Herewith
10.5#	Zeta Global Holdings Corp. 2017 Equity Incentive Plan	S-1/A	333-255499	10.6	5/7/2021		
10.6#	Form of restricted stock agreement under 2017 Equity Incentive Plan	S-1/A	333-255499	10.7	5/7/2021		
10.7#	Form of restricted stock unit agreement under 2017 Equity Incentive Plan	S-1/A	333-255499	10.8	5/7/2021		
10.8#	Form of stock option agreement under 2017 Equity Incentive Plan	S-1/A	333-255499	10.9	5/7/2021		
10.9#	Zeta Global Holdings Corp. 2021 Incentive Award Plan	S-1/A	333-255499	10.10	5/7/2021		
10.10#	Form of restricted stock agreement under 2021 Incentive Award Plan	S-1/A	333-255499	10.11	5/7/2021		
10.11#	Form of restricted stock unit agreement under 2021 Incentive Award Plan	S-1/A	333-255499	10.12	5/7/2021		
10.12#	Form of stock option agreement under 2021 Incentive Award Plan	S-1/A	333-255499	10.13	5/7/2021		
10.13#	Zeta Global Holdings Corp. 2021 Employee Stock Purchase Plan	S-1/A	333-255499	10.14	5/7/2021		
10.14#	Form of amendment to restricted stock agreement under 2008 Stock Option/Stock Issuance Plan and 2017 Equity Incentive Plan for participants eligible to participate in Buy-Back Program	S-1/A	333-255499	10.15	5/7/2021		
10.15#	Form of amendment to restricted stock unit agreement under 2017 Equity Incentive Plan for participants eligible to participate in Buy-Back Program	S-1/A	333-255499	10.16	5/7/2021		
10.16#	Form of Employment Agreement by and between Zeta Global Holdings Corp. and David A. Steinberg	S-1/A	333-255499	10.17	5/7/2021		
10.17	Form of Exchange Agreement	S-1/A	333-255499	10.18	5/7/2021		
10.18#	Form of Employment Agreement by and between Zeta Global Corp. and Steven Gerber	S-1/A	333-255499	10.19	5/7/2021		
10.19#	Form of Employment Agreement by and between Zeta Global Corp. and Chris Greiner	S-1/A	333-255499	10.20	5/7/2021		

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith	Furnished Herewith
		Form	File No.	Exhibit	Filing Date		
10.20#	Letter Agreement, dated June 29, 2021, by and between Zeta Global Holdings Corp. and Jené Elzie	8-K	001-40464	10.1	6/29/2021		
10.21#	Form of performance stock unit agreement under 2021 Incentive Award Plan	10-K	001-40464	10.21	2/25/2022		
10.22	Credit Agreement, dated as of February 3, 2021, among Zeta Global Corp., Zeta Global Holdings Corp., certain subsidiaries, the lenders party thereto, Bank of America, N.A. and BofA Securities, Inc.	S-1	333-255499	10.1	4/26/2021		
10.23	Second Amendment to Credit Agreement, dated as of March 22, 2023, among Zeta Global Corp., Zeta Global Holdings Corp., the other guarantors party thereto, the lenders party thereto, Bank of America, N.A.	10Q	001-40464	10.1	5/5/2023		
21.1	List of Subsidiaries					X	
23.1	Consent of Deloitte & Touche LLP					X	
31.1	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X	
31.2	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X	
32.1*	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002						X
32.2*	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002						X
97.1	Zeta Global Holdings Corp. Policy for Recovery of Erroneously Awarded Compensation						X
101.INS	XBRL Instance Document					X	
101.SCH	Inline XBRL Taxonomy Extension Schema Document					X	
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document					X	
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document					X	

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith	Furnished Herewith
		Form	File No.	Exhibit	Filing Date		
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document					X	
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document					X	
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)						

Indicates a management contract or compensatory plan.

* The certifications attached as Exhibit 32.1 and Exhibit 32.2 that accompany this Annual Report on Form 10-K are deemed furnished and not filed with the SEC and are not to be incorporated by reference into any filing of the Company under the Securities Act or the Exchange Act whether made before or after the date of this Annual Report on Form 10-K, irrespective of any general incorporation language contained in such filing.

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.

ZETA GLOBAL HOLDINGS CORP.

Date: February 28, 2024

By: /s/ Christopher Greiner

Christopher Greiner
Chief Financial Officer

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 in the capacities and on the dates indicated.

Name	Title	Date
<u>/s/ David Steinberg</u>		
David Steinberg	Chief Executive Officer, Director <i>(Principal Executive Officer)</i>	February 28, 2024
<u>/s/ Christopher Greiner</u>		
Christopher Greiner	Chief Financial Officer <i>(Principal Financial Officer)</i>	February 28, 2024
<u>/s/ Satish Ravella</u>		
Satish Ravella	SVP - Finance <i>(Principal Accounting Officer)</i>	February 28, 2024
<u>/s/ Jené Elzie</u>		
Jené Elzie	Director	February 28, 2024
<u>/s/ William Landman</u>		
William Landman	Director	February 28, 2024
<u>/s/ Robert Niehaus</u>		
Robert Niehaus	Director	February 28, 2024
<u>/s/ William Royan</u>		
William Royan	Director	February 28, 2024
<u>/s/ John Sculley</u>		
John Sculley	Director	February 28, 2024
<u>/s/ Jeanine Silberblatt</u>		
Jeanine Silberblatt	Director	February 28, 2024

Subsidiaries

Zeta Global Corp.
Disqus Inc.

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CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-257048 on Form S-8 of our reports dated February 28, 2024, relating to the financial statements of Zeta Global Holdings Corp. and the effectiveness of Zeta Global Holdings Corp.'s internal control over financial reporting appearing in this Annual Report on Form 10-K for the year ended December 31, 2023.

/s/ Deloitte & Touche LLP
Baltimore, Maryland

February 28, 2024

**Certification of Chief Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, David A. Steinberg, certify that:

1. I have reviewed this annual report on Form 10-K of Zeta Global Holdings Corp.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 28, 2024

By: /s/ David A. Steinberg

David A. Steinberg
Chief Executive Officer
(principal executive officer)

**Certification of Chief Financial Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Christopher Greiner, certify that:

1. I have reviewed this annual report on Form 10-K of Zeta Global Holdings Corp.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 28, 2024

By: /s/ Christopher Greiner

Christopher Greiner
Chief Financial Officer
(*principal financial officer*)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

Pursuant to 18 U.S.C. § 1350, as adopted by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Zeta Global Holdings Corp. (the “Company”) hereby certifies, to such officer’s knowledge, that:

- (1) the accompanying Annual Report on Form 10-K of the Company for the fiscal year ended December 31, 2023 (the “Report”) fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: February 28, 2024

By: /s/ David A. Steinberg

David A. Steinberg
Chief Executive Officer
(Principal Executive Officer)

The foregoing certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. § 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

Pursuant to 18 U.S.C. § 1350, as adopted by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Zeta Global Holdings Corp. (the “Company”) hereby certifies, to such officer’s knowledge, that:

- (1) the accompanying Annual Report on Form 10-K of the Company for the fiscal year ended December 31, 2023 (the “Report”) fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: February 28, 2024

By: /s/ Christopher Greiner

Christopher Greiner
Chief Financial Officer
(Principal Financial Officer)

The foregoing certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. § 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

ZETA GLOBAL HOLDINGS CORP.

POLICY FOR RECOVERY OF ERRONEOUSLY AWARDED COMPENSATION

Zeta Global Holdings Corp. (the “*Company*”) has adopted this Policy for Recovery of Erroneously Awarded Compensation (the “*Policy*”), effective as of October 2, 2023 (the “*Effective Date*”). Capitalized terms used in this Policy but not otherwise defined herein are defined in Section 11.

1. Persons Subject to Policy

This Policy shall apply to current and former Officers of the Company.

2. Compensation Subject to Policy

This Policy shall apply to Incentive-Based Compensation received on or after the Effective Date. For purposes of this Policy, the date on which Incentive-Based Compensation is “received” shall be determined under the Applicable Rules, which generally provide that Incentive-Based Compensation is “received” in the Company’s fiscal period during which the relevant Financial Reporting Measure is attained or satisfied, without regard to whether the grant, vesting or payment of the Incentive-Based Compensation occurs after the end of that period.

3. Recovery of Compensation

In the event that the Company is required to prepare a Restatement, the Company shall recover, reasonably promptly, the portion of any Incentive-Based Compensation that is Erroneously Awarded Compensation, unless the Committee has determined that recovery would be Impracticable. Recovery shall be required in accordance with the preceding sentence regardless of whether the applicable Officer engaged in misconduct or otherwise caused or contributed to the requirement for the Restatement and regardless of whether or when restated financial statements are filed by the Company. For clarity, the recovery of Erroneously Awarded Compensation under this Policy will not give rise to any person’s right to voluntarily terminate employment for “good reason,” or due to a “constructive termination” (or any similar term of like effect) under any plan, program or policy of or agreement with the Company or any of its affiliates.

4. Manner of Recovery; Limitation on Duplicative Recovery

The Committee shall, in its sole discretion, determine the manner of recovery of any Erroneously Awarded Compensation, which may include, without limitation, reduction or cancellation by the Company or an affiliate of the Company of Incentive-Based Compensation or Erroneously Awarded Compensation, reimbursement or repayment by any person subject to this Policy of the Erroneously Awarded Compensation, and, to the extent permitted by law, an offset of the Erroneously Awarded Compensation against other compensation payable by the Company or an affiliate of the Company to such person. Notwithstanding the foregoing, unless otherwise prohibited by the Applicable Rules, to the extent this Policy provides for recovery of Erroneously

Awarded Compensation already recovered by the Company pursuant to Section 304 of the Sarbanes-Oxley Act of 2002 or Other Recovery Arrangements, the amount of Erroneously Awarded Compensation already recovered by the Company from the recipient of such Erroneously Awarded Compensation may be credited to the amount of Erroneously Awarded Compensation required to be recovered pursuant to this Policy from such person.

5. Administration

This Policy shall be administered, interpreted and construed by the Committee, which is authorized to make all determinations necessary, appropriate or advisable for such purpose. The Board of Directors of the Company (the “**Board**”) may re-vest in itself the authority to administer, interpret and construe this Policy in accordance with applicable law, and in such event references herein to the “Committee” shall be deemed to be references to the Board. Subject to any permitted review by the applicable national securities exchange or association pursuant to the Applicable Rules, all determinations and decisions made by the Committee pursuant to the provisions of this Policy shall be final, conclusive and binding on all persons, including the Company and its affiliates, equityholders and employees. The Committee may delegate administrative duties with respect to this Policy to one or more directors or employees of the Company, as permitted under applicable law, including any Applicable Rules.

6. Interpretation

This Policy will be interpreted and applied in a manner that is consistent with the requirements of the Applicable Rules, and to the extent this Policy is inconsistent with such Applicable Rules, it shall be deemed amended to the minimum extent necessary to ensure compliance therewith.

7. No Indemnification; No Liability

The Company shall not indemnify or insure any person against the loss of any Erroneously Awarded Compensation pursuant to this Policy, nor shall the Company directly or indirectly pay or reimburse any person for any premiums for third-party insurance policies that such person may elect to purchase to fund such person’s potential obligations under this Policy. None of the Company, an affiliate of the Company or any member of the Committee or the Board shall have any liability to any person as a result of actions taken under this Policy.

8. Application; Enforceability

Except as otherwise determined by the Committee or the Board, the adoption of this Policy does not limit, and is intended to apply in addition to, any other clawback, recoupment, forfeiture or similar policies or provisions of the Company or its affiliates, including any such policies or provisions of such effect contained in any employment agreement, bonus plan, incentive plan, equity-based plan or award agreement thereunder or similar plan, program or agreement of the Company or an affiliate or required under applicable law (the “**Other Recovery Arrangements**”). The remedy specified in this Policy shall not be exclusive and shall be in addition to every other right or remedy at law or in equity that may be available to the Company or an affiliate of the Company.

9. Severability

The provisions in this Policy are intended to be applied to the fullest extent of the law; provided, however, to the extent that any provision of this Policy is found to be unenforceable or invalid under any applicable law, such provision will be applied to the maximum extent permitted, and shall automatically be deemed amended in a manner consistent with its objectives to the extent necessary to conform to any limitations required under applicable law.

10. Amendment and Termination

The Board or the Committee may amend, modify or terminate this Policy in whole or in part at any time and from time to time in its sole discretion. This Policy will terminate automatically when the Company does not have a class of securities listed on a national securities exchange or association.

11. Definitions

“Applicable Rules” means Section 10D of the Exchange Act, Rule 10D-1 promulgated thereunder, the listing rules of the national securities exchange or association on which the Company’s securities are listed, and any applicable rules, standards or other guidance adopted by the Securities and Exchange Commission or any national securities exchange or association on which the Company’s securities are listed.

“Committee” means the Compensation Committee of the Board, provided that, for purposes of determining whether recovery of Incentive-Based Compensation that is Erroneously Awarded Compensation would be Impracticable, “Committee” shall mean the committee of the Board responsible for executive compensation decisions comprised solely of independent directors (as determined under the Applicable Rules), or in the absence of such a committee, a majority of the independent directors serving on the Board.

“Erroneously Awarded Compensation” means the amount of Incentive-Based Compensation received by a current or former Officer that exceeds the amount of Incentive-Based Compensation that would have been received by such current or former Officer based on a restated Financial Reporting Measure, as determined on a pre-tax basis in accordance with the Applicable Rules.

“Exchange Act” means the Securities Exchange Act of 1934, as amended.

“Financial Reporting Measure” means any measure determined and presented in accordance with the accounting principles used in preparing the Company’s financial statements, and any measures derived wholly or in part from such measures, including GAAP, IFRS and non-GAAP/IFRS financial measures, as well as stock or share price and total equityholder return.

“GAAP” means United States generally accepted accounting principles.

“IFRS” means international financial reporting standards as adopted by the International Accounting Standards Board.

“Impracticable” means (a) the direct expenses paid to third parties to assist in enforcing recovery would exceed the Erroneously Awarded Compensation; provided that the Company has (i) made reasonable attempts to recover the Erroneously Awarded Compensation, (ii) documented such attempt(s), and (iii) provided such documentation to the relevant listing exchange or association, (b) to the extent permitted by the Applicable Rules, the recovery would violate the Company’s home country laws pursuant to an opinion of home country counsel; provided that the Company has (i) obtained an opinion of home country counsel, acceptable to the relevant listing exchange or association, that recovery would result in such violation, and (ii) provided such opinion to the relevant listing exchange or association, or (c) recovery would likely cause an otherwise tax-qualified retirement plan, under which benefits are broadly available to employees of the Company, to fail to meet the requirements of 26 U.S.C. 401(a)(13) or 26 U.S.C. 411(a) and the regulations thereunder.

“Incentive-Based Compensation” means, with respect to a Restatement, any compensation that is granted, earned, or vested based wholly or in part upon the attainment of one or more Financial Reporting Measures and received by a person: (a) after such person began service as an Officer; (b) who served as an Officer at any time during the performance period for that compensation; (c) while the Company has a class of its securities listed on a national securities exchange or association; and (d) during the applicable Three-Year Period.

“Officer” means each person who serves as an executive officer of the Company, as defined in Rule 10D-1(d) under the Exchange Act.

“Restatement” means an accounting restatement to correct the Company’s material noncompliance with any financial reporting requirement under securities laws, including restatements that correct an error in previously issued financial statements (a) that is material to the previously issued financial statements or (b) that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period.

“Three-Year Period” means, with respect to a Restatement, the three completed fiscal years immediately preceding the date that the Board, a committee of the Board, or the officer or officers of the Company authorized to take such action if Board action is not required, concludes, or reasonably should have concluded, that the Company is required to prepare such Restatement, or, if earlier, the date on which a court, regulator or other legally authorized body directs the Company to prepare such Restatement. The “Three-Year Period” also includes any transition period (that results from a change in the Company’s fiscal year) within or immediately following the three completed fiscal years identified in the preceding sentence. However, a transition period between the last day of the Company’s previous fiscal year end and the first day of its new fiscal year that comprises a period of nine to 12 months shall be deemed a completed fiscal year.