

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549**

FORM 10-K

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

For the fiscal year ended December 31, 2022
OR

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

For the transition period from _____ to _____

Commission File Number: 001-38386



CARDLYTICS, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware **26-3039436**
(State or other jurisdiction of incorporation or organization) (I.R.S. Employer Identification No.)
675 Ponce de Leon Ave. NE, Ste 6000 **Atlanta Georgia 30308**
(Address of principal executive offices, including zip code)
(888) **792-5802**
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Securities Exchange Act of 1934:

<u>Title of each class</u>	<u>Trading Symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common Stock	CDLX	NASDAQ

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 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, 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"/>	Smaller 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, 2022, the last business day of the registrant's most recently completed second fiscal quarter, the aggregate market value of the voting stock held by non-affiliates of the registrant was \$713.1 million based upon the closing sale price of our common stock on that date.

As of February 28, 2023, there were 33,605,769 shares outstanding of the registrant's common stock, par value \$0.0001 per share.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement, to be filed pursuant to Regulation 14A under the Securities Exchange Act of 1934, for its 2023 Annual Meeting of Stockholders are incorporated by reference in Part III of the Form 10-K. Such definitive proxy statement will be filed with the Securities and Exchange Commission within 120 days of the registrant's fiscal year ended December 31, 2022.

CARDLYTICS, INC.
ANNUAL REPORT ON FORM 10-K
TABLE OF CONTENTS

	Page
<u>PART I.</u>	<u>4</u>
Item 1. <u>Business</u>	<u>4</u>
Item 1A. <u>Risk Factors</u>	<u>12</u>
Item 1B. <u>Unresolved Staff Comments</u>	<u>39</u>
Item 2. <u>Properties</u>	<u>39</u>
Item 3. <u>Legal Proceedings</u>	<u>39</u>
Item 4. <u>Mine Safety Disclosures</u>	<u>39</u>
<u>PART II.</u>	<u>40</u>
Item 5. <u>Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	<u>40</u>
Item 6. <u>[Reserved]</u>	<u>41</u>
Item 7. <u>Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>41</u>
Item 7A. <u>Quantitative and Qualitative Disclosures about Market Risk</u>	<u>63</u>
Item 8. <u>Financial Statements and Supplementary Data</u>	<u>64</u>
Item 9. <u>Changes in and Disagreements With Accountants on Accounting and Financial Disclosure</u>	<u>113</u>
Item 9A. <u>Controls and Procedures</u>	<u>113</u>
Item 9B. <u>Other Information</u>	<u>115</u>
Item 9C. <u>Disclosure Regarding Foreign Jurisdictions that Prevent Inspections</u>	<u>115</u>
<u>PART III.</u>	<u>116</u>
Item 10. <u>Directors, Executive Officers and Corporate Governance</u>	<u>116</u>
Item 11. <u>Executive Compensation</u>	<u>116</u>
Item 12. <u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	<u>116</u>
Item 13. <u>Certain Relationships and Related Transactions, and Director Independence</u>	<u>116</u>
Item 14. <u>Principal Accounting Fees and Services</u>	<u>116</u>
<u>PART IV.</u>	<u>116</u>
Item 15. <u>Exhibits, Financial Statement Schedules</u>	<u>117</u>
Item 16. <u>Form 10-K Summary</u>	<u>121</u>
<u>Signatures</u>	<u>121</u>

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K ("Annual Report"), contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended ("Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended ("Exchange Act"), that reflect our current expectations regarding future events, our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management. Forward-looking statements include any statement that does not directly relate to a current or historical fact. In some cases, you can identify forward-looking statements by the words "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "might," "objective," "ongoing," "plan," "predict," "project," "potential," "should," "will," or "would," or the negative of these terms, or other comparable terminology intended to identify statements about the future. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. The forward-looking statements and opinions contained in this Annual Report are based upon information available to us as of the date of this Annual Report and, while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. Forward-looking statements include statements about:

- our ability to continue to add new financial institution ("FI") partners, merchant data partners and marketers and maintain our relationships with existing FI partners, merchant data partners and marketers;
- with respect to the Cardlytics platform, our ability to increase FI partner customer engagement from new and existing FI partners;
- our ability to increase revenue from new and existing marketers in both new and existing industries;
- the effects of increased competition as well as innovations by new and existing competitors in our market;
- our ability to adapt to technological change and effectively enhance, innovate and scale our solutions;
- our ability to effectively manage or sustain our growth and to sustain profitability;
- potential acquisitions and integration of complementary businesses and the integrations of Bridg, Dosh and Entertainment;
- our ability to capture synergies with acquired companies;
- our ability to maintain, or strengthen awareness of, our brand;
- perceived or actual integrity, reliability, quality or compatibility problems with our solutions, including related to unscheduled downtime or outages;
- future revenue, hiring plans, expenses, capital expenditures, capital requirements and stock performance;
- our ability to attract and retain qualified employees and key personnel and further expand our overall headcount;
- our ability to grow our business;
- our ability to stay abreast of new or modified laws and regulations that currently apply or become applicable to our business both in the United States and internationally;
- our ability to maintain, protect and enhance our intellectual property;
- costs associated with defending intellectual property infringement and other claims;
- the future trading prices of our common stock and the impact of securities analysts' reports on these prices;
- the continued impact of the worldwide COVID-19 pandemic and related global economic uncertainty on our business, results of operations and financial condition; and
- other risks detailed below in Item 1A. "Risk Factors."

You should refer to Item 1A. "Risk Factors" section of this Annual Report for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements in this Annual Report will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame or at all. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this Annual Report.

Except as otherwise indicated herein or as the context otherwise requires, references in this Annual Report to "Cardlytics," the "company," "we," "us," "our" and similar references refer to Cardlytics, Inc. and, unless the context otherwise requires, its consolidated subsidiaries.

RISK FACTORS SUMMARY

Our business is subject to a number of risks and uncertainties, including those risks discussed at-length in the section below titled “Risk Factors.” These risks include, among others, the following:

Risks Related to our Business and Industry

- Unfavorable conditions, including inflationary pressures, in the global economy or the industries we serve could limit our ability to grow our business and negatively affect our operating results.
- Our quarterly operating results have fluctuated and may continue to vary from period to period, which could result in our failure to meet expectations with respect to operating results and cause the trading price of our stock to decline.
- We may not be able to sustain our revenue and billings growth rate in the future.
- We are dependent upon the Cardlytics platform.
- If we fail to identify and respond effectively to rapidly changing technology and industry needs, our solutions may become less competitive or obsolete.
- We are substantially dependent on Chase, Bank of America, Wells Fargo and a limited number of other FI partners.
- The market in which we participate is competitive, and we may not be able to compete successfully with our current or future competitors.
- If we are unable to successfully integrate Dosh’s, Bridg’s and Entertainment’s businesses and employees, it could have an adverse effect on our future results and the market price of our common stock.
- The amount we will have to pay in connection with the acquisition of Bridg has not been conclusively determined, and it may be materially larger than we expect.
- The ongoing COVID-19 pandemic could materially and adversely affect our business, results of operations and financial condition.

Risks Related to our Outstanding Convertible Senior Notes

- Servicing our debt may require a significant amount of cash. We may not have sufficient cash flow from our business to pay our indebtedness, and we may not have the ability to raise the funds necessary to settle for cash conversions of the Notes or to repurchase the Notes for cash upon a fundamental change, which could adversely affect our business and results of operations.
- We are subject to counterparty risk with respect to the Capped Calls.

Risks Related to Regulatory and Intellectual Property Matters

- Legislation and regulation of online businesses, including privacy and data protection regimes, are expansive, not clearly defined and rapidly evolving. Such regulation could create unexpected costs, subject us to enforcement actions for compliance failures, or restrict portions of our business or cause us to change our business model.
- Failure to protect our proprietary technology and intellectual property rights could substantially harm our business, financial condition and operating results.

Risks Related to Ownership of our Common Stock

- The market price of our common stock has been and is likely to continue to be volatile.
- Anti-takeover provisions in our charter documents and under Delaware law could make acquiring us more difficult, limit attempts by our stockholders to replace or remove our current management and limit the market price of our common stock.

PART I.

ITEM 1. BUSINESS

Overview

Our company's mission is to make commerce smarter and rewarding for everyone. We work to accomplish this mission by operating an advertising platform within our own and our partners' digital channels, which include online, mobile applications, email, and various real-time notifications (the "Cardlytics platform"). We also operate a customer data platform that utilizes point-of-sale ("POS") data, including product-level purchase data, to enable marketers, in a privacy-protective manner, to perform analytics and targeted loyalty marketing and also enable marketers to measure the impact of their marketing (the "Bridg platform"). The partners for the Cardlytics platform are predominantly financial institutions ("FI partners"), that provide us with access to their anonymized purchase data and digital banking customers. The partners for the Bridg platform predominantly are merchants ("merchant data partners") that provide us with access to their POS data, including product-level purchase data. By applying advanced analytics to the purchase data we receive, we make it actionable, helping marketers, reach potential buyers at scale, and measure the true sales impact of their marketing spend. We have strong relationships with leading marketers across a variety of industries, including retail, restaurant, travel and entertainment, direct-to-consumer, and grocery and gas.

Our purchase intelligence, coupled with our access to customers using our and our partners' digital channels, enables us to help solve fundamental problems for marketers. Marketers increasingly have access to data on the purchase behavior of their customers in their own stores, websites and loyalty programs. However, they lack insight into their customers' purchase behavior outside of their stores and websites, as well as the purchase behavior of individuals who are not yet their customers. The reality is, no matter how robust their own customer data, marketers only see a small portion of their customers' overall spending patterns. As a result, it is difficult for businesses to focus their marketing investments on the most valuable customers. With the Cardlytics platform, we enable marketers to reach potential customers across our network of FI partners through their digital banking accounts and present them relevant offers to save money when they are thinking about their finances. With the Bridg platform, we enable marketers to leverage their own POS data and reach their customers across a wide variety of digital advertising channels that they would not otherwise be able to identify and reach. Marketers are also challenged to measure the performance of their marketing. This issue is particularly acute with respect to measuring the impact of marketing on in-store sales, where the vast majority of consumer spending occurs. We believe our platforms transform purchase data into purchase intelligence, creating a disruptive opportunity to comprehensively address these challenges by enabling marketers to precisely measure how marketing drives both in-store and online sales through "closed loop-measurement."

Solutions

The Cardlytics Platform

Through the Cardlytics platform, marketers can deliver advertising content to customers that allows them to earn rewards, which are funded with a portion of the fees we collect from marketers. Additionally, the Cardlytics platform benefits customers and enhances their overall experience by showing them relevant advertisements tailored to their spending patterns and specific interests. We maintain similar platforms in both the United States ("U.S.") and United Kingdom ("U.K.").

The Cardlytics platform helps marketers find potential new customers that are active in their category but not currently shopping with them, or to grow their business with existing customers. Our marketing is targeted and measured based on actual purchase data at a customer and account level. Unlike many other measurement solutions on which the marketing industry has historically relied, our measurements are not probabilistic or based on models, but are based on actual in-store and online purchases.

The breadth of our network of FI partners means that we are able to offer marketers the ability to optimize their marketing efforts to reach a large number of consumers through a single point of contact. The Cardlytics platform also provides our marketers a scalable solution for driving customer loyalty and engagement whereby Cardlytics handles everything from contracting with marketers and creating, managing and reporting performance of their campaigns to attributing incentives to each of our partners' customers.

The Cardlytics platform helps solve fundamental problems for our FI partners. Leveraging our powerful predictive analytics, we create compelling rewards that have the potential to drive deeper and more sustained use of the FI's digital channels, which we believe reduces customer attrition and increases use of the FI's credit and debit cards. Today, our FI partners include Bank of America, National Association ("Bank of America"), JPMorgan Chase Bank, National Association ("Chase") and Wells Fargo Bank, National Association ("Wells Fargo"), as well as many other national and regional financial institutions, financial technology companies and virtual-only banks. We also partner with several of the largest bank processors and digital banking providers to help us reach customers of small and mid-sized FIs.

The Bridg Platform

The Bridg platform is a customer data platform, that utilizes POS data from our merchant data partners, including product-level purchase data to enable marketers to perform analytics and targeted loyalty marketing in a privacy protected manner. Bridg also enables marketers to measure the impact of their marketing. The Bridg platform's unique ability to identify, understand, and engage previously unreachable in-store customers is made possible through industry leading identity resolution, proprietary census of identity and characteristics, and unique strategic data partnerships.

Purchase Intelligence

Purchase Data from our FI Partners

Purchase data from our FI partners provides a secure view into where and when consumers are spending their money. The Cardlytics platform aggregates and analyzes purchase data without any personally identifiable information ("PII") leaving the FI or otherwise being made available to us. The data from the FI is anonymized so that it cannot be associated with any one individual. In the U.S., the Cardlytics platform ingests approximately one in every two debit and credit card transactions. This data allows us to serve relevant advertisements to our FI partners' customers through our native bank advertising channel. We also leverage the power of purchase intelligence to provide marketers utilizing the Cardlytics platform with valuable insights into the preferences of their actual or potential customers wherever they shop.

Point-of-Sale Data from our Merchant Data Partners

Using POS data from our merchant data partners and our proprietary bureau of offline identity information, the Bridg platform associates customer purchases with developed identifiers. We then build privacy-protective profiles that include product-level purchase history and hundreds of customer attributes to enable marketing and analytics.

Advanced Analytics Capabilities

The advanced analytics we apply to our unique purchase datasets are what transforms them into valuable purchase intelligence. We use sophisticated quantitative methods to quickly access our massive volumes of data and make sense of what has happened—and, importantly, what is likely to happen. Our analytics makes our data actionable, enabling us to develop insights that marketers and partners rely on to make more informed business decisions and more meaningful customer connections.

Since we are able to measure the impact marketing campaigns have on in-store and online sales, marketers can use our purchase intelligence to optimize their advertising efforts and increase their investment in the Cardlytics and Bridg platforms to enhance future campaigns. Given our granular view into consumer spending across all categories, we can also help marketers identify share shift against their competition and learn more about where else their customers spend their money.

For our FI partners, we use our analytics to optimize the offers we display to customers within our Cardlytics platform. By assigning relevancy scores to each offer based on what customers are most likely to buy, our Cardlytics platform can present the most relevant offers earlier in customers' mobile and online banking sessions. This increases the likelihood that customers activate, redeem, and earn more cash back on the things they care about most. At the same time, marketers gain more opportunities to get valuable content in front of the right audience.

Privacy and Security

Cardlytics Platform

We have architected privacy and security into our systems and practices. A critical part of our strategy involves a design focused on gathering data without collecting, maintaining or using sensitive information, such as social security numbers, credit card numbers, financial account information or medical records. Our platforms are currently designed so that we do not receive or have access to any PII from our FI partners. We only target marketing against anonymized data and/or data that has undergone processing such that it is only linked to pseudonymous identifiers. This approach to privacy is intended to protect consumers. Our privacy and security standards have also been designed and implemented to meet the requirements of, and safeguard the reputations of, our partners and marketers, many of which are large, multinational corporations. These customers frequently audit our practices and engage in detailed assessments of our infrastructure.

Our Ad Server and Ads Manager form the core of the Cardlytics platform. The Ad Server is responsible for targeting and presenting offers, which are developed and designed within the Ads Manager. Each FI partner's Ad Server is either hosted at the FI partner's data center behind the FI partner's firewall or hosted by us on behalf of the FI partner. The Ad Server interfaces with our FI partners' systems to receive anonymized purchase data, assign a unique consumer ID to each FI partners' customer, which we call a Cardlytics ID, and aggregate this purchase data. The Cardlytics ID is then used to assign offers, measure redemptions, and in limited cases, validate certain online purchases via anonymously linking to a consumer's digital media presence. The Ad Server also receives engagement data, such as impressions and activations related to each Cardlytics ID.

The Ads Manager is hosted in our data centers behind our firewall and is used to create, manage and publish marketing campaigns to each FI partner's Ad Server. The Ads Manager also provides a majority of the functionality for managing configuration settings within each Ad Server and the transfer of data between Cardlytics and our partners.

We have implemented a number of security controls. Our security environment has achieved both SOC 1 Type II and SOC 2 Type II certifications, and has been audited by third parties using standards, which include Statement on Standards for Attestation Engagements No. 18 (SSAE 18), AICPA Auditing Standards Board-issued Statement on Quality Control Standard (SQCS) and Statements on Auditing Standards (SAS). Sensitive data is subject to encryption, anonymization, or de-identification depending on the use case and risk profile. We enhance network security through measures such as network segmentation, firewalls and network and host-based intrusion detection at critical network aggregation and ingress/egress points.

A cornerstone of our practices is transparency in data use and consumer choice. Our privacy policy outlines the types of data we collect and how we use it. Most of our FI partners maintain different types of "opt-out" features for any consumer wishing to opt out of the FI partners' rewards program on the Cardlytics platform.

Outside of the U.S., our privacy and data handling practices are subject to regulation by data protection authorities and other regulators in the countries in which we do business, which may be more restrictive than the requirements that we are subject to in the U.S.

Bridg Platform

The Bridg platform was designed to comply with privacy laws and regulations throughout the U.S. The Bridg platform also has built-in privacy protections to ensure that data provided by clients is never sold or shared without their consent, and personal information relating to newly identified consumers is never shared with the clients. Further, as we seek to deploy the Bridg platform outside the U.S., we will utilize appropriate practices to ensure compliance with General Data Protection Regulation ("GDPR") and other like data protection regimes.

Competitive Strengths

We have the ability to reach and influence real buyers at scale and measure the true impact of our campaigns on in-store and online sales. We believe that the following strengths provide us with competitive advantages:

- ***Significant Scale with FI Partners and Deeply Embedded Solution.*** We are generally the exclusive provider of native bank channel digital advertising to our FI partners as their digital channels are typically not conducive to supporting marketing content from multiple vendors. Our ability to connect and support multiple banks as a single vendor provides network scale that would otherwise be impossible for a single bank to achieve. Further, advertising within FIs' digital channels requires deep technological integrations, which we believe increases the cost of switching or supporting multiple vendors and therefore increases partner loyalty to us.
- ***Valuable Touchpoints with Customers of our FI Partners.*** The Cardlytics platform enables marketers to reach consumers in a secure, brand-safe, and digitally engaging environment, when they are thinking about their finances. We have access to consumers through both online and mobile channels and are increasingly reaching them through various other channels, including emails and real-time notifications.
- ***Massive Reach Informed by Purchase Intelligence.*** During 2022, the Cardlytics platform analyzed approximately \$4.1 trillion in purchases across all categories, and geographies, both online and in-store. We have access to purchase data on the Cardlytics platform in the form of credit, debit, ACH and bill pay transactions. We provide marketers with the opportunity to leverage this unique data set to precisely reach millions of consumers. The Bridg platform gives marketers the ability to leverage insight of their own POS transactional purchase data to better understand their customers, inform their marketing strategies and measure the impact of their marketing.

- **Significant Scale with Marketers due to consumer insights and Compelling Return on Advertising Spend.** We provide compelling return on advertising spend due to our ability to influence likely buyers through our insights into consumer purchase data. This allows us to serve marketers at scale across a variety of industries, including retail, restaurant, travel and entertainment, direct-to-consumer, and grocery and gas. By serving these marketers at scale, we have developed deep insight into consumer behavior, which has allowed us to optimize how we reach and influence likely buyers.
- **Powerful, Self-Reinforcing Network Effects.** We see significant network effects within the Cardlytics platform. Adding new marketers and increasing the potential incentives provided to our FI partners' customers increases engagement within our FI partners' digital channels. This, in turn, attracts more FI partners to our platforms, adding to our scale, and making our platforms more valuable to marketers.
- **Ability to Improve Marketing.** Consumers spend a vast majority of their money in physical stores, and marketers have long sought efficient and effective ways to understand online-to-offline attribution. Likewise, although marketers may have access to data on the purchase behavior of their customers in their stores and on their websites, they lack visibility about these customers' overall spending patterns and the purchasing behavior of other likely buyers. Through the Cardlytics and Bridg platforms, we reach and influence real buyers at scale and measure the true, incremental impact marketing campaigns have on in-store and online sales. Our targeting capabilities allow marketers to tailor their campaigns to align with their marketing strategies.
- **Proprietary Technology Architecture and Advanced Analytics Capabilities.** We have designed the Cardlytics platform to protect highly sensitive first-party data. Our proprietary, distributed architecture helps facilitate both the effective delivery of our solution and the protection of our FI partners customers' PII. No PII is shared by FI partners with Cardlytics and the data is anonymized so that it cannot be associated with any one individual. Our technologies leverage proprietary algorithms, to process raw purchase data into normalized purchase history useful for marketing and analytics. Our Cardlytics platform also supports integration of data from third-party sources to enrich the intelligence that we provide. Further, we apply advanced analytics to continuously increase our intelligence capabilities and identify actionable behavior patterns for our marketers. Our advanced analytics capabilities are what transforms our unique purchase dataset into valuable purchase intelligence. We use sophisticated quantitative methods to quickly access our massive volumes of data and make sense of what has happened—and, importantly, what is likely to happen. Our analytics makes our data actionable, enabling us to develop insights that marketers and partners rely on to make more informed business decisions and more meaningful customer connections.
- **Loyalty Tactics Beyond Loyalty Programs.** The Bridg platform easily ingests POS data, allowing marketers to identify and reach previously unreachable customers. This allows marketers to utilize loyalty tactics across all of their customers and enjoy the same rich insights, targeted marketing capabilities, and closed loop measurement as digital brands.
- **World-Class Management Team with Unique Combination of Backgrounds and Experiences.** Our team's extensive experience across banking, technology and marketing is invaluable in our ability to forge relationships with FI partners and market and understand the technical complexities inherent in building platforms that are transforming and disrupting the marketing industry.

Growth Strategies

The principal components of our strategy include the following:

- **Grow our Business with Marketers.** While we already work with many large marketers, our platforms currently capture only a small portion of their overall marketing spend. We intend to continue expanding our sales and marketing efforts to grow our share of advertising budgets from existing marketers and attract new brands, merchants and service providers both directly and through advertising agencies. We also intend to grow our business with new marketers in newer industry verticals such as travel and entertainment, direct to consumer, and grocery and gas. We also intend to continue growing the footprint of the Bridg platform through both new and existing merchant data partners.
- **Continue to Innovate and Evolve our Platform.** As we continue to grow our data assets and enhance our Cardlytics platform, we are also developing new solutions, greater automation and increasingly sophisticated analytical capabilities. Our innovation is also focused on evolving our offer formats and expanding the types of offers within the Cardlytics platform, including product-level offers sourced from Bridg's merchant data partners that can be distributed and managed within the Cardlytics platform. As we have in the past, we plan to continue to work in close collaboration with our partners to develop new purchase intelligence-based analytic solutions to enable marketers to make more informed business decisions.

- ***Continue to Realize Synergies between the Cardlytics and Bridg Platforms.*** The acquisition of Bridg allows for synergies with the current Cardlytics platform by creating more relevant offers, and more targeted segments, that can drive higher redemptions, increase consumer engagement, and generate greater advertiser demand. We believe integrating the Cardlytics and Bridg platforms has the potential to enable more effective media measurement (power promotional effectiveness across in-store and online channels), price and promotion optimization, more optimal partner relationships and further international expansion.
- ***Drive Growth through Existing FI Partners.*** We intend to increase customer adoption by improving the effectiveness of our FI partners' digital channels. We continually work with our FI partners to improve their customers' user experience, increase customer awareness and leverage additional customer outreach channels like email and alerts. We believe this organic increase in our monthly active users will drive growth.
- ***Expand the Network of Partners.*** We will continue to focus on growing our network of partners by integrating directly with FI partners, non-bank partners, merchant data partners and by opportunistically reselling our solution through financial processors and payment networks. Each new partner increases the size of our data asset, increasing the value of the Cardlytics and Bridg platforms to both marketers and our existing partners, which we believe will drive growth.
- ***Grow the Platform Through Integrations with Partners.*** We intend to continue to partner with other media platforms, marketing technology providers, merchant data providers and agencies that can utilize our platforms to serve a broad array of customers. In addition to focusing on the integration of the Cardlytics and Bridg platforms, we intend to focus on continued technological integration of our platforms with those of other complementary market participants.

Partners

We define a partner as a separate contracting entity from which we access data to empower our platforms either directly or through a third-party intermediary, such as a bank processor, digital banking provider or payment network operator. The partners for the Cardlytics platform are predominantly FI partners that provide us with access to their anonymized purchase data and digital banking customers. We generally pay our partners on the Cardlytics platform a Partner Share, which is a negotiated and fixed percentage of our billings to marketers less any Consumer Incentives that we pay to the partners' customers and certain third-party data. FI partners that become part of our network through bank processors and digital banking providers may terminate their relationships with these bank processors and digital banking providers and thereby indirectly terminate their relationships with us. Our agreements with our FI partners generally include an automatic renewal feature. The partners for the Bridg platform are merchant data partners that provide us with access to their POS data, including product-level purchase data.

Agreements with Bank of America

Our relationship with Bank of America is governed by a General Services Agreement ("GSA") pursuant to which we provide Bank of America with access to the Cardlytics platform and certain other related services, and a related Statement of Work, which grants Bank of America the right to use the software underlying the Cardlytics platform. The GSA and Statement of Work extends through July 31, 2025, and Bank of America may terminate the GSA and Statement of Work at any time upon 90 days' written notice.

Pursuant to the GSA with Bank of America, we provide the Cardlytics platform to Bank of America customers which includes forming relationships with participating marketers; obtaining and publishing marketer offers to customers after screening both the marketer and specific advertising content; and monitoring redemption rates with respect to Consumer Incentives offered in Cardlytics campaigns. Although we are primarily responsible for securing marketers to advertise on the Cardlytics platform, Bank of America may likewise secure marketers and share a portion of billings with us. Bank of America has the right to approve all marketer offers to be presented to Bank of America customers on the Cardlytics platform. Bank of America may terminate the Master Agreement at any time upon 90 days' written notice. The GSA will automatically renew for 12-month periods thereafter, unless terminated earlier in accordance with the terms of the GSA.

Under the GSA, we share the revenue that we generate from the sale of advertising within the Bank of America channel with Bank of America, subject to certain exceptions. The amounts that we pay to Bank of America in excess of Consumer Incentives are reflected as Partner Share. The specific Partner Share percentage that we pay is based on whether we or Bank of America have secured the relevant marketer account and other marketer- and transaction-specific factors, provided that we are entitled to retain a minimum percentage of the monthly revenue subject to the GSA.

Agreements with Chase

In May 2018, we entered into a Master Agreement and Schedule #1 to the Master Agreement (collectively, the “Master Agreement”) with Chase, pursuant to which we provide Chase with access to the Cardlytics platform. Under the Master Agreement, we provide Chase with access to the Cardlytics platform through November 2025. Chase may terminate the Master Agreement at any time upon 90 days’ written notice. The Master Agreement will automatically renew for 12-month periods thereafter, unless terminated earlier in accordance with the terms of the Master Agreement.

Under the Master Agreement, we share billings that we generate from the sale of advertising within the Chase channel with Chase, subject to certain exceptions. The amounts that we pay to Chase in excess of Consumer Incentives are reflected as Partner Share. The specific billing share percentage that we pay is based on whether we or Chase have secured the relevant marketer account and other marketer- and transaction-specific factors, provided that we are entitled to retain a minimum percentage of the monthly revenue subject to the Master Agreement.

Sales and Marketing

Our sales teams are focused on growing our share of advertising budgets from existing marketers and attracting new brands, merchants and service providers both directly and through advertising agencies. Our marketing efforts are focused on increasing brand awareness for Cardlytics and Bridge through partnerships, public relations, industry events and publications. Our partner-focused account management team is focused on deepening relationships with existing partners and expanding our network.

We have dedicated sales teams responsible for establishing relationships with marketers and their agencies. Our sales teams are organized by industry, which include retail, restaurant, travel and entertainment, direct-to-consumer, grocery and gas. Each industry team is led by an experienced sales manager and staffed with sales, sales support and service specialists who have deep domain knowledge and industry operating experience. We also have account managers that manage our customer relationships within each industry.

We also have a dedicated partner sales team focused on expanding our network by both nurturing our existing relationships and cultivating new relationships with FI partners. Our partner sales team helps drive adoption of our solution offerings and partners with FIs to develop curated content and enhancements to the user experience for FI partners’ customers to drive increased engagement with the Cardlytics Platform.

Competition

The market for utilizing purchase intelligence to power marketing decisions is still emerging, and we believe we are one of the only companies that can provide purchase intelligence with the scale and the level of granularity that is equivalent to ours. We believe that we are the only company with scale that leverages purchase data to enable marketing through FI partner channels at scale, although we believe we currently have competition from other companies that deliver similar solutions on a smaller scale. In the future, we may face greater competition from other bank service providers, online retailers, credit card companies, digital publishers and mobile pay providers with access to a substantial amount of consumer purchase data. There also may be companies with access to FI data that do not enable marketing through FI partner channels at scale today that may be able to do so in the future. While we may successfully partner with a wide range of companies that are, to some extent, currently competitive to us, these companies may become more competitive to us in the future. As we introduce new solutions, as our existing solutions evolve and as other companies introduce new products and services, we are likely to face additional competition.

We believe the principal competitive factors in our industry include the following:

- ability to leverage purchase data to inform marketing;
- depth and breadth of relationships with partners, marketers and their agencies;
- depth and breadth of, and access to, purchase data;
- effectiveness in increasing return on advertising spend for marketers;
- effectiveness in increasing marketing campaign performance for marketers and their agencies;
- effectiveness in increasing partner customer engagement;
- ability to maintain confidentiality and security of partner transaction data;
- transparency into and measurement of marketing performance;
- multi-channel capabilities;
- pricing;
- brand awareness and reputation;
- ability to continue to innovate; and

- ability to attract, retain and develop leading-edge sales, account management, analytical and technical talent.

We believe that we compete favorably with respect to these factors and that we are well positioned as a leading provider and innovator of purchase intelligence.

The Bridg platform competes with other companies that operate enterprise customer data platforms. Additionally, Bridg competes or may in the future compete against monoline companies that provide advertising and data solutions such as profile unification or marketing campaign management and analytics, as well as data provisioners, brokers and cooperatives that provide advertising analytics to clients.

Intellectual Property

Our future success and competitive position depend in part on our ability to protect our intellectual property and proprietary technologies. To safeguard these rights, we rely on a combination of patent, trademark, copyright and trade secret laws and contractual protections in the U.S. and other jurisdictions.

As of December 31, 2022, we had eight issued patents relating to our software. We cannot assure you that our patents will give us the protection that we seek or that any such patents will not be challenged, invalidated, or circumvented. Our patents may not provide sufficiently broad protection and may not be enforceable in actions against alleged infringements.

We have registered, or are registering, the "Cardlytics," "Dosh," "Bridg" and "Entertainment" names and logos in the U.S. and certain other countries. We have registrations and/or pending applications for additional marks in the U.S. and other countries; however, we cannot assure you that any future trademark registrations will be issued for pending or future applications or that any registered trademarks will be enforceable or provide adequate protection of our proprietary rights.

We also license software from third parties for integration into our offerings, including open source software and other software available on commercially reasonable terms. We cannot assure you that such third parties will maintain such software or continue to make it available.

We are the registered holder of a variety of domestic and international domain names that include cardlytics.com, dosh.com, bridg.com, entertainment.com and similar variations on those names.

In order to protect our unpatented proprietary technologies and processes, we rely on trade secret laws and confidentiality agreements with our employees, consultants, financial institution partners, marketers, vendors and others. Despite our efforts to protect our proprietary technology and trade secrets, unauthorized parties may attempt to misappropriate, reverse engineer or otherwise obtain and use them. In addition, others may independently discover our trade secrets, which would prevent us from being able to assert trade secret, rights or develop similar technologies and processes. Further, the contractual provisions that we enter into may not prevent unauthorized use or disclosure of our proprietary technology or intellectual property rights and may not provide an adequate remedy in the event of unauthorized use or disclosure of our proprietary technology or intellectual property rights. If we become more successful, we believe that competitors will be more likely to try to develop solutions and services that are similar to ours and that may infringe our proprietary rights. It may also be more likely that competitors or other third parties will claim that our platforms infringes their proprietary rights.

Patent and other intellectual property disputes are common in our industry and we have been involved in such disputes from time to time in the ordinary course of our business. Some companies, including some of our competitors, own large numbers of patents, copyrights and trademarks, which they may use to assert claims against us. Third parties may in the future assert claims of infringement, misappropriation or other violations of intellectual property rights against us. They may also assert such claims against our partners, which we typically indemnify against such claims. As the numbers of products and competitors in our market increase and overlaps occur, claims of infringement, misappropriation and other violations of intellectual property rights may increase. Any claim of infringement, misappropriation or other violation of intellectual property rights by a third party, even those without merit, could cause us to incur substantial costs defending against the claim and could distract our management from our business.

Seasonality

Our cash flows from operations vary from quarter to quarter, largely due to the seasonal nature of our marketers' advertising spending. Many marketers tend to devote a significant portion of their marketing budgets to the fourth quarter of the calendar year to coincide with consumer holiday spending and reduce their marketing budgets in the first quarter of the calendar year.

Employees

As of December 31, 2022, we had 501 full-time employees, including 63 in delivery, 200 in sales and marketing, 148 in research and development and 90 in general and administrative. None of our employees are covered by collective bargaining agreements. We believe our employee relations are good and we have not experienced any work stoppages.

Human Capital Resources and Management

Our company's mission is to make commerce smarter and rewarding for everyone, and we know this starts with investing in each of our employees. Headquartered in Atlanta, GA with additional offices in New York, NY; Palo Alto, CA; Los Angeles, CA; Austin, TX, Detroit, MI; Champaign, IL and London, U.K, our employees are a big part of what drives our exceptional desire to win and help our advertisers and partners win.

Diversity, Equity, and Inclusion (“DEI”) is integrated in everything we do. This mindset starts at the top, a significant part of our company goal of creating a “Great place where great people want to be.” DEI is embedded in each aspect of the talent lifecycle: attraction, recruitment, onboarding, development and retention. We build external relationships to ensure our talent pipelines are filled with candidates of diverse backgrounds. At the foundation of our DEI focus is our employee-led Special Interest Groups (“SIGs”). These groups facilitate learning and development, holistic wellness, professional connections, philanthropy, and raising awareness internally and externally for meaningful causes. Each group is sponsored by senior leaders in the organization. Cardlytics Connect, our newest SIG, focuses on our Black and Hispanic employees across the globe. As of December 31, 2022, approximately 42% of our global workforce is made up of women and 42% people of color.

A key component to our sustainability and success is talent development and learning. We are intentional in our efforts to provide all employees opportunities to grow. Additionally, we have introduced initiatives to give all employees access to learning content providers as well as experiencing success with programs for Educational Assistance and student loan reimbursement. Cardlytics University is a resource for both new hires as well as longer-tenured employees, and we have specialized curricula for emerging leaders, managers and mentors.

Our use of equity compensation allows our employees to operate as owners and is a key component of our total rewards strategy to retain, motivate and attract the best talent. We encourage our employees to think and act like shareholders, and they are invested in our success. Employee equity is the cornerstone in our compensation philosophy along with comprehensive medical benefits, a positive work/life ratio, unlimited paid time off, health and wellness programs, and learning and development opportunities. Each year, with the help of outside experts, we evaluate each aspect of compensation and benefits to ensure they are in alignment with the market and our peers.

As a purpose-driven company, we are focused on creating undeniable impact for partners while delivering real value to people, and our values reflect what drives our success. Our people and culture are our most valuable assets and greatest differentiators. We take initiative, are hungry to win, value transparency, and make it a priority to create a place where people want to be.

Corporate Information

Cardlytics, Inc. was initially incorporated under the laws of the State of Delaware in June 2008. Our principal executive offices are located at 675 Ponce de Leon Avenue NE, Suite 6000, Atlanta, Georgia 30308. Our telephone number is (888) 798-5802. Our website address is www.cardlytics.com. Our common stock is listed on the Nasdaq Global Market under the symbol “CDLX.” “Cardlytics,” the Cardlytics logo and other trademarks or service marks of Cardlytics, Inc. appearing in this Annual Report on Form 10-K are the property of Cardlytics, Inc. This Annual Report on Form 10-K contains additional trade names, trademarks and service marks of others, which are the property of their respective owners. Solely for convenience, trademarks and trade names referred to in this Annual Report may appear without the ® or TM symbols.

Available Information

Our website address is www.cardlytics.com and our investor relations website is located at <http://ir.cardlytics.com/>. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Sections 13(a) and 15(d) of the Exchange Act, are available free of charge on our investor relations website as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission (“SEC”). Additionally, the SEC maintains an internet site that contains reports, proxy and information statements and other information. The SEC’s website address is www.sec.gov.

The contents of our websites are not intended to be incorporated by reference into this Annual Report on Form 10-K or in any other report or document we file with the SEC, and any references to our websites are intended to be inactive textual references only.

ITEM 1A. RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information contained in this report, and in our other public filings in evaluating our business. Our business, financial condition, operating results, cash flow, and prospects could be materially and adversely affected by any of these risks or uncertainties. In that event, the market price of our common stock could decline, and you could lose part or all of your investment.

Risks Related to our Business and Industry

Unfavorable conditions, including inflationary pressure, in the global economy or the industries we serve could limit our ability to grow our business and negatively affect our operating results.

General worldwide economic conditions have experienced significant instability in recent years including the recent global economic uncertainty and financial market conditions. For example, inflation rates, particularly in the United States and United Kingdom, have increased recently to levels not seen in years, and increased inflation may result in decreased demand for our products and solutions, increases in our operating costs (including our labor costs), reduced liquidity and limits on our ability to access credit or otherwise raise capital. In addition, the Federal Reserve has raised, and may again raise, interest rates in response to concerns about inflation, which coupled with reduced government spending and volatility in financial markets may have the effect of further increasing economic uncertainty and heightening these risks. Additionally, financial markets around the world experienced volatility following the invasion of Ukraine by Russia in February 2022. These conditions make it extremely difficult for marketers and us to accurately forecast and plan future business activities and could cause marketers to continue to reduce or delay their marketing spending. Historically, economic downturns have resulted in overall reductions in marketing spending. Alternatively, as the market recovers from the pandemic, marketing spend may be volatile and unpredictable as certain industries recover at different speeds. If macroeconomic conditions deteriorate or are characterized by uncertainty or volatility, marketers may curtail or freeze spending on marketing in general and for services such as ours specifically, which could have a material and adverse impact on our business, financial condition and operating results.

In addition, our business may be materially and adversely affected by weak economic conditions in the industries that we serve. We have historically generated a substantial majority of our revenue from marketers in the restaurant, brick and mortar retail, telecommunications and cable industries, and have recently entered new industries such as travel and entertainment, direct-to-consumer, grocery and gas. All of these industries have been negatively impacted by the pandemic and inflationary pressure and certain precautions taken to control the pandemic and inflationary pressure. We cannot predict the timing, strength or duration of any economic slowdown or recovery. In addition, we cannot predict the timing, strength or duration of any economic slowdown or recovery. In addition, even if the overall economy is robust, we cannot assure you that the market for services such as ours will experience growth or that we will experience growth.

Our quarterly operating results have fluctuated and may continue to vary from period to period, which could result in our failure to meet expectations with respect to operating results and cause the trading price of our stock to decline.

Our operating results have historically fluctuated, and our future operating results may vary significantly from quarter to quarter due to a variety of factors, many of which are beyond our control. Period-to-period comparisons of our operating results should not be relied upon as an indication of our future performance. Given our relatively short operating history and the rapidly evolving purchase intelligence industry, our historical operating results may not be useful in predicting our future operating results.

Factors that may impact our quarterly operating results include the factors set forth in this “Risk Factors” section, as well as the following:

- our ability to attract and retain marketers and partners;
- the amount and timing of revenue, operating costs and capital expenditures related to the operations and expansion of our business, particularly with respect to our efforts to attract new marketers and partners to our network;
- the revenue mix revenue generated from our operations in the U.S. and U.K.;
- the revenue mix generated from the operations of Cardlytics, Inc. and its subsidiaries;
- decisions made by our FI partners to increase Consumer Incentives or use their Partners Share to fund their Consumer Incentives;

- changes in the economic prospects of marketers, the industries that we primarily serve, or the economy generally, which could alter marketers' spending priorities or budgets;
- the termination or alteration of relationships with our partners in a manner that impacts ongoing or future marketing campaigns;
- reputational harm;
- the amount and timing of expenses required to grow our business, including the timing of our payments of Partner Share and Partner Share commitments as compared to the timing of our receipt of payments from our marketers;
- changes in demand for our solutions or similar solutions;
- seasonal trends in the marketing industry;
- competitive market position, including changes in the pricing policies of our competitors;
- exposure related to our international operations and foreign currency exchange rates;
- quarantine, private travel limitation, or business disruption in regions affecting our operations, stemming from actual, imminent or perceived outbreak of contagious disease, including the COVID-19 pandemic;
- volatile recovery from the pandemic, including inflationary pressure;
- other events or factors, including those resulting from war, such as the current hostilities between Russia and Ukraine or incidents of terrorism;
- expenses associated with items such as litigation, regulatory changes, cyberattacks or security breaches;
- the introduction of new technologies, products or solution offerings by competitors;
- costs related to acquisitions of other businesses or technologies; and
- our ability to maintain and grow our business in light of the global COVID-19 pandemic and precautions taken to reduce the risk of this virus.

Fluctuations in our quarterly operating results, non-GAAP metrics and other metrics and the price of our common stock may be particularly pronounced in the current economic environment due to the uncertainty caused by and the unprecedented nature of the current COVID-19 pandemic. Each factor above or discussed elsewhere in this "Risk Factors" section or the cumulative effect of some of these factors may result in fluctuations in our operating results. This variability and unpredictability could result in our failure to meet expectations with respect to operating results, or those of securities analysts or investors, for a particular period. If we fail to meet or exceed expectations for our operating results for these or any other reasons, the market price of our stock could fall and we could face costly lawsuits, including securities class action suits.

We may not be able to sustain our revenue and billings growth rate in the future.

Our revenue increased 43% from \$186.9 million in 2020 to \$267.1 million in 2021, and our revenue increased 12% from \$267.1 million in 2021 to \$298.5 million in 2022. Our billings increased 50% from \$263.4 million in 2020 to \$394.1 million in 2021, and our billings increased 12% from \$394.1 million in 2021 to \$442.5 million in 2022. We may not be able to maintain year-over-year revenue and billings growth in the near term or at all, and you should not consider our revenue and billings growth in any specific historical periods as indicative of our future performance. Our revenue and billings may be negatively impacted in future periods due to a number of factors, including slowing demand for our solutions, increasing competition, decreasing growth of our overall market, inflationary pressure, our inability to engage and retain a sufficient number of marketers or partners, or our failure, for any reason, to capitalize on growth opportunities. If we are unable to maintain consistent revenue, revenue growth or billings growth, our stock price could be volatile, and it may be difficult for us to achieve and maintain profitability.

We are dependent upon the Cardlytics platform.

The majority of our revenue and billings during 2021 and 2022 were derived from sales of advertising via the Cardlytics platform. Our operating results could suffer due to:

- lack of continued participation by FI partners in our network or our failure to attract new FI partners;
- any decline in demand for the Cardlytics platform by marketers or their agencies;
- failure by our FI partners to increase engagement with our solutions within their customer bases, improve their customers' user experience, increase customer awareness, leverage additional customer outreach channels like email or otherwise promote our incentive programs on their websites and mobile applications, including by making the programs difficult to access or otherwise diminishing their prominence;
- our failure to offer compelling incentives to our FI partners' customers;

- FI partners may elect to use their Partner Share to fund their Consumer Incentives;
- the introduction by competitors of products and technologies that serve as a replacement or substitute for, or represent an improvement over, the Cardlytics platform, or an FI partner's decision to implement any existing or future product or technology of a competitor alongside, or in lieu, of the Cardlytics platform;
- FI partners developing, or acquiring, their own technology to support purchase intelligence marketing or other incentive programs;
- technological innovations or new standards that the Cardlytics platform does not address; and
- sensitivity to current or future prices offered by us or competing solutions.

In addition, in the majority of instances we would be required to pay Consumer Incentives associated with the Cardlytics platform marketing campaigns even if the amount of such Consumer Incentives exceeded the amount of billings that we are paid by the applicable marketer. Further, we are often required to pay such Consumer Incentives before we receive payment from the applicable marketer. Accordingly, if the amount of Consumer Incentives that we are required to pay materially exceeds the billings that we receive or we encounter any significant failure to ultimately collect payment, our business, financial condition and operating results could be adversely affected.

If we are unable to grow our revenue and billings from sales of the Cardlytics platform, our business and operating results would be harmed.

We are substantially dependent on Chase, Bank of America, Wells Fargo and a limited number of other FI partners.

We require participation from our FI partners in the Cardlytics platform and access to their purchase data in order to offer our solutions to marketers and their agencies. We must have FI partners with a sufficient number of customers and levels of customer engagement to ensure that we have robust purchase data and marketing space to support a broad array of incentive programs for marketers.

In addition, we pay most of our FI partners a Partner Share, which is a negotiated and fixed percentage of our billings less certain costs. During 2020 and 2021, our top two FI partners combined to account for over 75% of the total Partner Share we paid to all partners, with each representing over 25%. No other partner accounted for over 10% of Partner Share during these periods. During 2022, our top three FI partners combined to account for over 80% of the total Partner Share we paid to all partners, with the top two FI partners each representing over 20% and third largest FI partner representing over 10% of Partner Share. No other partner accounted for over 10% of Partner Share during these periods.

Our agreements with a substantial majority of our FI partners have three- to seven-year terms but are generally terminable by the FI partner on 90 days or less prior notice. If an FI partner terminates its agreement with us, we would lose that FI as a source of purchase data and online banking customers. Our FI partners may elect to withhold from us or limit the use of their purchase data for many reasons, including:

- a change in the business strategy;
- if there is a competitive reason to do so;
- if new technical requirements arise;
- concern by our FI Partners or their customers related to our use of purchase data;
- if they choose to develop and use in-house solutions or use a competitive solution in lieu of our solutions; and
- if legislation is passed restricting the dissemination, or our use, of the data that is currently provided to us or if judicial interpretations result in similar limitations.

To the extent that we breach or are alleged to have breached the terms of our agreement with any FI partner, or a disagreement arises with an FI partner regarding the interpretation of our contractual arrangements, which has occurred in the past and may occur again in the future, such an FI partner may be more likely to cease providing us data or to terminate its agreement with us. The loss of Bank of America, Chase, Wells Fargo or any other significant FI partner would significantly harm our business, results of operations and financial conditions.

We may fail to meet our publicly announced guidance or other expectations about our business and future operating results, which would cause our stock price to decline.

We have provided and may continue to provide guidance about our business, future operating results and other business metrics. In developing this guidance, our management must make certain assumptions and judgments about our future performance. Some of those key assumptions relate to the impact of COVID-19 and the associated economic uncertainty on our business and the timing and scope of economic recovery globally, which are inherently difficult to predict. Furthermore, analysts and investors may develop and publish their own projections of our business, which may form a consensus about our future performance. Our business results may vary significantly from such guidance or that consensus due to a number of factors, many of which are outside of our control, including due to the global economic uncertainty and financial market conditions caused by the COVID-19 pandemic, which could adversely affect our operations and operating results. Furthermore, if we make downward revisions of any publicly announced guidance, or if our publicly announced guidance of future operating results fails to meet expectations of securities analysts, investors or other interested parties, the price of our common stock would decline.

If we fail to maintain our relationships with current FI partners or attract new FI partners, we may not be able to sufficiently grow our revenue, which could significantly harm our business, results of operations and financial condition.

Our ability to grow our revenue depends on our ability to maintain our relationships with current FI partners and attract new FI partners. A significant percentage of consumer credit and debit card spending is concentrated with the 10 largest FIs in the U.S., five of which are currently part of our network, while the balance of card spending is spread across thousands of smaller FIs. Accordingly, our ability to efficiently grow our revenue will specifically depend on our ability to maintain our relationships with the large FIs that are currently part of our network and establish relationships with the large FIs that are not currently part of our network. In addition, we must continue to maintain our relationships with our existing bank processor and digital banking provider FI partners and attract new such FI partners because these FI partners aggregate smaller FIs into our network. We have in the past and may in the future be unsuccessful in attempts to establish and maintain relationships with large FIs. If we are unable to maintain our relationships with current FI partners and attract new FI partners, maintain our relationships with our existing bank processor and digital banking provider partners or attract new bank processor and digital provider partners, our business, results of operations and financial condition would be significantly harmed, and we may fail to capture a material portion of the native bank advertising market opportunity.

Our future success will depend, in part, on our ability to expand into new industries.

We have historically generated a substantial majority of our revenue from marketers in the restaurant, brick and mortar retail, telecommunications and cable industries, and have recently entered new industries such as travel and entertainment, direct-to-consumer, grocery and gas, and believe that our future success will depend, in part, on our ability to expand adoption of our solutions in new industries. As we market to a wider group of potential marketers and their agencies, we will need to adapt our marketing strategies to meet the concerns and expectations of customers in these new industries. Our success in expanding sales of our solutions to marketers in new industries will depend on a variety of factors, including our ability to:

- tailor our solutions so that they that are attractive to businesses in such industries;
- hire personnel with relevant industry experience to lead sales and services teams; and
- develop sufficient expertise in such industries so that we can provide effective and meaningful marketing programs and analytics.

If we are unable to successfully market our solutions to appeal to marketers and their agencies in new industries, we may not be able to achieve our growth or business objectives.

An actual or perceived breach of the security of our systems could result in a disruption of our operations, or a third-party's entry into our FI partners' systems, which would be detrimental to our business, reputation, financial condition and operating results.

We leverage our FI partners' purchase data and infrastructures to deliver our Cardlytics platform. We do not currently receive or have access to any personally identifiable information ("PII") from our FI partners, although we may obtain or have access to PII from our FI partners in the future as our business evolves. There is a risk that third parties may attempt to gain access to our systems, or our FI partners' systems through our systems, for the purpose of stealing sensitive or proprietary data, accessing sensitive information on our network, or disrupting our or their respective operations. Additionally, we receive and have access to PII as a result of other aspects of our business. In turn, we may be a more visible target for cyberattacks and/or physical breaches of our databases or data centers, and we may in the future suffer from such attacks or breaches. Cyberattacks, malicious internet-based activity and online and offline fraud are prevalent and continue to increase. In addition to traditional computer "hackers," threat actors, software bugs, malicious code (such as viruses and worms), employee theft or misuse, denial-of-service attacks (such as credential stuffing), and ransomware attacks, sophisticated nation-state and nation-state supported actors now engage in attacks (including advanced persistent threat intrusions). We also may be the subject of phishing attacks, viruses, malware installation, server malfunction, software or hardware failures, loss of data or other computer assets, adware, malicious or unintentional actions or in actions by employees or others with authorized access to our network that create or expose vulnerabilities or other similar issues.

Current or future criminal capabilities, discovery of existing or new vulnerabilities in our systems and attempts to exploit those vulnerabilities or other developments may compromise or breach the technology protecting our systems. Due to a variety of both internal and external factors, including defects or misconfigurations of our technology, our services could become vulnerable to security incidents (both from intentional attacks and accidental causes) that cause them to fail to secure networks and detect and block attacks. In the event that our protection efforts are unsuccessful, and our systems are compromised such that a third-party gains entry to our or any of our FI partners' systems, we could suffer substantial harm. In addition, a vast majority of our employees work remotely, which may make us more vulnerable to cyberattacks. A security breach could result in operational or administrative disruptions, or impair our ability to meet our marketers' requirements, which could result in decreased revenue. Also, our reputation could suffer irreparable harm, causing our current and prospective marketers and FI partners to decline to use our solutions in the future. Further, we could be forced to expend significant financial and operational resources to protect against or in response to a security incident, including repairing system damage, increasing cybersecurity protection costs by deploying additional personnel and protection technologies, dealing with regulatory scrutiny, and litigating and resolving legal claims, all of which could divert resources and the attention of our management and key personnel away from our business operations. In any event, an actual or suspected breach of the security of our systems or data could materially harm our business, financial condition and operating results.

We cannot assure you that any limitations of liability provisions in our contracts would be enforceable or adequate or would otherwise protect us from any liabilities or damages with respect to any particular claim relating to a security lapse or breach. While we maintain cybersecurity insurance, our insurance may be insufficient or may not cover all liabilities incurred by such attacks. We also cannot be certain that our insurance coverage will be adequate for data handling or data security liabilities actually incurred, that insurance will continue to be available to us on economically reasonable terms, or at all, or that any insurer will not deny coverage as to any future claim. The successful assertion of one or more large claims against us that exceeds available insurance coverage, or the occurrence of changes in our insurance policies, including premium increases or the imposition of large deductible or co-insurance requirements, could have a material adverse effect on our business, including our financial condition, operating results and reputation.

Our business could be adversely affected if marketers or their agencies are not satisfied with our solutions or our systems and infrastructure fail to meet their needs.

We derive nearly all of our revenue from marketers and their agencies. Accordingly, our business depends on our ability to satisfy marketers and their agencies with respect to their marketing needs. We are in the process of updating our platforms. Any failure of, or delays in the performance (or in the case of the self-service tool, the rollout) of, our systems could cause service interruptions or impaired system performance. Such failures in our systems could cause us to fail to maximize our earning potential with respect to any given marketing campaign. Such failures in our systems could also cause us to over-run on campaigns, thus committing us to higher redemptions, which may negatively affect the profitability of the affected campaigns. If sustained or repeated, these performance issues could adversely affect our business, financial condition or operating results, and further reduce the attractiveness of our solutions to new and existing marketers and cause existing marketers to reduce or cease using our solutions, which could also adversely affect our business, financial condition or operating results. In addition, negative publicity resulting from issues related to our marketer relationships, regardless of accuracy, may damage our business by adversely affecting our ability to attract new marketers or marketing agencies and maintain and expand our relationships with existing marketers.

If the use of our solutions increases, or if marketers or partners demand more advanced features from our solutions, we will need to devote additional resources to improving our solutions, and we also may need to expand our technical infrastructure at a more rapid pace than we have in the past. This may involve purchasing equipment, additional data storage and maintenance solutions, upgrading our technology and infrastructure and introducing new or enhanced solutions. It may take a significant amount of time to plan, develop and test changes to our infrastructure, and we may not be able to accurately forecast demand or predict the results we will realize from such improvements. There are inherent risks associated with changing, upgrading, improving and expanding our technical infrastructure. Any failure of our solutions to operate effectively with future infrastructure and technologies could reduce the demand for our solutions, resulting in marketer or partner dissatisfaction and harm to our business. Also, any expansion of our infrastructure would likely require that we appropriately scale our internal business systems and services organization, including without limitation implementation and support services, to serve our growing marketer base. If we are unable to respond to these changes or fully and effectively implement them in a cost-effective and timely manner, our solutions may become ineffective, we may lose marketers and/or partners, and our business, financial condition and operating results may be negatively impacted.

If we fail to generate sufficient revenue to offset our contractual commitments to FIs, our business, results of operations and financial conditions could be harmed.

We have a minimum Partner Share commitment to a certain FI partner totaling \$10.0 million over a 12-month period which began on April 1, 2022. To the extent that this commitment is expected to exceed the amount of Partner Share otherwise payable to such FI partner in the absence of such commitment, we accrue any expected shortfall over the commitment period. We accrued for zero and \$3.2 million of expected minimum Partner Share commitment shortfalls as of December 31, 2021 and 2022, respectively.

To the extent that we are unable to generate revenue from marketers sufficient to offset our Partner Share commitments and other obligations, our business, results of operations and financial conditions could be harmed.

If we are unable to successfully integrate Dosh's, Bridg's and Entertainment's businesses and employees, it could have an adverse effect on our future results and the market price of our common stock.

The success of our acquisitions of Dosh, Bridg and HSP EPI Acquisition, LLC ("Entertainment") will depend, in part, on our ability to integrate Dosh's, Bridg's and Entertainment's operations and to realize the anticipated benefits, including in certain instances annual net operating synergies and cost reductions from combining the businesses. These integrations may be complex and time-consuming.

The failure to successfully integrate and manage the challenges presented by the integration processes may result in our failure to achieve some or all of the anticipated benefits of the acquisitions. Potential difficulties that may be encountered in the integration processes, which may be enhanced as a result of our efforts to integrate both businesses concurrently, include the following:

- complexities associated with managing the larger combined company;
- integrating personnel from Dosh, Bridg and Entertainment with Cardlytics personnel;
- current and prospective employees may experience uncertainty regarding their future roles with our company, which might adversely affect our ability to retrain, recruit and motivate key personnel;
- difficulties ensuring the proper controls and policies are implemented and followed in the acquired and expanded business;
- increased cyber threats due to the expanded profile of the enlarged business as well as the challenges associated with ensuring the integrating and protecting the expanded IT footprint with security and prevention, detection and response protocols;
- potential lost sales and customers if Dosh's or Bridg's or Entertainment's partners or advertising clients, or our partners or advertising clients, decide not to do business with the combined company;
- issues associated with running a consumer-facing mobile application including proper notifications, rewards, and charges;
- potential unknown liabilities and unforeseen expenses associated with the acquisitions;
- performance shortfalls as a result of the diversion of management's attention caused by integrating the companies' operations;
- Legal or regulatory hurdles regarding privacy or other data rights in the United States and abroad; and
- Unanticipated challenges in expanding the businesses in the United States and abroad.

In addition, acquisitions are inherently risky, and our due diligence processes in connection with the acquisitions may have failed to identify significant problems, liabilities or other shortcomings or challenges of Dosh's, Bridg's or Entertainment's businesses.

If any of these events were to occur, our ability to maintain relationships with customers, suppliers and employees or our ability to achieve the anticipated benefits of the acquisition could be adversely affected or could reduce our future earnings or otherwise adversely affect our business and financial results and, as a result, adversely affect the market price of our common stock.

The amount we will have to pay in connection with the acquisition of Bridg has not been conclusively determined, and it may be materially larger than we expect.

As part of the acquisition of Bridg, we agreed to make two earnout payments: a First Anniversary Payment and a Second Anniversary Payment. We have agreed to pay at least 30% of the First Anniversary Payment and the Second Anniversary Payment in cash, with the remainder to be paid in cash or our common stock, at our option. Depending on the total amount we have to pay for the earnout payments and the price of our stock during the relevant time periods, we may be required to pay more than 30% of one or both earnout payments in cash even if we did not want to do so, due to a provision in the merger agreement that does not allow us to issue more than 19.9% of our common stock in connection with the transactions contemplated by the merger agreement.

In June 2022, we calculated the First Anniversary Payment and provided the calculation to the Stockholder Representative. The Stockholder Representative has objected to our calculation of the amount of the First Anniversary Payment. We are following the dispute resolution process specific to the First Anniversary Payment stated in the merger agreement. It is possible that the final amount of the First Anniversary Payment will be materially larger than we currently expect, and it is further possible that, as a result of this process, the Second Anniversary Payment will be materially larger than we currently expect, which could adversely affect our business, results of operations and financial conditions.

We derive a material portion of our revenue from a limited number of marketers, and the loss of one or more of these marketers could adversely impact our business, results of operations and financial conditions.

Our revenue and accounts receivable are diversified among a large number of marketers segregated by both geography and industry. During 2020, 2021 and 2022, our top five marketers accounted for 35%, 29% and 17% of our revenue, respectively, with one marketer accounting for over 10% during 2020 and 2021. While no marketer accounted for over 10% of our revenue during 2022, we may have one or more marketer account for over 10% of our revenue in future periods. As of December 31, 2021 and 2022, our top five marketers accounted for 19% and 18% of our accounts receivable, respectively, with no individual marketer representing over 10% as of the end of each period, respectively.

We do not have material long-term commitments from most of these marketers. If we were to lose one or more of our significant marketers, our revenue may significantly decline. In addition, revenue from significant marketers may vary from period-to-period depending on the timing or volume of marketing spend. Further, our credit risk is concentrated among a limited number of marketers. The loss of one or more of our significant marketers could adversely affect our business, results of operations and financial conditions.

The ongoing COVID-19 pandemic could materially and adversely affect our business, results of operations and financial condition.

COVID-19, including variants of COVID-19, has resulted, at times, in the implementation or reimplementing of significant governmental measures, including lockdowns, closures, quarantines, occupancy limits and travel bans intended to control the spread of the virus. In response to the pandemic, our employees began working remotely in March 2020 and many are still primarily or exclusively working from home. In addition, many of our marketers and prospective marketers, as well as our partners, are working remotely. We have had to expend, and may be required to continue to expend, significant time, attention, and resources to respond to the COVID-19 pandemic and the associated global economic uncertainty, including to develop and implement internal policies and procedures and track changes in laws and government guidelines and restrictions. The remote working environment may also create increased vulnerability to cybersecurity incidents, including breaches of information systems security, which could damage our reputation and commercial relationships.

To the extent that future COVID restrictions are reinstated or additional prevention and mitigation measures are implemented, or there is uncertainty about the effectiveness of these or any other measures to contain or treat COVID-19 or any of its variants, there potentially could be an adverse impact on global economic conditions, which could materially and adversely impact our operations and the operations of our marketers, partners, suppliers and others with whom we work. While, at this time, we are working to manage and mitigate potential disruptions from the virus or any of its variants on our employees and operations, the fluid nature of the pandemic and uncertainties regarding the related economic impact are likely to result in sustained market turmoil, which may materially and adversely impact our business, results of operations and financial condition. We cannot predict how the COVID-19 pandemic, including with respect to variants of COVID-19, will continue to develop, whether and to what extent government regulations or other restrictions may impact our operations or those of our customers, or whether or to what extent the COVID-19 pandemic or the effects thereof may have longer term unanticipated impacts on our business.

The full extent of COVID-19's impact on our operations and financial performance depends on future developments that are uncertain and unpredictable, including the duration, spread and intensity of future variants of the virus, the virus' impact on capital and financial markets, the timing of an economic recovery and any new information that may emerge concerning the severity of the virus, among others. As a result, it is not currently possible to ascertain the overall impact of COVID-19 on our business. If, however, the pandemic continues to persist as a severe worldwide health crisis, it may harm our business, and also may have the effect of heightening many of the other risks described in this "Risk Factors" section.

We have a short operating history, which makes it difficult to evaluate our future prospects and may increase the risk that we will not be successful.

We have a relatively short operating history, which limits our ability to forecast our future operating results and subjects us to a number of uncertainties, including with respect to our ability to plan for and model future growth. We have encountered and will continue to encounter risks and uncertainties frequently experienced by growing companies in developing industries. If our assumptions regarding these uncertainties, which we use to manage our business, are incorrect or change in response to changes in our markets, or if we do not address these risks successfully, our operating and financial results could differ materially from our expectations, our business could suffer and our stock price could decline. Any success that we may experience in the future will depend in large part on our ability to, among other things:

- maintain and expand our network of partners;
- build and maintain long-term relationships with marketers and their agencies;
- develop and offer competitive solutions that meet the evolving needs of marketers;
- expand our relationships with partners to enable us to use their purchase data for new solutions;
- improve the performance and capabilities of our solutions;
- successfully expand our business;
- successfully compete with other companies that are currently in, or may in the future enter, the markets for our solutions;
- increase market awareness of our solutions and enhance our brand;
- manage increased operating expenses as we continue to invest in our infrastructure to scale our business; and
- attract, hire, train, integrate and retain qualified and motivated employees.

Any failure of our partners to effectively deliver and promote the online incentive programs that comprise the Cardlytics platform could materially and adversely affect our business.

We have spent the last several years and significant resources building out technology integrations with our partners to facilitate the delivery of incentive programs to our partners' customers and measuring those customers subsequent in-store or digital spending. We are also reliant on our network of partners to promote their digital incentive programs, increase customer awareness and leverage additional customer outreach channels like email, all of which can increase customer engagement, as well as expand our network of partners. We believe that key factors in the success and effectiveness of our incentive program include the level of accessibility and prominence of the program on the partners' website and mobile applications, as well as the user interface through which a customer is presented with marketing content. In certain cases, we have little control over the prominence of the incentive program and design of the user interface that our partners choose to use. To the extent that our partners de-emphasize incentive programs, make incentive programs difficult to locate on their website and/or mobile applications and/or fail to provide a user interface that is appealing to partners' customers, partners' customers may be less likely to engage with the incentive programs, which could negatively impact the amount of fees that we are able to charge our marketer customers in connection with marketing campaigns, and, therefore, our revenue. In addition, a failure by our partners to properly deliver or sufficiently promote marketing campaigns would reduce the efficacy of our solutions and impair our ability to attract and retain marketers and their agencies. As a result, the revenue we generate from our Cardlytics platform may be adversely affected, which would materially and adversely affect our business, financial condition and results of operations.

If we do not effectively grow and train our sales team, we may be unable to add new marketers or increase sales to our existing marketers and our business will be adversely affected.

We continue to be substantially dependent on our sales team to obtain new marketers and to drive sales with respect to our existing marketers. We believe that the characteristics and skills of the best salespeople for our solutions are still being defined, as our market is relatively new. Further, we believe that there is, and will continue to be, significant competition for sales personnel with the skills and technical knowledge that we require. Our ability to achieve significant revenue growth will depend, in large part, on our success in recruiting, training, integrating and retaining sufficient numbers of sales personnel to support our growth. New hires require significant training, and it may take significant time before they achieve full productivity. Our recent hires and planned hires may not become productive as quickly as we expect, and we may be unable to hire or retain sufficient numbers of qualified individuals in the markets where we do business or plan to do business. In addition, as we continue to grow, a large percentage of our sales team will be new to our company and our solutions. If we are unable to hire and train sufficient numbers of effective sales personnel, or the sales personnel are not successful in obtaining new marketers or increasing sales to our existing marketers, our business will be adversely affected.

We generally do not have long-term commitments from marketers, and if we are unable to retain and increase sales of our solutions to marketers and their agencies or attract new marketers and their agencies, our business, financial condition and operating results would be adversely affected.

Most marketers do business with us by placing insertion orders for particular marketing campaigns, either directly or through marketing agencies that act on their behalf. We often do not have any commitment from a marketer beyond the campaign governed by a particular insertion order, and we frequently must compete to win further business from a marketer. In most circumstances, our insertion orders may be canceled by marketers or their marketing agencies prior to the completion of all the campaigns contemplated in the insertion orders; provided that marketers or their agencies are required to pay us for services performed prior to cancellation. As a result, our success is dependent upon our ability to outperform our competitors and win repeat business from existing marketers, while continually expanding the number of marketers for which we provide services. To maintain and increase our revenue, we must encourage existing marketers and their agencies to increase their use of our solutions and add new marketers. Many marketers and marketing agencies, however, have only just begun using our solutions for a limited number of marketing campaigns, and our future revenue growth will depend heavily on these marketers and marketing agencies expanding their use of our solutions across campaigns and otherwise increasing their spending with us. Even if we are successful in convincing marketers and their agencies to use our solutions, it may take several months or years for them to meaningfully increase the amount that they spend with us. Further, larger marketers with multiple brands typically have individual marketing budgets and marketing decision makers for each of their brands, and we may not be able to leverage our success in securing a portion of the marketing budget of one or more of a marketer's brands into additional business with other brands. Moreover, marketers may place internal limits on the allocation of their marketing budgets to digital marketing, to particular campaigns, to a particular provider or for other reasons. In addition, we are reliant on our FI network to have sufficient marketing inventory within the Cardlytics platform to place the full volume of advertisements contracted for by our marketers and their agencies. Any failure to meet these demands may hamper the growth of our business and the attractiveness of our solutions.

Our ability to retain and increase sales of our solutions and attract new marketers and their agencies may be adversely affected by competitive offerings, marketing methods that are lower priced or perceived as more effective than our solutions, or a general continued reduction or decline in spending by marketers due to the global economic uncertainty and financial market conditions caused by the COVID-19 pandemic. Larger marketers may themselves have a substantial amount of purchase data and they may also seek to augment their own purchase data with additional purchase, impression and/or demographic data acquired from third-party data providers, which may allow them to develop, individually or with partners, internal targeting and measurement capabilities.

Because many of our agreements with our marketers or their agencies are not long-term, we may not be able to accurately predict future revenue streams, and we cannot guarantee that our current marketers will continue to use our solutions, or that we will be able to replace departing marketers with new marketers that provide us with comparable revenue. If we are unable to retain and increase sales of our solutions to existing marketers and their agencies or attract new marketers and their agencies for any of the reasons above or for other reasons, our business, financial condition and operating results would be adversely affected.

We have a history of losses and may not achieve profitability in the future.

We have incurred net losses since inception and expect to incur net losses in the future. We incurred net losses of \$55.4 million, \$128.6 million and \$465.3 million in 2020, 2021 and 2022, respectively. As of December 31, 2022, we had an accumulated deficit of \$976.6 million. We have never achieved profitability on an annual basis, and we do not know if we will be able to achieve or sustain profitability. Although our revenue has increased substantially in recent periods, we also do not expect to maintain this rate of revenue growth. We plan to continue to invest in our research and development and sales and marketing efforts, and we anticipate that our operating expenses will continue to increase as we scale our business and expand our operations. We also expect our general and administrative expense to increase as a result of our growth. Our ability to achieve and sustain profitability is based on numerous factors, many of which are beyond our control. We may never be able to generate sufficient revenue to achieve or sustain profitability.

We operate in an emerging industry and future demand and market acceptance for our solutions is uncertain.

We believe that our future success will depend in large part on the growth, if any, of the market for purchase intelligence. Utilization of consumer purchase data to inform marketing is an emerging industry and future demand and market acceptance for this type of marketing is uncertain. If the market for purchase intelligence does not continue to develop or develops more slowly than we expect, our business, financial condition and operating results could be harmed.

The market in which we participate is competitive and we may not be able to compete successfully with our current or future competitors.

The market for purchase intelligence is nascent and we believe that there is no one company with which we compete directly across our range of solutions. With respect to the Cardlytics platform, we believe that we are the only company that enables marketing through FI channels at scale, although we believe we currently have competition from other companies that deliver similar solutions on a smaller scale. In the future, we may face competition from online retailers, credit card companies, established enterprise software companies, advertising and marketing companies and agencies, digital publishers and mobile pay providers with access to a substantial amount of consumer purchase data. While we may successfully partner with a wide range of companies that are to some extent currently competitive to us, these companies may become more competitive to us in the future. As we introduce new solutions, as our existing solutions evolve and as other companies introduce new products and solutions, we are likely to face additional competition.

Some of our actual and potential competitors may have advantages over us, such as longer operating histories, significantly greater financial, technical, marketing or other resources, stronger brand and recognition, larger intellectual property portfolios and broader global distribution and presence. In addition, our industry is evolving rapidly and is becoming increasingly competitive. Larger and more established companies may focus on purchase intelligence marketing and could directly compete with us. Smaller companies could also launch new products and services that we do not offer and that could gain market acceptance quickly.

Our competitors may be able to respond more quickly and effectively than we can to new or changing opportunities, technologies, standards or customer requirements. Larger competitors are also often in a better position to withstand any significant reduction in capital spending and will therefore not be as susceptible to economic downturns and inflationary pressure. In addition, current or potential competitors may be acquired by third parties with greater available resources. As a result of such relationships and acquisitions, our current or potential competitors might be able to adapt more quickly to new technologies and customer needs, devote greater resources to the promotion or sale of their products and services, initiate or withstand substantial price competition, take advantage of other opportunities more readily or develop and expand their product and service offerings more quickly than we do. For all of these reasons, we may not be able to compete successfully against our current or future competitors.

If we fail to identify and respond effectively to rapidly changing technology and industry needs, our solutions may become less competitive or obsolete.

Our future success depends on our ability to adapt and innovate. To attract, retain and increase new marketers and partners, we will need to expand and enhance our solutions to meet changing needs, add functionality and address technological advancements. Specifically, we are migrating to a cloud-based solution hosted by Amazon Web Services. If we are unable to adapt our solutions to evolving trends in the marketing industry, if we are unable to properly identify and prioritize appropriate solution development projects or if we fail to develop and effectively market new solutions or enhance existing solutions to address the needs of existing and new marketers and partners, we may not be able to achieve or maintain adequate market acceptance and penetration of our solutions, and our solutions may become less competitive or obsolete.

In addition, new, more effective or less costly technologies may emerge that use data sources that we do not have access to, that use entirely different analytical methodologies than we do or that use other indicators of purchases by consumers. If existing and new marketers and their agencies perceive greater value in alternative technologies or data sources, our ability to compete for marketers and their agencies could be materially and adversely affected.

A number of factors could impair our ability to collect the significant amounts of data that we use to deliver our solutions.

Our ability to collect and use data may be restricted or prevented by a number of other factors, including:

- the failure of our network or software systems, or the network or software systems of our partners;
- decisions by our partners to restrict our ability to collect data from them (which decision they may make at their discretion) or to refuse to implement the mechanisms that we request to ensure compliance with our legal obligations or technical requirements;
- decisions by our partners to limit our ability to use their purchase data outside of the applicable banking channel;
- decisions by our partners' customers to opt out of the incentive program or to use technology, such as browser settings, that reduces our ability to deliver relevant advertisements;
- interruptions, failures or defects in our or our partners' data collection, mining, analysis and storage systems;
- changes in regulations impacting the collection and use of data;
- changes in browser or device functionality and settings, and other new technologies, which impact our partners' ability to collect and/or share data about their customers; and
- changes in international laws, rules, regulations and industry standards or increased enforcement of international laws, rules, regulations, and industry standards.

Any of the above-described limitations on our ability to successfully collect, utilize and leverage data could also materially impair the optimal performance of our solutions and severely limit our ability to target consumers or bill marketers for our services, which would harm our business, financial condition and operating results.

The efficacy of some of our solutions depends upon third-party data providers.

We rely on several third parties to assist us in matching our anonymized identifiers with third-party identifiers. This matching process enables us to, among other things, use purchase intelligence to measure in-store and online campaign sales impact or provide marketers with valuable visibility into the behaviors of current or prospective customers both within and outside the context of their marketing efforts. If any of these key data providers were to withdraw or withhold their identifiers from us, our ability to provide our solutions could be adversely affected, and certain marketers may severely limit their spending on our solutions or stop spending with us entirely. Replacements for any of these third-party identifiers may not fit the needs of certain marketers or be available in a timely manner or under economically beneficial terms, or at all.

Defects, errors or delays in our solutions could harm our reputation, which would harm our operating results.

The technology underlying our solutions may contain material defects or errors that can adversely affect our ability to operate our business and cause significant harm to our reputation. This risk is compounded by the complexity of the technology underlying our solutions and the large amounts of data that we leverage and process. In addition, with regard to the Cardlytics platform, if we are unable to attribute Consumer Incentives to our partners' customers in a timely manner, our FI partners may limit or discontinue their use of our solutions. Any such error, failure, malfunction, disruption or delay could result in damage to our reputation and could harm our business, financial condition and operating results.

Significant system disruptions, loss of data center capacity, or changes to our data hosting solutions could adversely affect our business, financial condition and operating results.

Our business is heavily dependent upon highly complex data processing capabilities. We currently contract with Amazon Web Services for our cloud-hosting solutions. We have begun to migrate and will continue to migrate our data storage capabilities to Amazon Web Services' cloud-hosting solution. If we do not complete the migration, are not successful in completing a seamless migration, or fail to administer the cloud-hosting solution in a well-managed, secure and effective manner, we may experience unplanned service disruptions or unforeseen costs. If for any reason our arrangements with our third-party data centers or other data-hosting solutions are terminated, or if we are unable to renew our agreements on commercially reasonable terms, we may be required to transfer that portion of our operations to new data center facilities or other data-hosting solutions, and we may incur significant costs and possible service interruption in connection with doing so. Further, protection of our third-party data centers or other data-hosting solutions against damage or interruption from cyber-attacks, fire, flood, tornadoes, power loss, telecommunications or equipment failure or other disasters and events beyond our control is important to our continued success. Any damage to, or failure of, the systems of the data centers or other data-hosting solutions that we utilize, or of our own equipment located within such data centers, could result in interruptions to the availability or functionality of our solutions. In addition, the failure of the data centers or other data-hosting solutions that we utilize to meet our capacity requirements could result in interruptions in the availability or functionality of our solutions or impede our ability to scale our operations. Any damage to the data centers or other data-hosting solutions that we utilize, or to our own equipment located within such data centers, that causes loss of capacity or otherwise causes interruptions in our operations could materially adversely affect our ability to quickly and effectively respond to our marketers' or partners' requirements, which could result in loss of their confidence, adversely impact our ability to attract new marketers and/or partners and force us to expend significant resources. The occurrence of any such events could adversely affect our business, financial condition and operating results.

Seasonal fluctuations in marketing activity could adversely affect our cash flows.

We expect our revenue, operating results, cash flows from operations and other key performance metrics to vary from quarter to quarter in part due to the seasonal nature of our marketers' spending on digital marketing campaigns. For example, many marketers tend to devote a significant portion of their budgets to the fourth quarter of the calendar year to coincide with consumer holiday spending and to reduce spend in the first quarter of the calendar year. Seasonality could have a material impact on our revenue, operating results, cash flow from operations and other key performance metrics from period to period.

Our corporate culture has contributed to our success, and if we cannot maintain it as we grow, or our corporate culture is negatively impacted by the COVID-19 pandemic, we could lose the innovation, creativity and teamwork fostered by our culture, and our business may be harmed.

As of December 31, 2022, we had 501 full-time employees. We intend to further expand our overall headcount and operations, with no assurance that we will be able to do so while effectively maintaining our corporate culture. Additionally, our corporate culture may be negatively impacted by the COVID-19 pandemic. We believe our corporate culture is one of our fundamental strengths as it enables us to attract and retain top talent and deliver superior results for our customers. As we grow and change, integrate acquired businesses and their employees, and as the COVID-19 pandemic continues, we may find it difficult to preserve our corporate culture, which could reduce our ability to innovate and operate effectively. In turn, the failure to preserve our culture could negatively affect our ability to attract, recruit, integrate and retain employees, continue to perform at current levels and effectively execute our business strategy.

If we are unable to attract, integrate and retain additional qualified personnel, including top technical talent, our business could be adversely affected.

Our future success depends in part on our ability to identify, attract, integrate and retain highly skilled technical, managerial, sales and other personnel, including top technical talent from the industry and top research institutions. We face intense competition for qualified individuals from numerous other companies, including other software and technology companies, many of whom have greater financial and other resources than we do. These companies also may provide more diverse opportunities and better chances for career advancement. Some of these characteristics may be more appealing to high-quality candidates than those we have to offer. In addition, new hires often require significant training and, in many cases, take significant time before they achieve full productivity. We may incur significant costs to attract and retain qualified personnel, including significant expenditures related to salaries and benefits and compensation expenses related to equity awards and we may lose new employees to our competitors or other companies before we realize the benefit of our investment in recruiting and training them. Moreover, new employees may not be or become as productive as we expect, as we may face challenges in adequately or appropriately integrating them into our workforce and culture. In addition, as we move into new geographies, we will need to attract and recruit skilled personnel in those areas. We have little experience with recruiting in geographies outside of the U.S., and may face additional challenges in attracting, integrating and retaining international employees. If we are unable to attract, integrate and retain suitably qualified individuals who are capable of meeting our growing technical, operational and managerial requirements, on a timely basis or at all, our business will be adversely affected.

We are dependent on the continued services and performance of our senior management and other key personnel, the loss of any of whom could adversely affect our business.

Our future success depends in large part on the continued contributions of our senior management and other key personnel. In particular, the leadership of key management personnel is critical to the successful management of our company, the development of our solutions and our 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. The loss of any of our key management personnel could significantly delay or prevent the achievement of our development and strategic objectives and adversely affect our business. Further, if members of our management and other key personnel in critical functions across our organization are unable to perform their duties or have limited availability due to COVID-19, we may not be able to execute on our business strategy and/or our operations may be negatively impacted.

Our international sales and operations subject us to additional risks that can adversely affect our business, operating results and financial condition.

During each of 2020, 2021 and 2022, we derived 8% of our revenue outside the U.S., respectively. While substantially all of our operations are located in the U.S., we have an office in the U.K. and may continue to expand our international operations as part of our growth strategy. Our ability to convince marketers to expand their use of our solutions or renew their agreements with us is directly correlated to our direct engagement with such marketers or their agencies. To the extent that we are unable to engage with non-U.S. marketers and agencies effectively with our limited sales force capacity, we may be unable to grow sales to existing marketers to the same degree we have experienced in the U.S.

Our international operations subject us to a variety of risks and challenges, including:

- localization of our solutions, including adaptation for local practices;
- increased management, travel, infrastructure and legal compliance costs associated with having international operations;
- fluctuations in currency exchange rates and related effect on our operating results;
- longer payment cycles and difficulties in collecting accounts receivable or satisfying revenue recognition criteria;
- increased financial accounting and reporting burdens and complexities;
- general economic conditions in each country or region, including inflationary pressure;
- the global economic uncertainty and financial market conditions caused by the COVID-19 pandemic, including inflationary pressure;
- reduction in billings, foreign currency exchange rates, and trade with the United Kingdom;
- contractual and legislative restrictions or changes;
- economic uncertainty around the world;

- compliance with foreign laws and regulations and the risks and costs of non-compliance with such laws and regulations;
- compliance with U.S. laws and regulations for foreign operations, including the Foreign Corrupt Practices Act, the U.K. Bribery Act, import and export control laws, tariffs, trade barriers, economic sanctions and other regulatory or contractual limitations on our ability to sell our software in certain foreign markets, and the risks and costs of non-compliance;
- potential changes in a specific country's or region's political or economic climate, including the current hostilities between Russia and Ukraine;
- heightened risks of unfair or corrupt business practices in certain geographies and of improper or fraudulent sales arrangements that may impact financial results and result in restatements of financial statements and irregularities in financial statements;
- difficulties in repatriating or transferring funds from or converting currencies in certain countries;
- cultural differences inhibiting foreign employees from adopting our corporate culture;
- reduced protection for intellectual property rights in some countries and practical difficulties of enforcing rights abroad; and
- compliance with the laws of foreign taxing jurisdictions and overlap of different tax regimes.

Any of these risks could adversely affect our international operations, reduce our international revenues or increase our operating costs, adversely affecting our business, financial condition and operating results.

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

The recent growth in our business has placed, and is expected to continue to place, a significant strain on our managerial, administrative, operational and financial resources, as well as our infrastructure. We rely heavily on information technology ("IT") systems to manage critical functions such as data storage, data processing, matching and retrieval, revenue recognition, budgeting, forecasting and financial reporting. To manage our growth effectively, we must continue to improve and expand our infrastructure, including our IT, financial and administrative systems and controls. In particular, we may need to significantly expand our IT infrastructure as the amount of data we store and transmit increases over time, which will require that we both utilize existing IT products and adopt new technologies. If we are not able to scale our IT infrastructure in a cost-effective and secure manner, our ability to offer competitive solutions will be harmed and our business, financial condition and operating results may suffer.

We must also continue to manage our employees, operations, finances, research and development and capital investments efficiently in an environment where nearly all employees are working from home. Our productivity and the quality of our solutions may be adversely affected if we do not integrate and train our new employees quickly and effectively or if we fail to appropriately coordinate across our executive, research and development, technology, service development, analytics, finance, human resources, marketing, sales, operations and customer support teams. If we continue our rapid growth, we will incur additional expenses, and our growth may continue to place a strain on our resources, infrastructure and ability to maintain the quality of our solutions. If we do not adapt to meet these evolving challenges, or if the current and future members of our management team do not effectively manage our growth, the quality of our solutions may suffer and our corporate culture may be harmed. Failure to manage our future growth effectively could cause our business to suffer, which, in turn, could have an adverse impact on our business, financial condition and operating results.

If currency exchange rates fluctuate substantially in the future, the results of our operations could be adversely affected.

Due to our international operations, we may be exposed to the effects of fluctuations in currency exchange rates, including inflationary pressure. We generate revenue and incur expenses for employee compensation and other operating expenses at our U.K. office in the local currency. Fluctuations in the exchange rates between the U.S. dollar, British pound and Canadian dollar could result in the dollar equivalent of such revenue and expenses being lower, which could have a negative net impact on our reported operating results. Although we may in the future decide to undertake foreign exchange hedging transactions to cover a portion of our foreign currency exchange exposure, we currently do not hedge our exposure to foreign currency exchange risks.

Our ability to use net operating losses and certain other tax attributes to offset future taxable income may be limited.

Our net operating loss ("NOL"), carryforwards could expire unused and be unavailable to offset future tax liabilities because of their limited duration or because of restrictions under U.S. tax law. As of December 31, 2022, we had U.S. federal and state NOLs of \$626.5 million and \$255.6 million, respectively. Our federal NOLs generated in tax years beginning before January 1, 2018, are only permitted to be carried forward for 20 years under applicable U.S. tax law. Our federal NOLs generated in tax years beginning after December 31, 2017, may be carried forward indefinitely, but the deductibility of such federal NOL carryforwards is limited to 80% of taxable income. It is uncertain if and to what extent various states will conform to federal law.

In addition, under Section 382 and Section 383 of the Internal Revenue Code of 1986, as amended (the "Code"), if a corporation undergoes an "ownership change," which is generally defined as a greater than 50% change, by value, in its equity ownership over a three-year period, the corporation's ability to use its pre-change NOL carryforwards and other pre-change tax attributes to offset its post-change taxable income or taxes may be limited. We have experienced "ownership changes" under Code Section 382 in the past, and future changes in ownership of our stock, including by reason of future offerings, as well as other changes that may be outside of our control, could result in future ownership changes under Code Section 382. If we are or become subject to limitations on our use of federal NOL carryforwards under IRC Section 382, our federal NOL carryforwards could expire unutilized or underutilized, even if we earn taxable income against which our federal NOL carryforwards could otherwise be offset. Similar provisions of state tax law may also apply to limit our use of accumulated state tax attributes. In addition, at the state level, there may be periods during which the use of NOL carryforwards is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed.

Changes in tax laws or regulations could materially adversely affect our company.

New tax laws or regulations could be enacted at any time, and existing tax laws or regulations could be interpreted, modified or applied in a manner that is adverse to us, which could adversely affect our business and financial condition. For instance, the United States recently passed the Inflation Reduction Act, which provides for a minimum tax equal to 15% of the adjusted financial statement income of certain large corporations, as well as a 1% excise tax on certain share buybacks by public corporations that would be imposed on such corporations. In addition, it is uncertain if and to what extent various states will conform to federal tax legislation. The impact of such changes or future legislation could increase our U.S. tax expense and could have a material adverse impact on our business and financial condition.

Future acquisitions could disrupt our business and adversely affect our business, financial condition and operating results.

We may choose to expand by making acquisitions that could be material to our business, financial condition or operating results. Our ability as an organization to successfully acquire and integrate technologies or businesses is unproven. Acquisitions involve many risks, including the following:

- an acquisition may negatively affect our business, financial condition, operating results or cash flows because it may require us to incur charges or assume substantial debt or other liabilities, may cause adverse tax consequences or unfavorable accounting treatment, may expose us to claims and disputes by third parties, including intellectual property claims and disputes, or may not generate sufficient financial return to offset additional costs and expenses related to the acquisition;
- we may encounter difficulties or unforeseen expenditures in integrating the business, technologies, products, personnel or operations of any company that we acquire, particularly if key personnel of the acquired company decide not to work for us;
- an acquisition, whether or not consummated, may disrupt our ongoing business, divert resources, increase our expenses and distract our management;
- an acquisition may result in a delay or reduction of purchases for both us and the company that we acquired due to uncertainty about continuity and effectiveness of solution from either company;
- we may encounter difficulties in, or may be unable to, successfully sell any acquired products or solutions;
- an acquisition may involve the entry into geographic or business markets in which we have little or no prior experience or where competitors have stronger market positions;
- challenges inherent in effectively managing an increased number of employees in diverse locations;
- the potential strain on our financial and managerial controls and reporting systems and procedures;
- potential known and unknown liabilities associated with an acquired company;
- our use of cash to pay for acquisitions would limit other potential uses for our cash;

- if we incur debt to fund such acquisitions, such debt may subject us to material restrictions on our ability to conduct our business as well as financial maintenance covenants;
- the risk of impairment charges related to potential write-downs of acquired assets or goodwill in future acquisitions; and
- to the extent that we issue a significant amount of equity or convertible debt securities in connection with future acquisitions, existing stockholders may be diluted and earnings (loss) per share may decrease (increase).

We may not succeed in addressing these or other risks or any other problems encountered in connection with the integration of any acquired business. The inability to successfully integrate the business, technologies, products, personnel or operations of any acquired business, or any significant delay in achieving integration, could have a material adverse effect on our business, financial condition and operating results.

Charges to earnings resulting from our acquisitions may cause our operating results to suffer.

Under accounting principles, we have allocated the total purchase price of Dosh's, Bridg's and Entertainment's net tangible assets and intangible assets based on their fair values as of the date of the acquisitions, and we have recorded the excess of the purchase price over those fair values as goodwill. Our management's estimates of fair value will be based upon assumptions that they believe to be reasonable but that are inherently uncertain. The following factors, among others, could result in material charges that would cause our financial results to be negatively impacted:

- impairment of goodwill and other long-term assets;
- charges for the amortization of identifiable intangible assets and for stock-based compensation; and
- accrual of newly identified pre-acquisition contingent liabilities that are identified subsequent to the finalization of the purchase price allocation.

Additional costs may include costs of employee redeployment, relocation and retention, including salary increases or bonuses, taxes and termination of contracts that provide redundant or conflicting services. Some of these costs may have to be accounted for as expenses that would negatively impact our results of operations.

During the year ended December 31, 2022 we recognized a goodwill and intangible impairment of \$453.29 million. Refer to Note 5—Goodwill and Acquired Intangibles to our condensed consolidated financial statements for additional information regarding the goodwill impairment.

We may require additional capital to support growth, and such capital might not be available on terms acceptable to us, if at all, which may in turn hamper our growth and adversely affect our business.

We intend to continue to make investments to support our business growth and may require additional funds to respond to business challenges, including the need to develop new solutions or enhance our solutions, improve our operating infrastructure or acquire complementary businesses and technologies. Accordingly, we may need to engage in equity, equity-linked or debt financings to secure additional funds. If we raise additional funds through future issuances of equity or equity-linked securities, including convertible debt securities, our existing stockholders could suffer significant dilution, and any new equity securities that we issue could have rights, preferences and privileges superior to those of holders of our common stock. Any debt financing that we secure in the future could involve restrictive covenants relating to our capital-raising activities and other financial and operational matters, including the ability to pay dividends or repurchase shares of our capital stock. This may make it more difficult for us to obtain additional capital, to pursue business opportunities, including potential acquisitions, or to return capital to our stockholders. We also may not be able to obtain additional financing on terms favorable to us, if at all. For example, while the potential impact and duration of the COVID-19 pandemic on the global economy and our business in particular may be difficult to assess or predict, the pandemic has resulted in, and may continue to result in significant disruption of global financial markets, reducing our ability to access capital, which could in the future negatively affect our liquidity. If we are unable to obtain adequate financing or financing on terms satisfactory to us when we require it, our ability to continue to support our business growth, service our indebtedness and respond to business challenges could be significantly impaired, and our business may be adversely affected. Regulatory, legislative or self-regulatory developments regarding Internet privacy matters could adversely affect our ability to conduct our business.

Through our consumer application, users accumulate rewards that could be deemed subject to abandoned property laws and/or could be deemed to constitute stored value subject to certain legal requirements under applicable state and federal laws and regulations.

The Dosh application enables consumers to accumulate non-monetary rewards (“Dosh Rewards”) within the application, which may be converted to U.S. dollars only when certain requirements are met. Dosh Rewards have no cash value but users are able to receive U.S. dollar payouts from Dosh based on Dosh Rewards provided that certain requirements are met. State regulators could deem that Dosh Rewards constitute property that is subject to state property laws, which could potentially create a large liability for us as well as legal and related compliance obligations and costs to manage escheatment of any Dosh Rewards constituting abandoned property. Additionally, state and/or federal regulators could conclude that Dosh Rewards constitute monetary value or money and therefore subject to regulation pursuant to laws regulating the issuance, sale, redemption, and maintenance of stored value, prepaid access, or gift cards (or similar terminology). Such laws and regulations may include, but are not necessarily limited to, U.S. state money-transmitter licensing laws and the federal Bank Secrecy Act (including registration requirements), and our failure to comply with applicable laws could expose us to monetary penalties or damages and adversely affect our ability to operate our business in its current form.

Bringing new FI partners into our network can require considerable time and expense and can be long and unpredictable.

Our FI partners and FI partner prospects engage in highly regulated businesses, are often slow to adopt technological innovation and have rigorous standards with respect to providing third parties, like us, with access to their data. Our operating results depend in part on expanding our FI network to maintain and enhance the scale of our solutions. The length of time that it takes to add an FI partner to our network, from initial evaluation to integration into our network, varies substantially from FI to FI and may take several years. Our sales and integration cycle with respect to our FI partners is long and unpredictable, requires considerable time and expense and may not ultimately be successful. It is difficult to predict exactly when, or even if, a new FI partner will join our network and we may not generate revenue from a new FI partner in the same period as we incurred the costs associated with acquiring such FI partner, or at all. Once an FI partner has agreed to work with us, it may take a lengthy period of time for the implementation of our solutions to be prioritized and integrated into the FI partner’s infrastructure. Because a substantial portion of our expenses are relatively fixed in the short-term, our operating results will suffer if revenue falls below our expectations in a particular quarter, which could cause the price of our stock to decline. Ultimately, if additions to our FI network are not realized in the time period expected or not realized at all, or if an FI partner terminates its agreement with us, our business, financial condition and operating results could be adversely affected.

Bringing new FI partners into our network may impede our ability to accurately forecast the performance of our network.

Bringing new FI partners into our network may impede our ability to accurately predict how certain marketing campaigns will perform, and thus may impede our ability to accurately forecast the performance of our network. Such inaccurate predictions could result in marketing campaigns underperforming, which impacts the total fees we can collect from marketers, or over performing, which may result in us paying certain Consumer Incentives to consumers without adequate compensation from the marketers. The amount of time it will take us to be able to understand the impact of a new FI partner on our network is uncertain and difficult to predict. Additionally, our understanding of the impact of any given FI is subject to change at any time, as such understanding can be impacted by factors such as changes to an FI’s business strategy, changes to an FI’s user interface, or changes in the behavior or makeup of an FI’s consumer base.

If we are not able to maintain and enhance our brand, our business, financial condition and operating results may be adversely affected.

We believe that developing and maintaining awareness of the Cardlytics brand in a cost-effective manner is critical to achieving widespread acceptance of our existing solutions and future solutions and is an important element in attracting new marketers and partners. Furthermore, we believe that the importance of brand recognition will increase as competition in our market increases. Successful promotion of our brand will depend largely on the effectiveness of our marketing efforts and on our ability to deliver valuable solutions for our marketers, their agencies and our partners. In the past, our efforts to build our brand have involved significant expense. Brand promotion activities may not yield increased revenue and billings, and even if they do, any increased revenue and billings may not offset the expenses that we incurred in building our brand. If we fail to successfully promote and maintain our brand or incur substantial expenses in an unsuccessful attempt to promote and maintain our brand, we may fail to attract enough new marketers or partners or retain our existing marketers or partners and our business could suffer.

Risks Related to our Outstanding Convertible Senior Notes

Servicing our debt may require a significant amount of cash. We may not have sufficient cash flow from our business to pay our indebtedness, and we may not have the ability to raise the funds necessary to settle for cash conversions of the Notes or to repurchase the Notes for cash upon a fundamental change, which could adversely affect our business and results of operations.

In September 2020, we issued convertible senior notes with an aggregate principal amount of \$230.0 million bearing an interest rate of 1.00% due in 2025 (the "Notes"). The interest rate is fixed at 1.00% per annum and is payable semi-annually in arrears on March 15 and September 15 of each year, beginning on March 15, 2021. Our ability to make scheduled payments of the principal of, to pay interest on or to refinance our indebtedness, including the Notes, depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not generate cash flows from operations in the future that are sufficient to service our debt. If we are unable to generate such cash flows, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional debt financing or equity capital on terms that may be onerous or highly dilutive. Our ability to refinance any future indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations. In addition, any of our future debt agreements may contain restrictive covenants that may prohibit us from adopting any of these alternatives. Our failure to comply with these covenants could result in an event of default which, if not cured or waived, could result in the acceleration of our debt.

Holders of the Notes have the right to require us to repurchase their Notes upon the occurrence of a fundamental change (as defined in the indenture governing the Notes) at a repurchase price equal to 100% of the principal amount of the Notes to be repurchased, plus accrued and unpaid interest, if any. Upon conversion, unless we elect to deliver solely shares of our common stock to settle such conversion (other than paying cash in lieu of delivering any fractional share), we will be required to make cash payments in respect of the Notes being converted. We may not have enough available cash or be able to obtain financing at the time we are required to make repurchases in connection with such conversion and our ability to pay may additionally be limited by law, by regulatory authority or by agreements governing our existing and future indebtedness. Our failure to repurchase the Notes at a time when the repurchase is required by the indenture governing the Notes or to pay any cash payable on future conversions as required by such indenture would constitute a default under such indenture. A default under the indenture or the fundamental change itself could also lead to a default under agreements governing our existing and future indebtedness. If the repayment of the related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay the indebtedness and repurchase the Notes or make cash payments upon conversions thereof.

In addition, our indebtedness, combined with our other financial obligations and contractual commitments, could have other important consequences. For example, it could:

- make us more vulnerable to adverse changes in general U.S. and worldwide economic, industry, and
- competitive conditions and adverse changes in government regulation;
- limit our flexibility in planning for, or reacting to, changes in our business and our industry;
- place us at a disadvantage compared to our competitors who have less debt;
- limit our ability to borrow additional amounts for funding acquisitions, for working capital, and for other general corporate purposes; and
- make an acquisition of our company less attractive or more difficult.

Any of these factors could harm our business, results of operations, and financial condition. In addition, if we incur additional indebtedness, the risks related to our business and our ability to service or repay our indebtedness would increase.

The conditional conversion feature of the Notes, if triggered, may adversely affect our financial condition and results of operations.

In the event the conditional conversion feature of the Notes is triggered, holders of Notes will be entitled to convert the Notes at any time during specified periods at their option. If one or more holders elect to convert their Notes, unless we elect to satisfy our conversion obligation by delivering solely shares of our common stock (other than paying cash in lieu of delivering any fractional share), we would be required to settle a portion or all of our conversion obligation through the payment of cash, which could adversely affect our liquidity. In addition, even if holders do not elect to convert their Notes, we could be required under applicable accounting rules to reclassify all or a portion of the outstanding principal of the Notes as a current rather than long-term liability, which would result in a material reduction of our net working capital.

Transactions relating to our Notes may affect the value of our common stock.

The conversion of some or all of the Notes would dilute the ownership interests of existing stockholders to the extent we satisfy our conversion obligation by delivering shares of our common stock upon any conversion of such Notes. Our Notes may become in the future convertible at the option of their holders under certain circumstances. If holders of our Notes elect to convert their Notes, we may settle our conversion obligation by delivering to them a significant number of shares of our common stock, which would cause dilution to our existing stockholders.

In addition, in connection with the pricing of the Notes, we entered into capped call transactions (the "Capped Calls") with certain financial institutions (the "Option Counterparties"). The Capped Calls are expected generally to reduce the potential dilution to our common stock upon any conversion or settlement of the Notes and/or offset any cash payments we are required to make in excess of the principal amount of converted Notes, as the case may be, with such reduction and/or offset subject to a cap.

In connection with establishing their initial hedges of the Capped Calls, the Option Counterparties or their respective affiliates entered into various derivative transactions with respect to our common stock and/or purchased shares of our common stock concurrently with or shortly after the pricing of the Notes.

From time to time, the Option Counterparties or their respective affiliates may modify their hedge positions by entering into or unwinding various derivative transactions with respect to our common stock and/or purchasing or selling our common stock or other securities of ours in secondary market transactions prior to the maturity of the Notes (and are likely to do so following any conversion of the Notes, any repurchase of the Notes by us on any fundamental change repurchase date, any redemption date, or any other date on which the Notes are retired by us, in each case, if we exercise our option to terminate the relevant portion of the Capped Calls). This activity could cause a decrease and/or increased volatility in the market price of our common stock.

We do not make any representation or prediction as to the direction or magnitude of any potential effect that the transactions described above may have on the price of the Notes or our common stock. In addition, we do not make any representation that the Option Counterparties will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

We are subject to counterparty risk with respect to the Capped Calls.

The Option Counterparties are financial institutions, and we will be subject to the risk that any or all of them might default under the Capped Calls. Our exposure to the credit risk of the Option Counterparties will not be secured by any collateral. Past global economic conditions have resulted in the actual or perceived failure or financial difficulties of many financial institutions. If an Option Counterparty becomes subject to insolvency proceedings, we will become an unsecured creditor in those proceedings with a claim equal to our exposure at that time under the Capped Calls with such Option Counterparty. Our exposure will depend on many factors but, generally, an increase in our exposure will be correlated to an increase in the market price and in the volatility of our common stock. In addition, upon a default by an Option Counterparty, we may suffer adverse tax consequences and more dilution than we currently anticipate with respect to our common stock. We can provide no assurances as to the financial stability or viability of the Option Counterparties.

The accounting method for convertible debt securities that may be settled in cash, such as the Notes, could have a material effect on our reported financial results.

The accounting method for reflecting the notes on our balance sheet, accruing interest expense for the notes and reflecting the underlying shares of our common stock in our reported diluted earnings per share may adversely affect our reported earnings and financial condition. We expect that, under applicable accounting principles, the initial liability carrying amount of the notes will be the fair value of a similar debt instrument that does not have a conversion feature, valued using our cost of capital for straight, unconvertible debt. We expect to reflect the difference between the net proceeds from this offering and the initial carrying amount as a debt discount for accounting purposes, which will be amortized into interest expense over the term of the notes. As a result of this amortization, the interest expense that we expect to recognize for the notes for accounting purposes will be greater than the cash interest payments we will pay on the notes, which will result in lower reported income or higher reported loss. The lower reported income or higher reported loss resulting from this accounting treatment could depress the trading price of our common stock and the notes. However, in August 2020, the Financial Accounting Standards Board published an Accounting Standards Update ("ASU") 2020-06, eliminating the separate accounting for the debt and equity components as described above. ASU 2020-06 effective for SEC-reporting entities for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. On January 1, 2022, we adopted this standard using the modified retrospective method which allowed for a cumulative-effect adjustment to the opening balance sheet without restating prior periods. As we did not elect the fair value option in the process, the notes, net of issuance costs, are accounted for as a single liability measured at amortized cost. Upon adoption, we recorded a decrease in accumulated deficit of \$11.2 million, an increase to the notes, net of \$40.2 million and a decrease to additional paid in capital of \$51.4 million.

If accounting standards change in the future and we are not permitted to use the treasury stock method, then our diluted earnings per share may decline. For example, the Financial Accounting Standards Board’s ASU described above amends these accounting standards, effective as of the dates referred to above, to eliminate the treasury stock method for convertible instruments that can be settled in whole or in part with equity and instead require application of the “if-converted” method. Under that method, diluted earnings per share would generally be calculated assuming that all the notes were converted solely into shares of common stock at the beginning of the reporting period, unless the result would be anti-dilutive. The application of the if-converted method may reduce our reported diluted earnings per share.

Furthermore, if any of the conditions to the convertibility of the notes is satisfied, then we may be required under applicable accounting standards to reclassify the liability carrying value of the notes as a current, rather than a long-term, liability. This reclassification could be required even if no noteholders convert their notes and could materially reduce our reported working capital.

Risks Related to Regulatory and Intellectual Property Matters

We and our FI partners are subject to stringent and changing privacy and data security laws, rules, contractual obligations, self-regulatory schemes, government regulation, policies and other obligations related to data privacy and security. The actual or perceived failure by us, our customers, our partners, or other third parties upon whom we rely to comply with such obligations could lead to regulatory investigations or actions, litigation, disruptions of our business operations, loss of customers or sales, harm our reputation, result in significant expense, loss of revenue or profits, subject us to significant fines and liability or otherwise adversely affect our business.

In the ordinary course of business, we collect, receive, store, process, use, generate, transfer, disclose, make accessible, protect, secure, dispose of, transmit, and share personal information and other information (“Process” or “Processing”) necessary to operate our business, for legal and marketing purposes, and for other business-related purposes. We, our FI partners, our marketers and other third parties upon whom we rely are subject to a number of data privacy and security obligations, such as various laws, regulations, guidance, industry standards, external and internal privacy policies, contractual requirements, and other obligations relating to data privacy and security as well as laws and regulations regarding online services and the Internet generally.

In the U.S., the rules and regulations to which we, directly or contractually through our partners, or our marketers may be subject include those promulgated under the authority of the Federal Trade Commission, the Electronic Communications Privacy Act, the Computer Fraud and Abuse Act, the Health Insurance Portability and Accountability Act, the Gramm-Leach-Bliley Act and state cybersecurity, privacy and breach notification laws, as well as regulator enforcement positions and expectations reflected in federal and state regulatory actions, settlements, consent decrees and guidance documents.

The regulatory framework for online services and data privacy and security issues worldwide can vary substantially from jurisdiction to jurisdiction, is rapidly evolving and is likely to remain uncertain for the foreseeable future. Many of these obligations conflict with each other, and interpretation of these laws, rules and regulations and their application to our solutions in the U.S. and foreign jurisdictions is ongoing and cannot be fully determined at this time. A number of existing bills are pending in the U.S. Congress that contain provisions that would regulate how companies can use cookies and other tracking technologies to collect and utilize user information. Additionally, new legislation proposed or enacted in various other states will continue to shape the data privacy environment nationally.

The California Consumer Privacy Act (“CCPA”), which took effect on January 1, 2020, is an example of the trend towards increasingly comprehensive privacy legislation being introduced in the United States. The CCPA gives California residents expanded rights to request access to and deletion of their personal information, opt out of certain personal information sharing, and receive detailed information about how their personal information is used. The CCPA also increases the privacy and security obligations on entities handling personal information, which is broadly defined under the law. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches, and includes statutorily defined damages of up to \$750 per citizen, which is expected to increase data breach litigation. The CCPA also imposes requirements on businesses that “sell” information (which is defined broadly under the CCPA); there is significant ambiguity regarding what constitutes a sale and many of our or our partner’s business practices may qualify. Further the California Privacy Rights Act (“CPRA”), became effective starting on January 1, 2023, which significantly modifies the CCPA, including by expanding consumers’ rights with respect to certain sensitive personal information. The CPRA also creates a new state agency that will be vested with authority to implement and enforce the CCPA and the CPRA.

Other states, such as Virginia, Colorado, Utah, and Connecticut, have also passed comprehensive privacy laws, and similar laws are being considered in several other states, as well as at the federal and local levels. These developments may further complicate compliance efforts, and may increase legal risk and compliance costs for us and the third parties upon whom we rely.

Outside of the United States, an increasing number of laws, regulations, and industry standards may govern data privacy and security. For example, the European Union's General Data Protection Regulation ("EU GDPR") and the United Kingdom's GDPR ("UK GDPR"), impose strict requirements for processing personal data. For example, under the EU GDPR, companies may face temporary or definitive bans on data processing and other corrective actions; fines of up to 20 million Euros or 4% of annual global revenue, whichever is greater; or private litigation related to processing of personal data brought by classes of data subjects or consumer protection organizations authorized at law to represent their interests.. An example of the type of international regulation to which we may be subject is the U.K.'s Privacy and Electronic Communications Regulations 2011 ("PECR"), which implements the requirements of Directive 2009/136/EC (which amended Directive 2002/58/EC), which is known as the ePrivacy Directive. The PECR regulates various types of electronic direct marketing that use cookies and similar technologies. The PECR also imposes sector-specific breach reporting requirements, but only as applicable to providers of particular public electronic communications services. Additional European Union member state laws of this type may follow.

In the ordinary course of business, we may transfer personal data from Europe and other jurisdictions to the United States or other countries. Europe and other jurisdictions have enacted laws requiring data to be localized or limiting the transfer of personal data to other countries. In particular, the European Economic Area (EEA) and the United Kingdom (UK) have significantly restricted the transfer of personal data to the United States and other countries whose privacy laws it believes are inadequate. Other jurisdictions may adopt similarly stringent interpretations of their data localization and cross-border data transfer laws. Although there are currently various mechanisms that may be used to transfer personal data from the EEA and UK to the United States in compliance with law, such as the EEA standard contractual clauses and UK's International Data Transfer Agreement, these mechanisms are subject to legal challenges, and there is no assurance that we can satisfy or rely on these measures to lawfully transfer personal data to the United States. If there is no lawful manner for us to transfer personal data from the EEA, the UK, or other jurisdictions to the United States, or if the requirements for a legally-compliant transfer are too onerous, we could face significant adverse consequences, including the interruption or degradation of our operations, the need to relocate part of or all of our business or data processing activities to other jurisdictions at significant expense, increased exposure to regulatory actions, substantial fines and penalties, the inability to transfer data and work with partners, vendors and other third parties, and injunctions against our processing or transferring of personal data necessary to operate our business. Additionally, companies that transfer personal data out of the EEA and UK to other jurisdictions, particularly to the United States, are subject to increased scrutiny from regulators, individual litigants, and activist groups. Some European regulators have ordered certain companies to suspend or permanently cease certain transfers out of Europe for allegedly violating GDPR's cross-border data transfer limitations.

Obligations related to data privacy and security are quickly changing, becoming increasingly stringent, and creating regulatory uncertainty. Additionally, these obligations may be subject to differing applications and interpretations, which may be inconsistent or conflict among jurisdictions. Preparing for and complying with these obligations requires us to devote significant resources, which may necessitate changes to our services, information technologies, systems, and practices and to those of any third parties that process personal data on our behalf. In addition, these obligations may require us to change or business model. We may, for example, be required to, or otherwise may determine that it is advisable to, develop or obtain additional tools and technologies for validation of certain of our limited sales related to online purchases to compensate for a potential lack of cookie data. Even if we are able to do so, such additional tools may be subject to further regulation, time consuming to develop or costly to obtain, and less effective than our current use of cookies. Our business model materially depends on our ability to process personal data, so we are particularly exposed to the risks associated with the rapidly changing legal landscape. For example, we may be at heightened risk of regulatory scrutiny, and any changes in the regulatory framework could require us to fundamentally change our business model.

We may at times fail (or be perceived to have failed) in our efforts to comply with our data privacy and security obligations. Moreover, despite our efforts, our personnel or third parties on whom we rely may fail to comply with such obligations, which could negatively impact our business operations. If we or the third parties on which we rely fail, or are perceived to have failed, to address or comply with applicable data privacy and security obligations, we could face significant consequences, including, but not limited to: government enforcement actions (e.g. investigations, fines, penalties, audits and inspections); litigation (including class-action claims); additional reporting requirements and/or oversight; bans on processing personal data; and orders to destroy or not use personal data. Any of these events could have a material adverse effect on our reputation, business or financial condition, including, but not limited to: loss of customers; interruptions or stoppages in our business operations; inability to process personal data or to operate in certain jurisdictions; limited ability to develop or commercialize our products; expenditure of time and resources to defend any claim or inquiry; adverse publicity; or substantial changes to our business model or operations.

If the use of matching technologies, such as cookies, pixels and device identifiers, is rejected by Internet users, restricted or otherwise subject to unfavorable terms, such as by non-governmental entities, our validation methodologies could be impacted and we may lose customers and revenue.

Our solution can be utilized by in-store and online marketers; however, a large majority of consumer purchases continue to be made in-store. For validation of certain of these limited online purchases, our solutions may use digital matching technologies, such as mobile advertising identifiers, pixels and cookies to match the Cardlytics IDs we have assigned to our FIs' customers with their digital presence outside of the FI partners' websites and mobile applications. In most cases, the matching technologies we use relate to mobile advertising identifiers that we use in limited cases to validate that we influenced an online purchase. If our access to matching technology data is reduced, our ability to validate certain online purchases in the current manner may be affected and thus undermine the effectiveness of our solutions.

On occasion, "third-party cookies" may be placed through an Internet browser to validate online purchases. Internet users may easily block and/or delete cookies (e.g., through their browsers or "ad blocking" software). The most commonly used Internet browsers allow Internet users to modify their browser settings to prevent cookies from being accepted by their browsers or are set to block third-party cookies by default. Further, Google eliminated third-party cookies from its browser in 2022. If more browser providers and Internet users adopt these settings or delete their cookies more frequently than they currently do, our practices related to the validation of limited online purchases could be impacted, which could result in us needing to implement other available methodologies. Some government regulators and privacy advocates have suggested creating a "Do Not Track" standard that would allow Internet users to express a preference, independent of cookie settings in their browser, not to have website browsing recorded. If Internet users adopt a "Do Not Track" browser setting and the standard either gets imposed by state or federal legislation or agreed upon by standard-setting groups, it may curtail or prohibit us from using non-personal data as we currently do. This could hinder growth of marketing on the Internet generally and cause us to change our business practices and adversely affect our business, financial condition and operating results. In addition, browser manufacturers could replace cookies with their own product and require us to negotiate and pay them for use of such product to record information about Internet users' interactions with our marketers, which may not be available on commercially reasonable terms, or at all.

Failure to protect our proprietary technology and intellectual property rights could substantially harm our business, financial condition and operating results.

Our future success and competitive position depend in part on our ability to protect our intellectual property and proprietary technologies. To safeguard these rights, we rely on a combination of patent, trademark, copyright and trade secret laws and contractual protections in the U.S. and other jurisdictions, all of which provide only limited protection and may not now or in the future provide us with a competitive advantage.

As of the date of filing, we had eight issued patents relating to our software. We cannot assure you that any patents will issue from any patent applications, that patents that issue from such applications will give us the protection that we seek or that any such patents will not be challenged, invalidated, or circumvented. Any patents that may issue in the future from our pending or future patent applications may not provide sufficiently broad protection and may not be enforceable in actions against alleged infringements. We have registered, or are registering, the "Cardlytics," "Dosh," "Bridg" and "Entertainment" names and logos in the U.S. and certain other countries. We have registrations and/or pending applications for additional marks in the U.S. and other countries; however, we cannot assure you that any future trademark registrations will be issued for pending or future applications or that any registered trademarks will be enforceable or provide adequate protection of our proprietary rights. We also license software from third parties for integration into our products, including open source software and other software available on commercially reasonable terms. We cannot assure you that such third parties will maintain such software or continue to make it available.

In order to protect our unpatented proprietary technologies and processes, we rely on trade secret laws and confidentiality agreements with our employees, consultants, vendors and others. Despite our efforts to protect our proprietary technology and trade secrets, unauthorized parties may attempt to misappropriate, reverse engineer or otherwise obtain and use them. Bank of America also has a right to purchase some of the source code underlying the Cardlytics platform upon the occurrence of specified events, which could compromise the proprietary nature of the Cardlytics platform and/or allow Bank of America to discontinue the use of our solutions. Additionally, other FIs have a right to obtain the source code underlying Cardlytics Ad Server through the release of source code held in escrow upon the occurrence of specified events, which could compromise the proprietary nature of the Cardlytics platform and/or allow these FIs to discontinue the use of our solutions.

In addition, others may independently discover our trade secrets, in which case we would not be able to assert trade secret rights or develop similar technologies and processes. Further, the contractual provisions that we enter into may not prevent unauthorized use or disclosure of our proprietary technology or intellectual property rights and may not provide an adequate remedy in the event of unauthorized use or disclosure of our proprietary technology or intellectual property rights. Moreover, policing unauthorized use of our technologies, trade secrets and intellectual property is difficult, expensive and time-consuming, particularly in foreign countries where the laws may not be as protective of intellectual property rights as those in the U.S. and where mechanisms for enforcement of intellectual property rights may be weak. We may be unable to determine the extent of any unauthorized use or infringement of our solutions, technologies or intellectual property rights.

From time to time, legal action by us may be necessary to enforce our patents and other intellectual property rights, to protect our trade secrets, to determine the validity and scope of the intellectual property rights of others or to defend against claims of infringement or invalidity. Such legal action could result in substantial costs and diversion of resources and could negatively affect our business, financial condition and operating results.

Assertions by third parties of infringement or other violations by us of their intellectual property rights, whether or not correct, could result in significant costs and harm our business, financial condition and operating results.

Patent and other intellectual property disputes are common in our industry. We have in the past and may in the future be subject to claims alleging that we have misappropriated, misused, or infringed other parties' intellectual property rights. Some companies, including certain of our competitors, own larger numbers of patents, copyrights and trademarks than we do, which they may use to assert claims against us. Third parties may also assert claims of intellectual property rights infringement against our partners, whom we are typically required to indemnify. As the numbers of solutions and competitors in our market increases and overlap occurs, claims of infringement, misappropriation and other violations of intellectual property rights may increase. Any claim of infringement, misappropriation or other violation of intellectual property rights by a third-party, even those without merit, could cause us to incur substantial costs defending against the claim and could distract our management from our business.

The patent portfolios of our most significant competitors are larger than ours. This disparity may increase the risk that they may sue us for patent infringement and may limit our ability to counterclaim for patent infringement or settle through patent cross-licenses. In addition, future assertions of patent rights by third parties, and any resulting litigation, may involve patent holding companies or other adverse patent owners who have no relevant product revenues and against whom our own patents may therefore provide little or no deterrence or protection. There can be no assurance that we will not be found to infringe or otherwise violate any third-party intellectual property rights or to have done so in the past.

An adverse outcome of a dispute may require us to:

- pay substantial damages, including treble damages, if we are found to have willfully infringed a third-party's patents or copyrights;
- cease developing or selling solutions that rely on technology that is alleged to infringe or misappropriate the intellectual property of others;
- expend additional development resources to attempt to redesign our solutions or otherwise develop non-infringing technology, which may not be successful;
- enter into potentially unfavorable royalty or license agreements in order to obtain the right to use necessary technologies or intellectual property rights; and
- indemnify our partners and other third parties.

In addition, royalty or licensing agreements, if required or desirable, may be unavailable on terms acceptable to us, or at all, and may require significant royalty payments and other expenditures. Some licenses may also be non-exclusive, and therefore our competitors may have access to the same technology licensed to us. Any of the foregoing events could seriously harm our business, financial condition and operating results.

Our use of open source software could negatively affect our ability to sell our solutions and subject us to possible litigation.

We use open-source software to deliver our solutions and expect to continue to use open-source software in the future. Some of these open-source licenses may require that source code subject to the license be made available to the public and that any modifications or derivative works to open-source software continue to be licensed under open source licenses. This may require that we make certain proprietary code available under an open-source license. We may face claims from others claiming ownership of, or seeking to enforce the license terms applicable to, such open source software, including by demanding release of the open source software, derivative works or our proprietary source code that was developed using such software. Few of the licenses applicable to open-source software have been interpreted by courts, and there is a risk that these licenses could be construed in a manner that could impose unanticipated conditions or restrictions on our ability to commercialize our products. These claims could also result in litigation, require us to purchase costly licenses or require us to devote additional research and development resources to change the software underlying our solutions, any of which would have a negative effect on our business, financial condition and operating results and may not be possible in a timely manner. We and our customers may also be subject to suits by parties claiming infringement due to the reliance by our solutions on certain open-source software, and such litigation could be costly for us to defend or subject us to an injunction. In addition, if the license terms for the open-source code change, we may be forced to re-engineer our software or incur additional costs. Finally, we cannot assure you that we have not incorporated open-source software into the software underlying our solutions in a manner that may subject our proprietary software to an open-source license that requires disclosure, to customers or the public, of the source code to such proprietary software. In the event that portions of our proprietary technology are determined to be subject to an open source license, we could be required to publicly release portions of our source code, re-engineer all or a portion of our technologies, or otherwise be limited in the licensing of our technologies, each of which could reduce or eliminate the value of our solutions and technologies and materially and adversely affect our ability to sustain and grow our business. Many open-source licenses also limit our ability to bring patent infringement lawsuits against open-source software that we use without losing our right to use such open-source software. Therefore, the use of open-source software may limit our ability to bring patent infringement lawsuits, to the extent we ever have any patents that cover open-source software that we use.

We are subject to government regulation, including import, export, economic sanctions and anti-corruption laws and regulations that may expose us to liability and increase our costs.

Various of our products are subject to U.S. export controls, including the U.S. Department of Commerce's Export Administration Regulations and economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls. These regulations may limit the export of our products and provision of our solutions outside of the U.S., or may require export authorizations, including by license, a license exception or other appropriate government authorizations, including annual or semi-annual reporting. Export control and economic sanctions laws may also include prohibitions on the sale or supply of certain of our products to embargoed or sanctioned countries, regions, governments, persons and entities. In addition, various countries regulate the importation of certain products, through import permitting and licensing requirements, and have enacted laws that could limit our ability to distribute our products. The exportation, reexportation, and importation of our products and the provision of solutions, including by our partners, must comply with these laws or else we may be adversely affected, through reputational harm, government investigations, penalties and a denial or curtailment of our ability to export our products or provide solutions. Complying with export control and sanctions laws may be time consuming and may result in the delay or loss of sales opportunities. Although we take precautions to prevent our products from being provided in violation of such laws, our products may have previously been, and could in the future be, provided inadvertently in violation of such laws, despite the precautions we take. If we are found to be in violation of U.S. sanctions or export control laws, it could result in substantial fines and penalties for us and for the individuals working for us. Changes in export or import laws or corresponding sanctions, may delay the introduction and sale of our products in international markets, or, in some cases, prevent the export or import of our products to certain countries, regions, governments, persons or entities altogether, which could adversely affect our business, financial condition and results of operations.

We are also subject to various domestic and international anti-corruption laws, such as the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act, as well as other similar anti-bribery and anti-kickback laws and regulations. These laws and regulations generally prohibit companies and their employees and intermediaries from authorizing, offering or providing improper payments or benefits to officials and other recipients for improper purposes. We rely on certain third parties to support our sales and regulatory compliance efforts and can be held liable for their corrupt or other illegal activities, even if we do not explicitly authorize or have actual knowledge of such activities. Although we take precautions to prevent violations of these laws, our exposure for violating these laws increases as our international presence expands and as we increase sales and operations in foreign jurisdictions.

Risks Related to Ownership of Our Common Stock

The market price of our common stock has been and is likely to continue to be volatile.

The market price of our common stock may be highly volatile and may fluctuate substantially as a result of a variety of factors, some of which are related in complex ways. Since shares of our common stock were sold in our initial public offering in February 2018 at a price of \$13.00 per share, our stock price has ranged from an intraday low of \$3.50 to an intraday high of \$161.47 through February 28, 2023. Factors that may affect the market price of our common stock include:

- actual or anticipated fluctuations in our financial condition and operating results;
- variance in our financial performance from expectations of securities analysts or investors;
- changes in the prices of our solutions;
- changes in laws or regulations applicable to our solutions;
- announcements by us or our competitors of significant business developments, acquisitions or new offerings;
- our involvement in litigation;
- our sale of our common stock or other securities in the future;
- changes in senior management or key personnel;
- trading volume of our common stock;
- changes in the anticipated future size and growth rate of our market; and
- general economic, regulatory and market conditions.

Recently, the stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies, including our own, due to, among other factors, the actions of market participants or other actions outside of our control, including general market volatility caused by expected interest rate changes, inflation and the COVID-19 pandemic. These fluctuations have often been unrelated or disproportionate to the operating performance of those companies. Broad market and industry fluctuations, as well as general economic, political, regulatory and market conditions, may negatively impact the market price of our common stock. In the past, companies that have experienced volatility in the market price of their securities have been subject to securities class action litigation. We may be the target of this type of litigation in the future, which could result in substantial costs and divert our management's attention.

We do not intend to pay dividends for the foreseeable future and, as a result, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We have never declared or paid any cash dividends on our common stock and do not intend to pay any cash dividends in the foreseeable future. We anticipate that we will retain all of our future earnings for use in the development of our business and for general corporate purposes. Any determination to pay dividends in the future will be at the discretion of our board of directors. Accordingly, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us more difficult, limit attempts by our stockholders to replace or remove our current management and limit the market price of our common stock.

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws may have the effect of delaying or preventing a change in control or changes in our management. Our amended and restated certificate of incorporation and amended and restated bylaws include provisions that:

- authorize our board of directors to issue preferred stock without further stockholder action and with voting liquidation, dividend and other rights superior to our common stock;
- require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent, and limit the ability of our stockholders to call special meetings;
- establish an advance notice procedure for stockholder proposals to be brought before an annual meeting, including proposed nominations of persons for director nominees;
- establish that our board of directors is divided into three classes, with directors in each class serving three-year staggered terms;

- require the approval of holders of two-thirds of the shares entitled to vote at an election of directors to adopt, amend or repeal our amended and restated bylaws or amend or repeal the provisions of our amended and restated certificate of incorporation regarding the election and removal of directors and the ability of stockholders to take action by written consent or call a special meeting;
- prohibit cumulative voting in the election of directors; and
- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally prohibits a Delaware corporation from engaging in any of a broad range of business combinations with any “interested” stockholder for a period of three years following the date on which the stockholder became an “interested” stockholder. Any of the foregoing provisions could limit the price that investors might be willing to pay in the future for shares of our common stock, and they could deter potential acquirers of our company, thereby reducing the likelihood that you would receive a premium for your shares of our common stock in an acquisition.

Our amended and restated certificate of incorporation designates the Court of Chancery of the State of Delaware as the exclusive forum for certain litigation that may be initiated by our stockholders, which could limit our stockholders’ ability to obtain a favorable judicial forum for disputes with us.

Pursuant to our amended and restated certificate of incorporation, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for the following types of actions or proceedings under Delaware statutory or common law. (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (3) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, our amended and restated certificate of incorporation or our amended and restated bylaws or (4) any action asserting a claim governed by the internal affairs doctrine. However, this exclusive forum provision would not apply to suits brought to enforce a duty or liability created by the Securities Act or the Exchange Act. The forum selection clause in our amended and restated certificate of incorporation may limit our stockholders’ ability to obtain a favorable judicial forum for disputes with us.

General Risk Factors

Natural or man-made disasters, pandemics and other similar events may significantly disrupt our business, and negatively impact our business, financial condition and operating results.

A significant public health crisis, epidemic or pandemic (including the ongoing COVID-19 pandemic), or a natural disaster, such as an earthquake, fire or a flood, or a significant power outage could have a material adverse impact on our business, operating results and financial condition. A significant portion of our employee base, operating facilities and infrastructure are centralized in Atlanta, Georgia. Any of our facilities may be harmed or rendered inoperable by natural or man-made disasters, including earthquakes, tornadoes, hurricanes, wildfires, floods, nuclear disasters, acts of terrorism or other criminal activities, infectious disease outbreaks and power outages, which may render it difficult or impossible for us to operate our business for some period of time. Our facilities would likely be costly to repair or replace, and any such efforts would likely require substantial time. Any disruptions in our operations could negatively impact our business, financial condition and operating results, and harm our reputation. In addition, we may not carry business insurance or may not carry sufficient business insurance to compensate for losses that may occur. Any such losses or damages could have a material adverse effect on our business, financial condition and operating results. In addition, the facilities of significant marketers, partners or third-party data providers may be harmed or rendered inoperable by such natural or man-made disasters, which may cause disruptions, difficulties or material adverse effects on our business.

An active trading market for our common stock may not develop or be sustained.

Although our common stock is listed on the Nasdaq Global Market, we cannot assure you that an active trading market for our shares will be sustained. If an active market for our common stock is not sustained, it may be difficult for investors in our common stock to sell shares without depressing the market price for the shares or to sell the shares at all.

Future sales of our common stock in the public market could cause our share price to decline.

Sales of a substantial number of shares of our common stock in the public market, or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that sales, particularly sales by our directors, executive officers, and significant stockholders, may have on the prevailing market price of our common stock. All of our outstanding shares of common stock are available for sale in the public market, subject only to the restrictions of Rule 144 under the Securities Act in the case of our affiliates. In addition, the shares of common stock subject to outstanding options under our equity incentive plans and the shares reserved for future issuance under our equity incentive plans, as well as shares issuable upon vesting of restricted stock unit awards, will become eligible for sale in the public market in the future, subject to certain legal and contractual limitations. In addition, certain holders of our common stock have the right, subject to various conditions and limitations, to request we include their shares of our common stock in registration statements we may file relating to our securities.

We may issue common stock or other securities if we need to raise additional capital. The number of new shares of our common stock issued in connection with raising additional capital could constitute a material portion of our then-outstanding shares of our common stock.

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

The trading market for our common stock will depend, in part, on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. If our financial performance fails to meet analyst estimates or one or more of the analysts who cover us downgrade our stock or change their opinion of our business or market value, our share price would likely decline. If one or more of these analysts cease providing coverage of us or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our share price or trading volume to decline.

Our reported financial results may be adversely affected by changes in accounting principles generally accepted in the U.S.

Generally accepted accounting principles in the U.S. are subject to interpretation by the Financial Accounting Standards Board ("FASB"), the SEC, and various bodies formed to promulgate and interpret appropriate accounting principles. A change in these principles or interpretations could have a significant effect on our reported financial results and could affect the reporting of transactions completed before the announcement of a change.

We have incurred and will continue to incur increased costs as a result of being a public company.

As a public company, we have incurred and will continue to incur significant legal, accounting and other expenses that we did not incur as a private company. The Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of the Nasdaq Stock Market and other applicable securities rules and regulations impose various requirements on public companies. We expect that compliance with these requirements will continue to increase certain of our expenses and make some activities more time-consuming than they have been in the past when we were a private company. Such additional costs going forward could negatively affect our financial results.

Our business and operations could be negatively affected if we become subject to any securities litigation or stockholder activism.

Our business and operations could be negatively affected if we become subject to any securities litigation or stockholder activism, which could cause us to incur significant expenses, hinder the execution of our business and growth strategy and impact the price of our common stock.

In the past, securities class action litigation often has been brought against companies following a decline in the market price of such companies' securities. In addition, stockholder activism, which could take many forms and arise in a variety of situations, has been increasing recently, and new universal proxy rules could significantly lower the cost and further increase the ease and likelihood of stockholder activism. This risk is especially relevant for us as a result of the significant stock price volatility experienced by technology companies in recent years. Volatility in our stock price or other reasons may in the future cause us to become the target of securities litigation or stockholder activism. Securities litigation and stockholder activism, including potential proxy contests, could result in substantial costs, including significant legal fees and other expenses, and divert our management and board of directors' attention and resources from our business. Additionally, securities litigation and stockholder activism could give rise to perceived uncertainties as to our future, adversely affect our relationships with customers and business partners, adversely affect our reputation, and make it more difficult to attract and retain qualified personnel. Our stock price could also be subject to significant fluctuation or otherwise be adversely affected by the events, risks and uncertainties of any securities litigation and stockholder activism.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our principal executive offices are located in Atlanta, Georgia where we occupy a facility of approximately 77,000 square feet. Our lease expires in April 2025. We have additional offices in New York, NY; Palo Alto, CA; Austin, TX; Los Angeles, CA; Detroit, MI; Champaign, IL; and London, U.K. We believe that our facilities are sufficient for our current needs and that, should it be needed, additional facilities will be available to accommodate the expansion of our business.

ITEM 3. LEGAL PROCEEDINGS

From time to time we may become involved in legal proceedings or be subject to claims arising in the ordinary course of our business. We are currently in a dispute with the Bridg Stockholder Representative regarding the amount of the First Anniversary Payment. Please refer to Note 4—Business Combinations to our consolidated financial statements included elsewhere in this Form 10-K for further discussion. Other than this dispute, we are not presently a party to any legal proceedings that, if determined adversely to us, would individually or taken together have a material adverse effect on our business, operating results, financial condition or cash flows. 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.

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

Our common stock is listed on the Nasdaq Global Market under the symbol "CDLX."

Holdings of Record

As of February 28, 2023, there were approximately 104 stockholders of record of our common stock. Because many of our shares are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these record holders.

Recent Issuances of Unregistered Securities

In connection with our acquisition of Entertainment, in January 2023 we issued 22,549 shares of our common stock to former equityholders of Entertainment who were "accredited investors," as that term is defined in the Securities Act in reliance on the exemption from registration afforded by Section 4(a)(2) of the Securities Act and Rule 506 of Regulation D promulgated under the Securities Act and corresponding provisions of state securities or "blue sky" laws. Each of the Entertainment equityholders receiving shares as part of the acquisition represented that they were acquiring such shares for investment only and not with a view towards, or for resale in connection with, the public sale or distribution thereof. Such shares have not been registered under the Securities Act and such securities may not be offered or sold in the United States absent registration or an exemption from registration under the Securities Act and any applicable state securities laws.

Issuer Purchases of Equity Securities

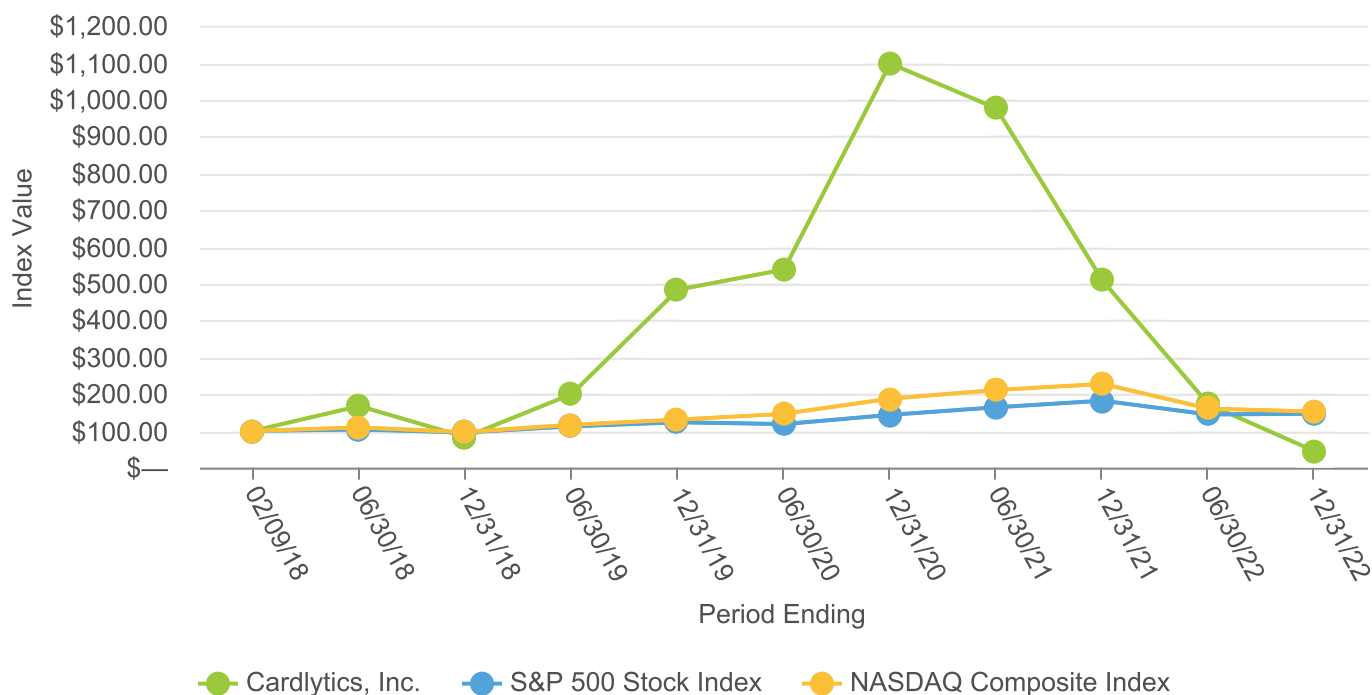
None.

Stock Performance Graph

This performance graph shall not be deemed "filed" with the SEC for purposes of Section 18 of the Exchange Act, or incorporated by reference into any filing of Cardlytics, Inc. under the Securities Act.

The following performance graph compares the performance of our common stock with the performance of the Standard & Poor's 500 Stock Index and the Nasdaq Composite Index, from February 9, 2018, the date our common stock commenced trading on the Nasdaq Global Market, through December 31, 2022. The graph plots the changes in value of an initial \$100 investment over the indicated time period, assuming all dividends are reinvested. The graph uses our initial public offering price on February 9, 2018 of \$13.00 per share as the initial value of our common stock. The stock price performance in this graph is not necessarily indicative of future stock price performance.

CDLX Performance Graph



ITEM 6. [RESERVED]

ITEM 7. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and the related notes and other financial information included elsewhere in this Annual Report. Some of the information contained in this discussion and analysis or set forth elsewhere in this Annual Report, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. You should review Item 1A. “Risk Factors” and “Special Note Regarding Forward-Looking Statements” in this Annual Report for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

Our company's mission is to make commerce smarter and rewarding for everyone. We work to accomplish this mission by operating an advertising platform within our own and our partners' digital channels, which include online, mobile applications, email, and various real-time notifications (the "Cardlytics platform"). We also operate a customer data platform that utilizes point-of-sale ("POS") data, including product-level purchase data, to enable marketers, in a privacy-protective manner, to perform analytics and targeted loyalty marketing and also enable marketers to measure the impact of their marketing (the "Bridg platform"). The partners for the Cardlytics platform are predominantly financial institutions ("FI partners"), that provide us with access to their anonymized purchase data and digital banking customers. The partners for the Bridg platform predominantly are merchants ("merchant data partners") that provide us with access to their POS data, including product-level purchase data. By applying advanced analytics to the purchase data we receive, we make it actionable, helping marketers, reach potential buyers at scale, and measure the true sales impact of their marketing spend. We have strong relationships with leading marketers across a variety of industries, including retail, restaurant, travel and entertainment, direct-to-consumer, and grocery and gas.

Working with a marketer, we design a campaign that targets consumers based on their purchase history. The consumer is offered an incentive to make a purchase from the marketer within a specified period. We use a portion of the fees that we collect from marketers to provide these consumer incentives to customers after they make qualifying purchases ("Consumer Incentives"). We report our revenue on our consolidated statements of operations net of Consumer Incentives since we do not provide the goods or services that are purchased by customers from the marketers to which the Consumer Incentives relate.

We pay certain partners a negotiated and fixed percentage of our billings to marketers less any Consumer Incentives that we pay to customers and certain third-party data costs ("Partner Share"). We report our revenue gross of Partner Share. Partner Share costs are included in Partner Share and other third-party costs in our consolidated statements of operations, rather than as a reduction of revenue, because we and not our partners act as the principal in our arrangements with marketers.

We run campaigns offering compelling Consumer Incentives to drive an expected rate of return on advertising spend for marketers. At times, we may collaborate with a partner to enhance the level of Consumer Incentives to their respective customers, funded by their Partner Share. We believe that these investments by our partners positively impact our platforms by making their customers more highly engaged with our platforms. However, these investments negatively impact our GAAP revenue, which is reported net of Consumer Incentives.

Revenue, which is reported net of Consumer Incentives and gross of Partner Share and other third-party costs, was \$267.1 million and \$298.5 million for the years ended December 31, 2021 and 2022, respectively, representing an increase of 12%. Billings, a non-GAAP measure that represents the gross amount billed to marketers and is reported gross of both Consumer Incentives and Partner Share, was \$394.1 million and \$442.5 million for the years ended December 31, 2021 and 2022, respectively, representing an increase of 12%. Gross profit, which represents revenue less Partner Share and other third-party costs and less delivery costs, was \$103.3 million and \$112.6 million for the years ended December 31, 2021 and 2022, respectively, representing an increase of 9%. Adjusted contribution, a non-GAAP measure that represents our revenue less our adjusted Partner Share and other third-party costs, was \$129.6 million and \$143.0 million for the years ended December 31, 2021 and 2022, respectively, representing an increase of 10%.

Billings and adjusted contribution are further defined under the heading "Non-GAAP Measures and Other Performance Metrics" below. We believe these non-GAAP measures, alongside our GAAP revenue and GAAP gross profit, provide useful information to investors for period-to-period comparisons of our core business and in understanding and evaluating our results of operations in the same manner as our management and board of directors.

The following table summarizes our results (dollars in thousands):

	Year Ended December 31,		Change		Year Ended December 31,		Change	
	2020	2021	\$	%	2021	2022	\$	%
Billings ⁽¹⁾	\$ 263,355	\$ 394,075	\$130,720	50 %	\$ 394,075	\$ 442,477	\$ 48,402	12 %
Consumer Incentives	76,463	126,959	50,496	66	126,959	143,935	16,976	13
Revenue	186,892	267,116	80,224	43	267,116	298,542	31,426	12
Adjusted Partner Share and other third-party costs ⁽¹⁾	104,710	137,488	32,778	31	137,488	155,507	18,019	13
Adjusted contribution ⁽¹⁾	82,182	129,628	47,446	58	129,628	143,035	13,407	10
Delivery costs	14,310	22,503	8,193	57	22,503	30,403	7,900	35
Deferred implementation costs	4,598	3,785	(813)	(18)	3,785	—	(3,785)	(100)
Gross profit	\$ 63,274	\$ 103,340	\$ 40,066	63 %	\$ 103,340	\$ 112,632	\$ 9,292	9 %
Net loss	\$ (55,422)	\$ (128,565)	\$ (73,143)	132 %	\$ (128,565)	\$ (465,264)	\$ (336,699)	262 %
Adjusted EBITDA ⁽¹⁾	\$ (7,780)	\$ (12,220)	\$ (4,440)	57 %	\$ (12,220)	\$ (45,169)	\$ (32,949)	270 %

(1) Billings, adjusted Partner Share and other third-party costs, adjusted contribution and adjusted EBITDA are non-GAAP measures, as detailed below in our reconciliations of GAAP revenue to billings, GAAP gross profit to adjusted contribution and GAAP net loss to adjusted EBITDA.

During 2020, 2021 and 2022, our net loss was \$55.4 million, \$128.6 million and \$465.3 million, respectively. Our historical losses have been driven by our substantial investments in our purchase intelligence platform and infrastructure, which we believe will enable us to expand the use of our platforms by FI partners, merchant data partners and marketers. On January 7, 2022, we purchased Entertainment, on May 5, 2021, we acquired Bridg, Inc. ("Bridg") and on March 2021 we acquired Dosh Holdings, Inc. ("Dosh"). During 2022, we incurred a \$3.6 million benefit and a \$0.8 million cost in connection with the Bridg and Dosh acquisitions, respectively. During 2020, 2021 and 2022, our net loss included stock-based compensation expense of \$32.4 million, \$50.3 million and \$44.7 million, respectively. During the 2022, we received a benefit due to a reduction of the estimated contingent consideration and brokerage fee related to our Bridg acquisition partially offset by an impairment of goodwill. We also initiated a strategic reduction of our forces in our U.S., U.K., and India operations, including the closure of our Indian office, which resulted restructuring charges of \$1.3 million, \$0.8 million and \$8.1 million during 2020, 2021 and 2022, respectively.

FI Partners

Our FI partners include Bank of America, National Association ("Bank of America"), JPMorgan Chase Bank, National Association ("Chase") and Wells Fargo Bank, National Association ("Wells Fargo"), as well as many other national and regional financial institutions, including several of the largest bank processors and digital banking providers to reach customers of small and mid-sized FIs.

Partner Commitments

During 2020 and 2021, we recognized write offs of deferred implementation costs totaling \$0.7 million and \$1.0 million, respectively, in Partner Share and other third-party costs on our consolidated statements of operations, upon the notification from one of our partners about plans to end the use of certain platform features prior to the end of our contractual arrangement with the partner.

We have a minimum Partner Share commitment to a certain FI partner totaling \$10.0 million over a 12-month period which began on April 1, 2022. To the extent that this commitment is expected to exceed the amount of Partner Share otherwise payable to such FI partner in the absence of such commitment, we accrue any expected shortfall over the commitment period. We accrued for zero and \$3.2 million of expected minimum Partner Share commitment shortfalls as of December 31, 2021 and 2022, respectively.

Restructuring and Reduction of Force

During the first quarter of 2020, we began a strategic shift within our organization to increase productivity and optimize performance. This plan resulted in severance and medical benefits totaling \$1.3 million during the year ended December 31, 2020. These charges are reflected on our consolidated statement of operations for the year ended December 31, 2020, as follows: \$1.1 million in sales and marketing expense, \$0.1 million in general and administrative expense and \$0.1 million in research and development expense.

As a part of our integration efforts with our acquired companies, we continued to evaluate the optimal structure of the combined organization. As a result, during the year ended December 31, 2021 we recognized \$1.2 million in severance and medical benefits related to our acquisitions. These charges are reflected on our consolidated statement of operations within acquisition and integration costs. Additionally, during the year ended December 31, 2021, we recognized \$0.8 million of severance and medical benefits charges related to internal restructuring. These charges are reflected on our consolidated statement of operations as follows: \$0.1 million in delivery costs, \$0.4 million in sales and marketing expense, and \$0.3 million in research and development expense. We recognize these costs when the extent of our actions is determined and the costs can be estimated.

During 2022, we initiated a strategic reduction of our forces in our U.S., U.K., and India operations, including the closure of our Indian office. We also began a strategic shift within our organization to migrate certain data and applications to a cloud computing environment. As part of these initiatives, we recognized severance and medical benefit costs of \$8.1 million. These charges are reflected on our condensed consolidated statement of operations as follows: \$2.1 million in delivery costs, \$1.6 million in sales and marketing expense, \$1.9 million in research and development expense and \$2.5 million in general and administrative expense. Our Indian office was closed on December 31, 2022. As of December 31, 2022, the remaining costs that have been incurred related to our restructuring and reduction of force but not yet paid are \$2.4 million.

Acquisitions

On January 7, 2022, we purchased Entertainment for \$13.0 million in equity at an agreed-upon price of \$66.52 per share, subject to \$1.1 million of fair value adjustments based upon our close date, and \$2.3 million in cash, subject to \$0.4 million of adjustments, for an acquisition date fair value of \$14.6 million.

On May 5, 2021, we completed the acquisition of Bridg for purchase consideration of \$578.9 million. The purchase consideration consisted of a \$350.0 million cash purchase price, subject to \$2.8 million of adjustments and escrows, and contingent consideration with a fair value of \$230.9 million related to additional potential future payments. At least 30% of the potential future payments will be in cash, with the remainder to be paid in cash or our common stock, at our option.

On March 5, 2021, we completed the acquisition of Dosh for purchase consideration of \$277.6 million in a combination of cash and common stock. The total purchase consideration consisted of a \$150.0 million cash purchase price, subject to \$6.6 million of adjustments and escrows, and \$125.0 million of shares of our common stock at an agreed-upon price of \$136.33 per share, subject to \$7.6 million of fair value adjustments based upon our close date, for an acquisition date fair value of \$117.4 million.

Refer to Note 4—Business Combinations to our consolidated financial statements for further information.

Macroeconomic Considerations

Unfavorable conditions in the economy both in the United States and abroad may negatively affect the growth of our business and our results of operations. For example, macroeconomic events, including the COVID-19 pandemic, rising inflation, the U.S. Federal Reserve raising interest rates and the Russia-Ukraine war, have led to economic uncertainty globally. Historically, during periods of economic uncertainty and downturns, businesses may slow spending on advertising, which may impact our business and our customers' businesses.

The effect of macroeconomic conditions may not be fully reflected in our results of operations until future periods. If, however, economic uncertainty increases or the global economy worsens, our business, financial condition and results of operations may be harmed. For further discussion of the potential impacts of macroeconomic events on our business, financial condition, and operating results, see the section titled "Risk Factors."

Non-GAAP Measures and Other Performance Metrics

We regularly monitor a number of financial and operating metrics in order to measure our current performance and estimate our future performance. Our metrics may be calculated in a manner different than similar metrics used by other companies.

	Year Ended December 31,		
	2020	2021	2022
	(Amounts in thousands, except ARPU)		
Cardlytics MAUs	155,784	170,925	186,682
Cardlytics ARPU	\$ 1.20	\$ 1.51	\$ 1.55
Bridg ARR	\$ —	\$ 15,282	\$ 23,129
Billings	\$ 263,355	\$ 394,075	\$ 442,477
Adjusted contribution	\$ 82,182	\$ 129,628	\$ 143,035
Adjusted EBITDA	\$ (7,780)	\$ (12,220)	\$ (45,169)

Cardlytics Monthly Active Users ("MAUs")

We define MAUs as targetable customers or accounts that have logged in and visited online or mobile applications containing offers from, opened an email containing offers from, or redeemed an offer from the Cardlytics platform during a monthly period. We then calculate a monthly average of these MAUs for the periods presented. We believe that MAUs is an indicator of the Cardlytics platform's ability to drive engagement and is reflective of the marketing base that we offer to marketers.

Cardlytics Average Revenue per User ("ARPU")

We define ARPU as the total revenue generated in the applicable period calculated in accordance with generally accepted accounting principles in the United States ("GAAP"), divided by the average number of MAUs in the applicable period. We believe that ARPU is an indicator of the value of our relationships with our FI partners with respect to the Cardlytics platform.

Bridg Annualized Recurring Revenue ("ARR")

Consistent with the Bridg merger agreement, we define ARR as the annualized GAAP revenue of the final month in the period presented for the Bridg platform. ARR should not be considered in isolation from, or as an alternative to, revenue prepared in accordance with GAAP. We believe that ARR is an indicator of the Bridg platform's ability to generate future revenue from existing clients.

Billings

Billings represents the gross amount billed to customers and marketers for services in order to generate revenue. Cardlytics platform billings is recognized gross of both Consumer Incentives and Partner Share. Cardlytics platform GAAP revenue is recognized net of Consumer Incentives and gross of Partner Share. Bridg platform billings is the same as Bridg platform GAAP revenue.

We review billings for internal management purposes. We believe that billings provides useful information to investors for period-to-period comparisons of our core business and in understanding and evaluating our results of operations in the same manner as our management and board of directors. Nevertheless, our use of billings has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for analysis of our financial results as reported under GAAP. Other companies, including companies in our industry that have similar business arrangements, may address the impact of Consumer Incentives differently. You should consider billings alongside our other GAAP financial results.

The following table presents a reconciliation of billings to revenue, the most directly comparable GAAP measure, for each of the periods indicated (in thousands):

	Year Ended December 31, 2020		
	Cardlytics Platform	Bridg Platform	Consolidated
Revenue	\$ 186,892	\$ —	\$ 186,892
Plus:			
Consumer Incentives	76,463	—	76,463
Billings	<u>\$ 263,355</u>	<u>\$ —</u>	<u>\$ 263,355</u>

	Year Ended December 31, 2021		
	Cardlytics Platform	Bridg Platform	Consolidated
Revenue	\$ 258,754	\$ 8,362	\$ 267,116
Plus:			
Consumer Incentives	126,959	—	126,959
Billings	<u>\$ 385,713</u>	<u>\$ 8,362</u>	<u>\$ 394,075</u>

	Year Ended December 31, 2022		
	Cardlytics Platform	Bridg Platform	Consolidated
Revenue	\$ 277,185	\$ 21,357	\$ 298,542
Plus:			
Consumer Incentives	143,935	—	143,935
Billings	<u>\$ 421,120</u>	<u>\$ 21,357</u>	<u>\$ 442,477</u>

Adjusted Contribution

Adjusted contribution measures the degree by which revenue generated from our marketers exceeds the cost to obtain the purchase data and the digital advertising space from our partners. Adjusted contribution demonstrates how incremental revenue on our platforms generates incremental amounts to support our sales and marketing, research and development, general and administration and other investments. Adjusted contribution is calculated by taking our total revenue less our Partner Share and other third-party costs exclusive of deferred implementation costs, which is a non-cash cost. Adjusted contribution does not take into account all costs associated with generating revenue from advertising campaigns, including sales and marketing expenses, research and development expenses, general and administrative expenses and other expenses, which we do not take into consideration when making decisions on how to manage our advertising campaigns.

We use adjusted contribution extensively to measure the efficiency of our advertising platform, make decisions to manage advertising campaigns and evaluate our operational performance. Adjusted contribution is also used to determine the vesting of performance-based equity awards and is used to determine the achievement of quarterly and annual bonuses across our entire global employee base, including executives. We view adjusted contribution as an important operating measure of our financial results. We believe that adjusted contribution provides useful information to investors and others in understanding and evaluating our results of operations in the same manner as our management and board of directors. Adjusted contribution should not be considered in isolation from, or as an alternative to, measures prepared in accordance with GAAP. Adjusted contribution should be considered together with other operating and financial performance measures presented in accordance with GAAP. Also, adjusted contribution may not necessarily be comparable to similarly titled measures presented by other companies. Refer to Note 15—Segments to our consolidated financial statements for further details on our adjusted contribution by segment.

The following table presents a reconciliation of adjusted contribution to gross profit, the most directly comparable GAAP measure, for each of the periods indicated (in thousands):

	Year Ended December 31, 2020		
	Cardlytics Platform	Bridg Platform	Consolidated
Revenue	\$ 186,892	\$ —	\$ 186,892
Minus:			
Partner Share and other third-party costs	109,308	—	109,308
Delivery costs ⁽¹⁾	14,310	—	14,310
Gross profit	63,274	—	63,274
Plus:			
Delivery costs ⁽¹⁾	14,310	—	14,310
Deferred implementation costs ⁽²⁾	4,598	—	4,598
Adjusted contribution	<u>\$ 82,182</u>	<u>\$ —</u>	<u>\$ 82,182</u>

(1) Stock-based compensation expense recognized in consolidated delivery costs totaled \$1.2 million during 2020.

(2) Deferred implementation costs is excluded from adjusted Partner Share and other third-party costs as follows (in thousands):

	Year Ended December 31, 2020		
	Cardlytics Platform	Bridg Platform	Consolidated
Partner Share and other third-party costs	\$ 109,308	\$ —	\$ 109,308
Minus:			
Deferred implementation costs	4,598	—	4,598
Adjusted Partner Share and other third-party costs	<u>\$ 104,710</u>	<u>\$ —</u>	<u>\$ 104,710</u>

Year Ended December 31, 2021

	Cardlytics Platform	Bridg Platform	Consolidated
Revenue	\$ 258,754	\$ 8,362	\$ 267,116
Minus:			
Partner Share and other third-party costs	140,864	409	141,273
Delivery costs ⁽¹⁾	18,111	4,392	22,503
Gross profit	99,779	3,561	103,340
Plus:			
Delivery costs ⁽¹⁾	18,111	4,392	22,503
Deferred implementation costs ⁽²⁾	3,785	—	3,785
Adjusted contribution	<u>\$ 121,675</u>	<u>\$ 7,953</u>	<u>\$ 129,628</u>

(1) Stock-based compensation expense recognized in consolidated delivery costs totaled \$1.9 million during 2021.

(2) Deferred implementation costs is excluded from adjusted Partner Share and other third-party costs as follows (in thousands):

Year Ended December 31, 2021

	Cardlytics Platform	Bridg Platform	Consolidated
Partner Share and other third-party costs	\$ 140,864	\$ 409	\$ 141,273
Minus:			
Deferred implementation costs	3,785	—	3,785
Adjusted Partner Share and other third-party costs	<u>\$ 137,079</u>	<u>\$ 409</u>	<u>\$ 137,488</u>

Year Ended December 31, 2022

	Cardlytics Platform	Bridg Platform	Consolidated
Revenue	\$ 277,185	\$ 21,357	\$ 298,542
Minus:			
Partner Share and other third-party costs	154,204	1,303	155,507
Delivery costs ⁽¹⁾	24,112	6,291	30,403
Gross profit	98,869	13,763	112,632
Plus:			
Delivery costs ⁽¹⁾	24,112	6,291	30,403
Deferred implementation costs ⁽²⁾	—	—	—
Adjusted contribution	<u>\$ 122,981</u>	<u>\$ 20,054</u>	<u>\$ 143,035</u>

(1) Stock-based compensation expense recognized in consolidated delivery costs totaled \$2.7 million during 2022.

(2) Deferred implementation costs is excluded from adjusted Partner Share and other third-party costs as follows (in thousands):

Year Ended December 31, 2022

	Cardlytics Platform	Bridg Platform	Consolidated
Partner Share and other third-party costs	\$ 154,204	\$ 1,303	\$ 155,507
Minus:			
Deferred implementation costs	—	—	—
Adjusted Partner Share and other third-party costs	<u>\$ 154,204</u>	<u>\$ 1,303</u>	<u>\$ 155,507</u>

Adjusted EBITDA

Adjusted EBITDA represents our net loss before income tax benefit; interest expense, net; depreciation and amortization expense; stock-based compensation expense; foreign currency gain (loss); impairment of goodwill and intangible assets; deferred implementation costs; restructuring and reduction of force costs; acquisition and integration costs (benefits); and change in fair value of contingent consideration. We do not consider these excluded items to be indicative of our core operating performance. The items that are non-cash include foreign currency (gain) loss, impairment of goodwill and intangible assets, deferred implementation costs, depreciation and amortization expense, stock-based compensation expense and change in fair value of contingent consideration. Notably, any impacts related to minimum Partner Share commitments in connection with agreements with certain FI partners are not added back to net loss in order to calculate adjusted EBITDA. Adjusted EBITDA is a key measure used by management to understand and evaluate our core operating performance and trends and to generate future operating plans, make strategic decisions regarding the allocation of capital and invest in initiatives that are focused on cultivating new markets for our solution. In particular, the exclusion of certain expenses in calculating adjusted EBITDA facilitates comparisons of our operating performance on a period-to-period basis. Adjusted EBITDA is not a measure calculated in accordance with GAAP.

We believe that adjusted EBITDA provides useful information to investors and others in understanding and evaluating our operating results in the same manner as our management and board of directors. Nevertheless, use of adjusted EBITDA has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for analysis of our financial results as reported under GAAP. Some of these limitations are: (1) adjusted EBITDA does not reflect changes in, or cash requirements for, our working capital needs; (2) adjusted EBITDA does not reflect the potentially dilutive impact of stock-based compensation and equity instruments issued to our FI partners; (3) adjusted EBITDA does not reflect tax payments or receipts that may represent a reduction or increase in cash available to us and (4) other companies, including companies in our industry, may calculate adjusted EBITDA or similarly titled measures differently, which reduces the usefulness of the metric as a comparative measure. Because of these and other limitations, you should consider adjusted EBITDA alongside our net loss and other GAAP financial results.

The following table presents a reconciliation of adjusted EBITDA to net loss, the most directly comparable GAAP measure, for each of the periods indicated (in thousands):

	Year Ended December 31,		
	2020	2021	2022
Net loss	\$ (55,422)	\$ (128,565)	\$ (465,264)
Plus:			
Interest expense, net	3,048	12,563	2,556
Depreciation and amortization	7,826	29,871	37,544
Stock-based compensation expense	32,396	50,264	44,686
Acquisition and integration costs (benefits)	—	24,372	(2,874)
Change in fair value of contingent consideration	—	1,374	(128,174)
Foreign currency (gain) loss	(1,549)	1,267	6,376
Impairment of goodwill and intangible assets	—	—	453,288
Restructuring and reduction of force	1,323	713	8,139
Income tax benefit	—	(7,864)	(1,446)
Deferred implementation costs	4,598	3,785	—
Adjusted EBITDA	<u>\$ (7,780)</u>	<u>\$ (12,220)</u>	<u>\$ (45,169)</u>

The following table presents a reconciliation of adjusted EBITDA to adjusted contribution, the most directly comparable segment income measure, for each of the periods indicated (in thousands):

	Year Ended December 31, 2020		
	Cardlytics Platform	Bridg Platform	Consolidated
Adjusted contribution	\$ 82,182	\$ —	\$ 82,182
Minus:			
Delivery costs	14,310	—	14,310
Sales and marketing expense	45,307	—	45,307
Research and development expense	17,532	—	17,532
General and administration expense	46,532	—	46,532
Stock-based compensation expense	(32,396)	—	(32,396)
Restructuring and reduction of force	(1,323)	—	(1,323)
Adjusted EBITDA	<u>\$ (7,780)</u>	<u>\$ —</u>	<u>\$ (7,780)</u>
	Year Ended December 31, 2021		
	Cardlytics Platform	Bridg Platform	Consolidated
Adjusted contribution	\$ 121,675	\$ 7,953	\$ 129,628
Minus:			
Delivery costs	18,170	4,333	22,503
Sales and marketing expense	62,771	3,225	65,996
Research and development expense	35,393	2,711	38,104
General and administration expense	63,379	2,843	66,222
Stock-based compensation expense	(47,223)	(3,041)	(50,264)
Restructuring and reduction of force	(713)	—	(713)
Adjusted EBITDA	<u>\$ (10,102)</u>	<u>\$ (2,118)</u>	<u>\$ (12,220)</u>
	Year Ended December 31, 2022		
	Cardlytics Platform	Bridg Platform	Consolidated
Adjusted contribution	\$ 122,981	\$ 20,053	\$ 143,034
Minus:			
Delivery costs	24,112	6,290	30,402
Sales and marketing expense	67,830	6,915	74,745
Research and development expense	47,579	6,856	54,435
General and administration expense	79,069	2,377	81,446
Stock-based compensation expense	(43,490)	(1,196)	(44,686)
Restructuring and reduction of force	(8,139)	—	(8,139)
Adjusted EBITDA	<u>\$ (43,980)</u>	<u>\$ (1,189)</u>	<u>\$ (45,169)</u>

Components of Results of Operations

Revenue

We sell our Cardlytics platform solution by entering into agreements directly with marketers or their marketing agencies, generally through the execution of insertion orders. The agreements state the terms of the arrangement, the negotiated fee, payment terms and the fixed period of time of the campaign. We invoice marketers monthly based on the qualifying purchases of our partners' customers as reported by our partners during the month. We report our revenue net of Consumer Incentives and gross of Partner Share and other third-party costs. The Bridg platform generates revenue through the sale of subscriptions to our cloud-based customer-data platform and the delivery of professional services, such as implementation, onboarding and technical support in connection with each subscription. We recognize subscription revenue on a ratable basis over the contract term beginning on the date that our service is made available to the customer.

Cost and Expense

We classify our expenses into the following categories: Partner Share and other third-party costs; delivery costs; sales and marketing expense; research and development expense; general and administrative expense; and depreciation and amortization expense.

Partner Share and Other Third-Party Costs

Partner Share and other third-party costs consist primarily of the Partner Share that we pay our partners, media and data costs, deferred implementation costs incurred pursuant to our agreements with certain partners. To the extent that we use a specific partners' customer's anonymized purchase data in the delivery of our solutions, we generally pay the applicable partner a Partner Share calculated based on the relative contribution of the data provided by the partner to the overall delivery of the services. We expect that our Partner Share and other third-party costs will increase in absolute dollars as a result of our revenue growth.

Delivery Costs

Delivery costs consist primarily of personnel costs of our campaign, data operations and production support teams, including salaries, benefits, bonuses, stock-based compensation and payroll taxes. Delivery costs also include hosting costs, purchased or licensed software costs, outsourcing costs and professional services costs. As we migrate our technology to the cloud, our delivery costs will increase in absolute dollars and if such anticipated revenue growth does not occur, our delivery costs as a percentage of revenue will be adversely affected. Over time, we expect delivery costs will decline as a percentage of revenue.

Sales and Marketing Expense

Sales and marketing expense consists primarily of personnel costs of our sales, account management, marketing and analytics teams, including salaries, benefits, bonuses, commissions, stock-based compensation and payroll taxes. Sales and marketing expense also includes professional fees, marketing programs such as trade shows, marketing materials, public relations, sponsorships and other brand building expenses, as well as outsourcing costs, travel and entertainment expenses and company funded consumer testing expenses for certain marketers that are not current customers. We expect that our sales and marketing expense will increase in absolute dollars as a result of hiring new sales representatives and as we invest to enhance our brand. Over time, we expect sales and marketing expenses will decline as a percentage of revenue.

Research and Development Expense

Research and development expense consists primarily of personnel costs of our information technology ("IT") engineering, IT architecture and product development teams, including salaries, benefits, bonuses, stock-based compensation and payroll taxes. Research and development expense also includes outsourcing costs, software licensing costs, professional fees and travel expenses. We focus our research and development efforts on improving our solutions and developing new ones. We expect research and development expense to increase in absolute dollars as we continue to create new solutions and improve the functionality of our existing solutions.

General and Administrative Expense

General and administrative expense consists of personnel costs of our executive, finance, legal, compliance, IT support and human resources teams, including salaries, benefits, bonuses, stock-based compensation and payroll taxes. General and administrative expense also includes professional fees for external legal, accounting and consulting services, financing transaction costs, facilities costs such as rent and utilities, royalties, bad debt expense, travel expense, property taxes and franchise taxes. We expect that general and administrative expenses will increase on an absolute dollar basis but decrease as a percentage of revenue as we focus on processes, systems and controls to enable our internal support functions to scale with the growth of our business.

Acquisition and Integration Costs

Acquisition costs primarily represent diligence efforts, legal and advisory costs, broker fees and insurance premiums. Integration costs primarily represent integration-related employee compensation, advisory costs, and travel costs.

Change in Fair Value of Contingent Consideration

Our acquisition of Bridg includes a component of contingent consideration to be paid to the sellers if certain performance levels are achieved by Bridg over a specific period of time. Contingent consideration is initially recorded at fair value on the acquisition date based, in part, on a range of estimated probabilities for achievement of these performance levels. The fair value is periodically adjusted as actual performance levels become known and updates are made to the estimated probabilities for future performance. A gain or loss is recognized in the income statement for fair value adjustments. If we make additional acquisitions, it is possible that we will incur gains or losses in the future due to the change in the fair value of contingent consideration.

Impairment of Goodwill and Intangible Assets

Intangible assets are recorded at fair value on the date of acquisition and amortized over their estimated useful lives. We evaluate the recoverability of our finite-lived intangible assets and other long-lived assets whenever events or substantive changes in circumstances indicate that the carrying amount may not be recoverable. The impairment analysis involves determining whether the estimated fair value of each intangible asset exceeds its carrying amount. Our estimation of the fair value of definite lived intangible assets include the use of discounted cash flow analyses which reflected estimates of future revenue, customer attrition rates, royalty rates, cash flows, and discount rates.

Goodwill represents the purchase consideration of an acquired business that exceeds the fair value of the net tangible and identifiable intangible assets. Goodwill is evaluated for impairment by reporting unit annually in the fourth quarter, specifically October 1, and whenever events or changes in circumstances indicate the carrying value of goodwill may not be recoverable. Triggering events that may indicate impairment include, but are not limited to, a significant adverse change in customer demand or business climate or a significant decrease in expected cash flows.

Depreciation and Amortization Expense

Depreciation and amortization expense includes depreciation of property and equipment over the estimated useful life of the applicable asset as well as amortization of acquired intangible assets, deferred patent costs and capitalized internal-use software development costs.

Interest Expense, Net

Interest expense, net consists of interest incurred on our debt facilities, as well as related discount amortization and financing costs, partially offset by interest income on our cash balances.

Foreign Currency Gain (Loss)

Foreign currency gain (loss) consists primarily of gains and losses on foreign currency transactions.

Income Tax Benefit

We have generated losses before income taxes in the U.S., U.K. and most U.S. state income tax jurisdictions. We have generated historical net losses and recorded a full valuation allowance against our net deferred tax assets, and we expect to maintain a full valuation allowance in the near term. Realization of any of our net deferred tax assets depends upon future earnings, the timing and amount of which are uncertain. For the periods presented, income tax benefit represents the release of a portion of our valuation allowance in connection with deferred tax liabilities arising from our acquisitions of Dosh and Bridg.

Results of Operations

The following table sets forth our consolidated statements of operations (in thousands):

	Year Ended December 31,		
	2020	2021	2022
Revenue	\$ 186,892	\$ 267,116	\$ 298,542
Costs and expenses:			
Partner Share and other third-party costs	109,308	141,273	155,507
Delivery costs	14,310	22,503	30,403
Sales and marketing expense	45,307	65,996	74,745
Research and development expense	17,532	38,104	54,435
General and administrative expense	46,532	66,222	81,446
Acquisition and integration costs (benefits)	—	24,372	(2,874)
Impairment of goodwill and intangible assets	—	—	453,288
Change in fair value of contingent consideration	—	1,374	(128,174)
Depreciation and amortization expense	7,826	29,871	37,544
Total costs and expenses	<u>240,815</u>	<u>389,715</u>	<u>756,320</u>
Operating loss	<u>(53,923)</u>	<u>(122,599)</u>	<u>(457,778)</u>
Other (expense) income:			
Interest expense, net	(3,048)	(12,563)	(2,556)
Foreign currency gain (loss)	1,549	(1,267)	(6,376)
Total other expense	<u>(1,499)</u>	<u>(13,830)</u>	<u>(8,932)</u>
Loss before income taxes	<u>(55,422)</u>	<u>(136,429)</u>	<u>(466,710)</u>
Income tax benefit	—	7,864	1,446
Net loss	<u>\$ (55,422)</u>	<u>\$ (128,565)</u>	<u>\$ (465,264)</u>

Comparison of Years Ended December 31, 2022 and 2021

In this section, we discuss the results of our operations for the year ended December 31, 2022 compared to the year ended December 31, 2021. For a discussion of the year ended December 31, 2021 compared to the year ended December 31, 2020, please refer to Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K and Form 10-K/A for the year ended December 31, 2021.

Revenue

	Year Ended December 31,		Change	
	2021	2022	\$	%
	(dollars in thousands)			
Billings	\$ 394,075	\$ 442,477	\$ 48,402	12 %
Consumer Incentives	126,959	143,935	16,976	13 %
Revenue	\$ 267,116	\$ 298,542	\$ 31,426	12 %
% of billings	68 %	67 %		

The \$31.4 million increase in revenue during 2022 compared to 2021 was comprised of a \$48.4 million increase in billings, offset by a \$17.0 million increase in Consumer Incentives. The billings increase was comprised of a \$6.9 million net increase in sales to existing marketers and a \$41.5 million increase in sales to new marketers in 2022. Consumer Incentives grew at a higher rate than billings during 2022 compared to 2021 primarily as a result of changes in advertiser mix and Consumer Incentives funded by partners through a reduction in Partner Share.

Costs and Expenses

Partner Share and Other Third-Party Costs

	Year Ended December 31,		Change	
	2021	2022	\$	%
	(dollars in thousands)			
Partner Share and other third-party costs:				
Adjusted Partner Share and other third-party costs	\$ 137,488	\$ 155,507	\$ 18,019	13 %
Deferred implementation costs	3,785	—	(3,785)	(100)
Total Partner Share and other third-party costs	\$ 141,273	\$ 155,507	\$ 14,234	10 %
% of revenue	53 %	52 %		

Partner Share and other third-party costs increased by \$14.2 million during 2022 compared to 2021 primarily due to increase in billings partially offset by an increase in Consumer Incentives funded by partner through a reduction of Partner Share. Deferred implementation costs decreased by \$3.8 million during 2022 compared to 2021 primarily due to the end of the useful lives of certain platform enhancements.

Delivery Costs

	Year Ended December 31,		Change	
	2021	2022	\$	%
	(dollars in thousands)			
Delivery costs excluding stock-based compensation expense and restructuring and reduction of force	\$ 20,554	\$ 25,860	\$ 5,306	26 %
Plus:				
Stock-based compensation expense	1,865	2,682	817	44
Restructuring and reduction of force	84	1,861	1,777	n/a
Total delivery costs	\$ 22,503	\$ 30,403	\$ 7,900	35 %
% of revenue	8 %	10 %		

Delivery costs increased by \$7.9 million during 2022 compared to 2021. Delivery costs excluding stock-based compensation and restructuring and reduction of force increased by \$5.3 million primarily due to a \$2.9 million increase in hosting-related IT costs, a \$1.8 million increase due to costs from our acquired businesses, a \$0.5 million increase in personnel costs associated with additional headcount and a \$0.1 million increase due to facilities expense.

Sales and Marketing Expense

	Year Ended December 31,		Change	
	2021	2022	\$	%
	(dollars in thousands)			
Sales and marketing expense excluding stock-based compensation expense and restructuring and reduction of force	\$ 51,849	\$ 60,671	\$ 8,822	17 %
Plus:				
Stock-based compensation expense	13,780	11,935	(1,845)	(13)
Restructuring and reduction of force	367	2,139	1,772	n/a
Total sales and marketing expense	\$ 65,996	\$ 74,745	\$ 8,749	13 %
% of revenue	25 %	25 %		

Sales and marketing expense increased by \$8.7 million during 2022 compared to 2021. Sales and marketing expense excluding stock-based compensation and restructuring and reduction of force increased by \$8.8 million primarily due to a \$6.2 million increase due to costs from our acquired businesses, a \$1.0 million increase in travel expenses, a \$0.8 million increase in personnel costs associated with additional headcount, a \$0.8 million increase in software licensing costs and a \$0.3 million increase due to facility expense, offset by a \$0.3 million decrease in professional fees.

Research and Development Expense

	Year Ended December 31,		Change	
	2021	2022	\$	%
	(dollars in thousands)			
Research and development expense excluding stock-based compensation expense and restructuring and reduction of force	\$ 27,468	\$ 39,573	\$ 12,105	44 %
Plus:				
Stock-based compensation expense	10,328	13,262	2,934	28
Restructuring and reduction of force	308	1,600	1,292	n/a
Total research and development expense	\$ 38,104	\$ 54,435	\$ 16,331	43 %
% of revenue	14 %	18 %		

Research and development expense increased by \$16.3 million during 2022 compared to 2021. Research and development expense excluding stock-based compensation and restructuring and reduction of force increased by \$12.1 million primarily due to a \$8.2 million increase in personnel costs associated with additional headcount, a \$3.5 million increase due to costs from our acquired businesses, a \$1.1 million increase in software licensing costs, a \$0.2 million increase due to facility expense, a \$0.2 million increase due to travel expenses and a \$0.1 million increase due to incentive compensation, partially offset by a \$1.2 million decrease in professional fees.

General and Administrative Expense

	Year Ended December 31,		Change	
	2021	2022	\$	%
	(dollars in thousands)			
General and administrative expense excluding stock-based compensation expense and restructuring and reduction of force	\$ 41,931	\$ 62,168	\$ 20,237	48 %
Plus:				
Stock-based compensation expense	24,291	16,807	(7,484)	(31)
Restructuring and reduction of force	—	2,471	2,471	n/a
Total general and administrative expense	\$ 66,222	\$ 81,446	\$ 15,224	23 %
% of revenue	25 %	27 %		

General and administrative expense increased by \$15.2 million during 2022 compared to 2021. General and administrative expense excluding stock-based compensation and restructuring and reduction of force increased by \$20.2 million primarily due to a \$6.6 million increase due to costs from our acquired businesses, a \$4.6 million increase in personnel costs associated with additional headcount, a \$3.0 million increase in professional fees, \$2.2 million increase in software licensing costs, a \$1.0 million increase in bad debt related to our acquired businesses, a \$0.7 million increase in our insurance premiums, a \$0.5 million increase in marketing expenses, a \$0.5 million increase in tax expense and a \$1.1 million increase due to other expenses including travel, facility expense, professional development and professional fees.

Stock-based Compensation Expense

The following table summarizes the allocation of stock-based compensation in the consolidated statements of operations (dollars in thousands):

	Year Ended December 31,		Change	
	2021	2022	\$	%
Delivery costs	\$ 1,865	\$ 2,682	\$ 817	44 %
Sales and marketing expense	13,780	11,935	(1,845)	(13)
Research and development expense	10,328	13,262	2,934	28
General and administrative expense	24,291	16,807	(7,484)	(31)
Total stock-based compensation expense	\$ 50,264	\$ 44,686	\$ (5,578)	(11)%
% of revenue	19 %	15 %		

Stock-based compensation expense decreased by \$5.6 million during 2022 compared to 2021 primarily due to forfeitures of restricted stock units related to our reduction of force. Refer to Note 10—Stock-based Compensation to our consolidated financial statements for additional information regarding the change in stock compensation expense.

Acquisition and integration costs (benefits)

	Year Ended December 31,		Change	
	2021	2022	\$	%
(dollars in thousands)				
Acquisition and integration costs (benefits)	\$ 24,372	(2,874)	\$ (27,246)	n/a
% of revenue	9 %	(1)%		

Acquisition and integration costs (benefits) decreased by \$27.2 million during 2022 compared to 2021. During 2021 we recognized \$24.4 million of expense primarily due to the acquisitions of Dosh and Bridg. During 2022 we recognized a \$2.9 million benefit primarily due to a reduction in our estimated broker fee related to the contingent consideration for the Bridg acquisition, partially offset by \$0.1 million of costs incurred by the acquisition of Entertainment. Refer to Note 4—Business Combinations to our consolidated financial statements for additional information regarding these acquisitions.

Change in fair value of contingent consideration

	Year Ended December 31,		Change	
	2021	2022	\$	%
(dollars in thousands)				
Change in fair value of contingent consideration	\$ 1,374	\$ (128,174)	\$ (129,548)	n/a
% of revenue	1 %	(43)%		

During 2021, we recognized \$1.4 million of expense due to an increase in the fair value of contingent consideration related to our acquisition of Bridg. During 2022 we recognized a \$128.2 million gain, respectively, in the fair value of contingent consideration related to our acquisition of Bridg. This gain was driven by the mark-to-market reduction in fair value of the 2,068,995 shares of our common stock that we expect to issue to satisfy 70% of the contingent consideration related to the First Anniversary Payment. Refer to Note 12—Fair Value Measurements to our consolidated financial statements for additional information regarding the contingent consideration.

Impairment of goodwill and intangible assets

	Year Ended December 31,		Change	
	2021	2022	\$	%
	(dollars in thousands)			
Impairment of goodwill and intangible assets	\$ —	\$ 453,288	\$ 453,288	n/a
% of revenue	— %	n/a		

During 2022, we recognized \$453.3 million of impairment of goodwill and intangible assets related to the Cardlytics and Bridg Platform. The impairment of goodwill and intangible assets resulted from a continued slowdown in the global economy and decreased consumer spend, and a sustained decline in our stock price. Refer to Note 5—Goodwill and Acquired Intangibles to our condensed consolidated financial statements for additional information regarding the goodwill impairment.

Depreciation and Amortization Expense

	Year Ended December 31,		Change	
	2021	2022	\$	%
	(dollars in thousands)			
Depreciation and amortization expense	\$ 29,871	\$ 37,544	\$ 7,673	26 %
% of revenue	11 %	13 %		

Depreciation and amortization expense increased by \$7.7 million during 2022 compared to 2021 primarily driven by a full year of amortization of intangible assets related to the Dosh and Bridg acquisitions.

Interest Expense, Net

	Year Ended December 31,		Change	
	2021	2022	\$	%
	(dollars in thousands)			
Interest expense	\$ (12,860)	\$ (3,994)	\$ 8,866	(69)%
Interest income	297	1,438	1,141	384
Interest expense, net	\$ (12,563)	\$ (2,556)	\$ 10,007	(80)%
% of revenue	(5)%	(1)%		

Interest expense, net decreased by \$10.0 million during 2022 compared to 2021 primarily driven by reduced amortization of debt discount reflected as interest expense related to the Notes upon the adoption of ASU 2020-06 on January 1, 2022.

Foreign Currency Loss

	Year Ended December 31,		Change	
	2021	2022	\$	%
	(dollars in thousands)			
Foreign currency loss	\$ (1,267)	\$ (6,376)	\$ (5,109)	403 %
% of revenue	— %	(2)%		

Foreign currency loss increased by \$5.1 million during 2022 compared to 2021 primarily due to the decrease in the value of the British pound relative to the U.S. dollar.

Income Tax Benefit

	Year Ended December 31,		Change	
	2021	2022	\$	%
	(dollars in thousands)			
Income tax benefit	\$ 7,864	\$ 1,446	\$ (6,418)	n/a
% of revenue	3 %	— %		

Income tax benefit decreased by \$6.4 million during 2022 compared to 2021 due to the release of a portion of our valuation allowance in connection with deferred tax liabilities arising from our acquisitions of Dosh and Bridg.

Liquidity and Capital Resources

The following table summarizes our cash and cash equivalents, restricted cash, working capital, accounts receivable and contract assets, net and unused available borrowings (in thousands):

	December 31,	
	2021	2022
Cash and cash equivalents	\$ 233,467	\$ 121,905
Restricted cash	95	80
Working capital ⁽¹⁾	31,375	1,098
Accounts receivable and contract assets, net	95	80
Unused available borrowings	50,000	60,000

(1) We define working capital as current assets less current liabilities. See our consolidated financial statements for further details regarding our current assets and current liabilities.

Our cash and cash equivalents are available for working capital purposes. We do not enter into investments for trading purposes, and our investment policy is to invest any excess cash in short-term, highly liquid investments that limit the risk of principal loss. A majority of our cash and cash equivalents are held in fully FDIC-insured demand deposit accounts that distribute funds, and credit risk, over a vast number of financial institutions. Our remaining cash and cash equivalents are held in treasury obligation funds and money market accounts with six financial institutions, which we believe are of high credit quality. As of December 31, 2022, our demand deposit accounts earned up to a 0.50% annual rate of interest. As of December 31, 2022, we had \$3.4 million in cash and cash equivalents in the U.K. While our investment in Cardlytics UK is not considered indefinitely invested, we do not plan to repatriate these funds.

Through December 31, 2022, we have incurred accumulated net losses of \$976.6 million since inception, including losses of \$55.4 million, \$128.6 million and \$465.3 million during 2020, 2021 and 2022, respectively. We expect to incur additional operating losses as we continue our efforts to grow our business. We have historically financed our operations and capital expenditures through convertible note financings, private placements of our redeemable convertible preferred stock, public offerings of our common stock as well as lines of credit and term loans.

On May 5, 2021, we completed the acquisition of Bridg. As a part of this acquisition, we have agreed to make a First Anniversary Payment equal to 20 times the ARR based on the month preceding the anniversary, less \$12.5 million, and a Second Anniversary Payment equal to 15 times the ARR for customers as of the first anniversary based on the month preceding the second anniversary, less the prior ARR at the first anniversary. The Second Anniversary Payment is subject to a specified cap. We have agreed to pay at least 30% of the First Anniversary Payment and the Second Anniversary Payment in cash, with the remainder to be paid in cash or our common stock, at our option. We have determined the First Anniversary Payment to be \$126.4 million and have estimated the Second Anniversary Payment to be \$67.8 million, inclusive of brokerage fees and transaction bonuses. We expect our minimum cash requirements, inclusive of contractual cash broker fees and transaction bonuses, for the First Anniversary Payment and Second Anniversary Payment to be \$43.3 million and \$24.0 million, respectively. We are currently in a dispute with the Bridg Stockholder Representative regarding the amount of the First Anniversary Payment. Refer to Note 4—Business Combinations to our condensed consolidated financial statements for additional information regarding the dispute.

Our other future capital requirements will depend on many factors, including our growth rate, the timing and extent of spending to support research and development efforts, our merger and acquisition efforts, the continued expansion of sales and marketing activities, the enhancement of our platforms, the introduction of new solutions, the continued market acceptance of our solutions and the extent of the impact of COVID-19 on the global economy. We expect to continue to incur operating losses for the foreseeable future and may require additional capital resources to continue to grow our business. We believe that current cash and cash equivalents will be sufficient to fund our operations and capital requirements for at least the next 12 months and in the long-term following the date our consolidated financial statements were issued. However, if our access to capital is restricted or our borrowing costs increase, our operations and financial condition could be materially and adversely impacted. In the event that additional financing is required from outside sources, we may not be able to raise such financing on terms acceptable to us or at all.

Sources of Material Cash Requirements

The following table summarizes our material cash requirements for future periods (in thousands):

	Material Cash Requirements Due by the Year Ended December 31,				
	2023	2024 - 2025	2026 - 2028	Thereafter	Total
Convertible senior notes ⁽¹⁾	\$ 2,300	\$ 4,600	\$ 230,096	\$ —	\$ 236,996
Finance leases ⁽²⁾	39	50	—	—	89
Operating leases ⁽³⁾	5,087	3,605	599	—	9,291
Cash portion of contingent consideration ⁽⁴⁾	67,290	—	—	—	67,290
Purchase obligations ⁽⁵⁾	25,352	362	—	—	25,714
Total	\$ 100,068	\$ 8,617	\$ 230,695	\$ —	\$ 339,380

- (1) Convertible senior notes were issued on September 22, 2020 and have an aggregate principal amount of \$230.0 million bearing interest of 1.00%.
- (2) Finance leases represent principal and interest payments.
- (3) Operating lease obligations represent future minimum lease payments under our non-cancelable operating leases with an initial term in excess of one year.
- (4) Amount represents the estimated fair value of the 30% cash portion of the Bridg First and Second Anniversary Payments, inclusive of \$13.8 million of broker fees and transaction bonuses.
- (5) Purchase obligations include all legally binding contracts such as hardware, software, licenses and legally binding service contracts. Purchase orders that are not binding agreements are excluded from the table above.

The commitment amounts in the table above are associated with contracts that are enforceable and legally binding and that specify all significant terms, including fixed or minimum services to be used, fixed, minimum or variable price provisions, and the approximate timing of the actions under the contracts. The table above does not include obligations under agreements that we can cancel without a significant penalty.

We have a minimum Partner Share commitment to a certain FI partner totaling \$10.0 million over a 12-month period which began on April 1, 2022. To the extent that this commitment is expected to exceed the amount of Partner Share otherwise payable to such FI partner in the absence of such commitment, we accrue any expected shortfall over the commitment period. We accrued for zero and \$3.2 million of expected minimum Partner Share commitment shortfalls as of December 31, 2021 and 2022, respectively.

Sources of Funds

Proceeds from Issuance of Common Stock

On March 5, 2021, we closed a public equity offering in which we sold 3,850,000 shares of common stock at a public offering price of \$130.00 per share. We received total net proceeds of \$484.0 million after deducting underwriting discounts and commissions of \$16.3 million and offering costs of \$0.2 million.

During 2020 and 2021 we also received \$2.2 million and \$2.4 million respectively, in proceeds from the exercise of options and warrants to purchase shares of common stock, respectively.

2020 Convertible Senior Notes

In September 2020, we issued convertible senior notes with an aggregate principal amount of \$230.0 million bearing an interest rate of 1.00% due in 2025 (the "Notes"). The net proceeds from this offering were \$222.7 million, after deducting the initial purchasers' discounts and commissions and the estimated offering expenses payable by us. We used \$26.5 million of the net proceeds to pay the cost of capped call transactions (the "Capped Calls") related to the Notes.

2018 Loan Facility

On April 2022, we amended our 2018 Loan Facility to increase the capacity of our Line of Credit from \$50.0 million to \$60.0 million with an option to increase to \$75.0 million upon syndication. This amendment also extended the maturity date of the 2018 Loan Facility from December 31, 2022 to April 29, 2024. As part of this amendment, the former cash covenant, as described below, was removed and was replaced with a requirement to maintain a minimum level of adjusted contribution and a minimum adjusted cash of \$25.0 million, which is reduced by eligible accounts receivable in excess of the loan capacity. On November 29, 2022 we amended our 2018 Loan Facility to modify the eligible account receivable to exclude UK accounts, reduce the ability to borrow up to 85% of the amount of our eligible accounts receivable to 50% and adjusted the required minimum level of adjusted contribution. On February 16, 2023 we amended our 2018 Loan Facility to remove and replace the former adjusted contribution covenant with a requirement to maintain a minimum level of adjusted EBITDA.

Under the 2018 Loan Facility relating to the 2018 Line of Credit, we are able to borrow up to the lesser of \$50.0 million or 50% of the amount of our eligible accounts receivable. Interest on advances under the 2018 Line of Credit bears an interest rate equal to the prime rate minus of 7.50% as of December 31, 2022. In addition, we are required to pay an unused line fee of 0.15% per annum on the average daily unused amount of the \$60.0 million revolving commitment. Interest accrued on the 2018 Term Loan at an annual rate of interest equal to the prime rate minus 2.75%, or 2.00% at the date of repayment in September 2019.

The 2018 Loan Facility includes customary representations, warranties and covenants (affirmative and negative), including restrictive covenants that prohibit mergers, acquisitions and dispositions of assets, incurrence of indebtedness and encumbrances on our assets and the payment or declaration of dividends; in each case subject to specified exceptions.

The 2018 Loan Facility also includes standard events of default, including in the event of a material adverse change. Upon the occurrence of an event of default, the lender may declare all outstanding obligations immediately due and payable and take such other actions as are set forth in the 2018 Loan Facility and increase the interest rate otherwise applicable to advances under the 2018 Line of Credit by an additional 3.00%. All of our obligations under the 2018 Loan Facility are secured by a first priority lien on substantially all of our assets. The 2018 Loan Facility does not include any prepayment penalties.

We believe we were in compliance with all financial covenants as of December 31, 2022. As of December 31, 2022, we had \$60.0 million of unused borrowings available under our 2018 Line of Credit.

Uses of Funds

Our collection cycles can vary from period to period based on the payment practices of our marketers and their agencies. We are generally obligated to pay Consumer Incentives between one and three months following redemption, regardless of whether we have collected payment from a marketer or its agency. We are generally obligated to pay our FI partners' Partner Share by the end of the month following our collection of payment from the applicable marketer or its agency. As a result, timing of cash receipts from our marketers can significantly impact our operating cash flows for any period. Further, the timing of payment of commitments and implementation fees to our FI partners may also result in variability of our operating cash flows for any period.

Our operating cash flows also vary from quarter to quarter due to the seasonal nature of our marketers' advertising spending. Many marketers tend to devote a significant portion of their marketing budgets to the fourth quarter of the calendar year to coincide with consumer holiday spending and reduce marketing spend in the first quarter of the calendar year. Any lag between the timing of our payments to FI partners and our receipt of payment from marketers and their agencies can exacerbate our need for working capital during the first quarter of the calendar year.

Historical Cash Flows

In this section, we discuss the activity of our cash flows for the year ended December 31, 2021 and the year ended December 31, 2022. For a discussion of the year ended December 31, 2020, please refer to Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Liquidity and Capital Resources" in our Annual Report on Form 10-K and Form 10-K/A for the year ended December 31, 2021.

The following table shows a summary of our cash flows for the periods presented (in thousands):

	Year Ended December 31,	
	2021	2022
Cash, cash equivalents and restricted cash at beginning of period	\$ 293,349	\$ 233,562
Net cash used in operating activities	(38,523)	(53,904)
Net cash used in investing activities	(506,695)	(15,760)
Net cash received from financing activities	485,998	(39,987)
Effect of exchange rates on cash, cash equivalents and restricted cash	(567)	(1,926)
Cash, cash equivalents and restricted cash at end of period	<u>\$ 233,562</u>	<u>\$ 121,985</u>

Operating Activities

Historically, we have experienced negative operating cash flows, which reflects our investments to grow our business. Over time, we expect our business to generate positive operating cash flows. Given the seasonal nature of our marketer's advertising spending and our continued investment in our business, we may experience periods of negative operating cash flows from operations.

Operating activities used \$53.9 million of cash in 2022, which reflected our net loss of \$465.3 million, \$422.7 million of which were non-cash charges, and a \$11.3 million change in our net operating assets and liabilities. The non-cash charges primarily related to stock-based compensation expense, depreciation and amortization expense, including the amortization of acquired intangible assets, impairment of goodwill and intangible assets, amortization of right-of-use assets, deferred implementation costs, changes in the fair value of our contingent consideration, credit loss expense and income tax benefit. The change in our net operating assets and liabilities was primarily due to a \$4.5 million increase in accounts receivable and contract assets, a \$9.5 million decrease in other accrued expenses and a \$1.7 million decrease in Partner Share liability, partially offset by a \$1.4 million increase in our Consumer Incentive liability.

Operating activities used \$38.5 million of cash in 2021, which reflected our net loss of \$128.6 million, \$96.7 million of which were non-cash charges, and a \$6.7 million change in our net operating assets and liabilities. The non-cash charges primarily related to stock-based compensation expense, depreciation and amortization expense, including the amortization of acquired intangible assets, amortization of right-of-use assets, deferred implementation costs, changes in the fair value of our contingent consideration, credit loss expense and income tax benefit. The change in our net operating assets and liabilities was primarily due to a \$27.9 million increase in accounts receivable and contract assets, a \$0.9 million decrease in other accrued expenses and a \$9.1 million decrease in Partner Share liability, partially offset by a \$13.2 million increase in our Consumer Incentive liability.

Investing Activities

Our cash flows used for investing activities are primarily driven by our acquisitions of Dosh and Bridg, our investments in, and purchases of, property and equipment and costs to develop internal-use software. We expect that we will continue to use cash for investing activities as we continue to invest in and grow our business.

Investing activities used cash totaling \$506.7 million and \$15.8 million, in 2021 and 2022, respectively. Our investing cash flows during these periods primarily consisted of funds used for the acquisitions of Dosh and Bridg, purchases of technology hardware and costs to develop internal-use software.

Financing Activities

Our cash flows from financing activities have primarily been composed of borrowings and repayments under our debt facilities, proceeds from the issuance of common stock and payments for costs related to debt issuances and equity offerings.

Financing activities used \$40.0 million in cash in 2022, consisting of \$40.0 million used to repurchase shares of our common stock, partially offset by proceeds received in connection with the exercise of stock options.

Financing activities provided \$486.0 million in cash in 2021. During 2021, we raised total gross proceeds of \$500.5 million, or net proceeds of \$484.0 million after deducting underwriting discounts and commissions of \$16.3 million and offering costs of \$0.2 million from our public equity offering in which we sold 3,850,000 shares of common stock at a public offering price of \$130.00 per share.

Critical Accounting Estimates

Our consolidated financial statements are prepared in accordance with GAAP. The preparation of our consolidated financial statements requires us to make estimates, assumptions and judgments that affect the reported amounts of assets, liabilities, revenue, costs and expenses. We base our estimates and assumptions on historical experience and other factors that we believe to be reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates. Our most critical accounting policies are summarized below. Refer to the notes to our consolidated financial statements for additional information.

Business Combinations

We estimate the fair value of assets acquired and liabilities assumed in a business combination. Goodwill as of the acquisition date is measured as the excess of consideration transferred over the net of the acquisition date fair values of the assets acquired and the liabilities assumed. While we use our best estimates and assumptions to accurately value assets acquired and liabilities assumed at the acquisition date, our estimates are inherently uncertain and subject to refinement.

Significant estimates in valuing certain intangible assets include, but are not limited to, future expected cash flows from acquired technology, useful lives, and discount rates. Although we believe the assumptions and estimates we have made in the past have been reasonable and appropriate, they are based in part on historical experience and information obtained from the management of the acquired companies and are inherently uncertain. During the measurement period, which may be up to one year from the acquisition date, we record adjustments to the assets acquired and liabilities assumed with the corresponding offset to goodwill. On the conclusion of the measurement period or final determination of the values of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded to our consolidated statements of operations.

Fair Value of Contingent Consideration

When required by GAAP, assets and liabilities are reported at fair value on our consolidated financial statements. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs.

The consideration for our acquisition of Bridg includes future payments that are contingent upon the results of Bridg's operations. We recorded a contingent consideration obligation for such contingent payments at fair value on the acquisition date. We estimate the fair value of contingent consideration obligations through valuation models designed to estimate the probability of such contingent payments based on various assumptions and incorporating estimated success rates. Estimated payments are discounted using present value techniques to arrive at an estimated fair value at the balance sheet date. Changes in the fair value of the contingent consideration obligations are recognized within our consolidated statements of operations. Changes in the fair value of the contingent consideration obligations can result from changes to one or multiple inputs, including adjustments to forecasts, the discount rates and assumptions used in preparing these models which include estimates such as revenue volatility, revenue discount rate, weighted average cost of capital, and our common stock volatility. Substantial judgment is employed in determining the appropriateness of these assumptions as of the acquisition date and for each subsequent period until the dates of settlement. Accordingly, changes in assumptions could have a material impact on the amount of contingent consideration expense in our records in any given period. Refer to Note 12—Fair Value Measurements to our consolidated financial statements for additional information regarding the fair value of our financial instruments.

Valuation and Impairment of goodwill and intangible assets

Intangible assets are recorded at fair value on the date of acquisition and amortized over their estimated useful lives. The intangible assets are evaluated whenever events or changes in circumstances indicated that we should estimate the fair value of our individual long-lived assets to determine if any impairment charges were present. Our estimation of the fair value of definite lived intangible assets include the use of discounted cash flow analyses which reflected estimates of future revenue, customer attrition rates, royalty rates, cash flows, and discount rates. Given the significant level of uncertainty that currently exists, management applied several alternative scenarios for market and Company performance over the next several years to determine an estimated fair value. Other key assumptions were updated as appropriate, including the discount rate, which increased as a result of an increase in the equity risk premium, which was partially offset by a decrease in the risk free rate.

Goodwill represents the excess of the purchase price over the estimated fair value of the net assets acquired in a business combination. We evaluate our goodwill for impairment annually during the fourth quarter and whenever events or changes in circumstances indicate that the fair value of a reporting unit is more likely than not less than the carrying amount. Our reporting units are one level below the operating segments at which level our segment management conducts regular reviews of the operating results.

Our impairment evaluation consists of a qualitative assessment. If this assessment indicates that the fair value of the reporting unit is not more likely than not less than the carrying amount, goodwill is not considered impaired. Otherwise, a quantitative impairment test is performed by comparing the fair value of a reporting unit to its carrying value, including goodwill. We can bypass the qualitative assessment for any period and proceed directly to the quantitative impairment test. If the carrying value of the net assets associated with the reporting unit exceeds the fair value of the reporting unit, goodwill is considered impaired and the impairment will be determined as the amount by which the reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill.

We performed a quantitative assessment for goodwill in our Cardlytics platform in the U.S. reporting unit and our Bridg platform reporting unit at June 30, 2022, which resulted in a goodwill impairment of \$83.1 million recorded to our Bridg platform reporting unit. We performed our annual impairment test as of October 1, 2022, which resulted in goodwill impairment of \$313.1 million recorded between our Cardlytics platform in the U.S. and our Bridg platform reporting units. We utilized a discounted cash flow method under the income approach, and to a lesser extent the market approach to value our reporting units. The significant judgments in the discounted cash flow analysis for both our Cardlytics platform in the U.S. and our Bridg platform included the selected discount rate and forecasts of future revenues and cash flows. See Note 5—Goodwill and Acquired Intangibles in our consolidated financial statements for additional information.

We continue to closely monitor developments related to global events and macroeconomic conditions. Changes in market conditions, laws and regulations, and key assumptions made in future quantitative assessments, including forecasted revenues and expected cash flows, competitive factors and discount rates, could negatively impact the results of future impairment testing and could result in the recognition of an additional impairment charge.

Income Taxes

Income taxes are accounted for using the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective income tax bases, and operating loss and tax credit carryforwards. Valuation allowances are provided when we determine that it is more likely than not that all of, or a portion of, deferred tax assets will not be utilized in the future.

Significant judgment is required in determining any valuation allowance recorded against net deferred tax assets. In assessing the need for a valuation allowance, we consider all available evidence, including past operating results, estimates of future taxable income and the feasibility of tax planning strategies. In the event that we change our determination as to the amount of deferred tax assets that can be realized, we will adjust our valuation allowance with a corresponding impact to the provision for income taxes in the period in which such determination is made.

Estimates of future taxable income are based on assumptions that are consistent with our plans. Assumptions represent management's best estimates and involve inherent uncertainties and the application of management's judgment. If actual amounts differ from our estimates, the amount of our tax expense and liabilities could be materially impacted.

We have recorded a full valuation allowance related to our net deferred tax assets due to the uncertainty of the ultimate realization of the future benefits of those assets.

We recognize the tax effects of an uncertain tax position only if it is more likely than not to be sustained based solely on its technical merits as of the reporting date, and then, only in an amount more likely than not to be sustained upon review by the tax authorities. Where applicable, we classify associated interest and penalties as income tax expense. The total amounts of interest and penalties were not material. We consider many factors when evaluating and estimating our tax positions and tax benefits, which may require periodic adjustments and which may not accurately anticipate actual outcomes.

Recent Accounting Pronouncements

Refer to Note 3—Accounting Standards to our consolidated financial statements for additional information.

ITEM 7A. QUALITATIVE AND QUANTITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily the result of fluctuations in interest rates and foreign exchange rates.

Interest Rate Risk

The interest rate under the 2018 Line of Credit is variable. Interest on advances under the 2018 Line of Credit bears an interest rate of the prime rate of 7.50%. As of December 31, 2022 the prime rate was 7.5% and a 10% increase in the current prime rate would, for example, result in a \$0.4 million annual increase in interest expense if the maximum borrowable amount under the 2018 Line of Credit were outstanding for an entire year. The interest rate on the Notes is fixed at 1.00%.

Foreign Currency Exchange Risk

Both revenue and operating expense of Cardlytics UK Limited are denominated in British pounds, and we bear foreign currency risks related to these amounts. For example, if the average value of the British pound had been 10% higher relative to the U.S. dollar during the 2020, 2021 and 2022, our operating expense would have increased by \$0.8 million, \$1.0 million and \$1.1 million, respectively. Our foreign currency risks related to expenses denominated in Indian rupees are insignificant.

Inflation Risk

Historically, we do not believe that inflation has had a material effect on our business, financial condition or results of operations. However, over the last year there has been increased inflationary pressure, and we believe that inflationary pressure has the potential to negatively impact overall consumer spending and advertising budgets as a result of the impact on consumer spend. This could potentially impact our current business products and strategy. We will continue to monitor the impact of inflation in order to reduce its effects through pricing strategies, productivity improvements, and cost reductions. If advertising budgets were to become subject to significant inflationary pressures, we may not be able to fully offset the effects of lower demand through price increases. Our inability or failure to do so could harm our business, financial condition and results of operations.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

CARDLYTICS, INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	Page
Report of Independent Registered Public Accounting Firm (PCAOB ID No. 34)	65
Consolidated Balance Sheets	68
Consolidated Statements of Operations	69
Consolidated Statements of Comprehensive Loss	70
Consolidated Statements of Stockholders' Equity	71
Consolidated Statements of Cash Flows	72
Notes to Consolidated Financial Statements	74

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Cardlytics, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Cardlytics, Inc. and subsidiaries (the "Company") as of December 31, 2022 and 2021, the related consolidated statements of operations, comprehensive loss, stockholders' equity, and cash flows, for each of the three years in the period ended December 31, 2022, 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, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, 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, 2022, 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 March 1, 2023, 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 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 Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate 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 matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Revenue – Refer to Note 2 and 6 to the consolidated financial statements

Critical Audit Matter Description

The Company's revenue generated from its Cardlytics platform in the U.S. and U.K. consists of transaction-based fees made up of a significant volume of low-dollar transactions, sourced from multiple databases. The processing and recording of revenue is highly automated and is based on contractual terms with marketers, FIs, and other parties. Because of the nature of the Company's transaction-based fees, the Company uses automated systems to process and record its revenue transactions.

We identified revenue as a critical audit matter because the Company's systems to process and record revenue are highly automated. This required an increased extent of effort, including the need for us to involve professionals with expertise in information technology (IT), to identify, test, and evaluate the Company's systems, software applications, and automated controls.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the Company's systems to process revenue transactions included the following, among others:

- With the assistance of our IT specialists, we:
 - Identified the relevant systems used to process revenue transactions and tested the general IT controls over each of these systems, including testing of user access controls, change management controls, and IT operations controls.
 - Performed testing of initial system set-up and monitoring controls, system interface controls, automated controls, and data monitoring controls within the relevant revenue streams, as well as the controls designed to ensure the accuracy and completeness of revenue.
- We tested the operating effectiveness of internal controls within the relevant revenue business processes, including those in place to reconcile the information from various systems to the Company's general ledger.

- For a sample of revenue transactions, we performed detail transaction testing by agreeing the amounts recognized to source documents and testing the mathematical accuracy of the recorded revenue.

Contingent Consideration – Refer to Notes 2, 4, and 12 to the consolidated financial statements

Critical Audit Matter Description

The Company acquired Bridg in the prior year, which included contingent consideration as part of the total purchase consideration. Auditing the Company's accounting for the contingent consideration was complex due to the estimation utilized in the Company's determination of the fair value of the contingent consideration, which was valued at \$104.1 million as of December 31, 2022. The significant estimation was primarily due to the complexity of the valuation methodology used by management to measure the fair value of the contingent consideration and the sensitivity of the fair value to the significant underlying assumptions. In order to determine the fair value of the contingent consideration, the Company simulated forecasted annual recurring revenue ("ARR") using revenue volatility from comparable market data. The Company then determined the appropriate discount rate for the assumed cash component and used a Monte Carlo simulation for the assumed stock component. The assumptions used in preparing this model include estimates such as revenue volatility, revenue discount rate, weighted average cost of capital, and the Company's common stock volatility. The assumptions utilized in the model require substantial judgment and could have a material impact on the amount of contingent consideration expense recorded in any given period.

As contingent consideration is recorded as a liability it is remeasured using a fair value methodology consistent with the one described above and it will continue to be remeasured until the dates of settlement. As of December 31, 2022, the remeasurement is relevant for the Second Anniversary Payment date.

We identified contingent consideration as a critical audit matter because of the judgement surrounding forecasted ARR and the complexity of the valuation methodology used to value the contingent consideration. This required a high degree of auditor judgment and an increased extent of effort, including the need for us to involve professionals with valuation expertise.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures as of December 31, 2022, related to the Bridg contingent consideration included the following, among others:

- We tested operating effectiveness of controls around management's review of third-party specialist's report, calculation and reconciliation of the estimated liability to the general ledger, and management's review of forecasted ARR.
- We tested the forecasted ARR used in the model by comparing the projections to historical results, third party industry projections, and the Company's internal contracted backlog.
- We evaluated management's ability to accurately forecast revenues by comparing actual results to management's historical forecasts of revenue.
- With the assistance of our valuation specialists, we evaluated the valuation methodology and independently recalculated the estimated fair value of the contingent consideration to compare to the Company's recorded amount.

Goodwill – Certain Reporting Units – Refer to Note 5 to the consolidated financial statements

Critical Audit Matter Description

The Company's evaluation of goodwill for impairment involves the comparison of the fair values of its reporting units, including the Cardlytics platform in the U.S. reporting unit and the Bridg platform reporting unit, to their respective carrying values as of both June 30, 2022 and October 1, 2022. The Company used a combination of valuation methodologies including the income approach, and to a lesser extent the market approach, to estimate fair value at each reporting date. The Company utilizes discounted cash flow models to perform its income approach, which requires management to make significant judgments related to discount rates and forecasts of future revenues and cash flows. Changes in these assumptions could have a significant impact on either the fair values of the reporting units, the amount of any goodwill impairment charge, or both.

The Company performed an interim impairment test for goodwill as of June 30, 2022 due to a sustained decline in its stock price. The Company recognized a goodwill impairment charge of \$83.1 million in the second quarter of 2022 as the fair value of the Bridg platform reporting unit was determined to be less than its respective carrying value. The Company performed its annual goodwill impairment assessment as of October 1, 2022. As a result of a continued slowdown in the global economy and decreased consumer spend, which resulted in further declines in the Company's stock price, the Company recognized a goodwill impairment charge of \$46.3 million for the Cardlytics platform in the U.S. reporting unit and \$266.8 million for the Bridg platform reporting unit, as the fair value for each respective reporting unit was determined to be less than its respective carrying value. The total goodwill impairments were \$396.2 million for the year ended December 31, 2022. The goodwill balance was \$352.7 million as of December 31, 2022, of which \$164.4 million was allocated to the Cardlytics platform in the U.S. reporting unit and \$188.3 million was allocated to the Bridg platform reporting unit.

We identified valuation of goodwill for Cardlytics platform in the U.S. reporting unit and Bridg platform reporting unit as a critical audit matter because of the significant judgments made by management to estimate the fair values of these reporting units. This required a high degree of auditor judgment and an increased extent of effort, including the need to involve fair value specialists, when performing audit procedures to evaluate the reasonableness of management’s estimates and assumptions related to the selection of the discount rate and forecasts of future revenues and cash flows for the Cardlytics platform in the U.S. reporting unit and the Bridg platform reporting unit.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the valuation methodology, discount rate and forecasts of future revenues and cash flows used by management to estimate the fair value of the Cardlytics platform in the U.S. reporting unit and Bridg platform reporting unit included the following, among others:

- We tested the effectiveness of controls over management’s goodwill impairment evaluation, including those over the determination of the fair value of the Cardlytics platform in the U.S. reporting unit and Bridg platform reporting unit, such as controls related to management’s selection of the discount rate and forecasts of future revenues and cash flows.
- With the assistance of our fair value specialists, we evaluated the reasonableness of the (1) valuation methodology and (2) discount rate, including testing the source information underlying the determination of the discount rate, testing the mathematical accuracy of the calculation, and developing a range of independent estimates and comparing those to the discount rate selected by management.
- We evaluated management’s ability to accurately forecast future revenues and cash flows by comparing prior year forecasts to actual results in the respective years. We also compared current revenue and cash flow forecasts to (1) historical results, (2) internal communications to management and the Board of Directors, and (3) forecasted information included in Company press releases as well as in analyst and industry reports of the Company and companies in its peer group.

/s/ DELOITTE & TOUCHE LLP

Atlanta, Georgia

March 1, 2023

We have served as the Company’s auditor since 2012.

CARDLYTICS, INC.
CONSOLIDATED BALANCE SHEETS
(Amounts in thousands, except par value amounts)

	December 31,	
	2021	2022
Assets		
Current assets:		
Cash and cash equivalents	\$ 233,467	\$ 121,905
Restricted cash	95	80
Accounts receivable and contract assets, net	111,085	115,609
Other receivables	6,097	4,470
Prepaid expenses and other assets	7,981	7,978
Total current assets	358,725	250,042
Long-term assets:		
Property and equipment, net	11,273	5,916
Right-of-use assets under operating leases, net	10,196	6,571
Intangible assets, net	125,550	53,475
Goodwill	742,516	352,721
Capitalized software development costs, net	13,131	19,925
Other long-term assets, net	2,406	2,586
Total assets	\$ 1,263,797	\$ 691,236
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 4,619	\$ 3,765
Accrued liabilities:		
Accrued compensation	12,136	10,486
Accrued expenses	19,620	21,335
Partner Share liability	46,595	48,593
Consumer Incentive liability	52,602	53,983
Deferred revenue	3,280	1,751
Current operating lease liabilities	6,028	4,910
Current contingent consideration	182,470	104,121
Total current liabilities	327,350	248,944
Long-term liabilities:		
Convertible senior notes, net	184,398	226,047
Long-term deferred revenue	173	334
Long-term operating lease liabilities	6,801	4,306
Long-term contingent consideration	49,825	—
Other long-term liabilities	4,550	—
Total liabilities	573,097	479,631
Stockholders' equity:		
Common stock, \$0.0001 par value—100,000 shares authorized and 33,534 and 33,477 shares issued and outstanding as of December 31, 2021 and December 31, 2022, respectively	9	9
Additional paid-in capital	1,212,823	1,182,568
Accumulated other comprehensive income	486	5,598
Accumulated deficit	(522,618)	(976,570)
Total stockholders' equity	690,700	211,605
Total liabilities and stockholders' equity	\$ 1,263,797	\$ 691,236

See notes to the consolidated financial statements

CARDLYTICS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(Amounts in thousands, except per share amounts)

	Year Ended December 31,		
	2020	2021	2022
Revenue	\$ 186,892	\$ 267,116	\$ 298,542
Costs and expenses:			
Partner Share and other third-party costs	109,308	141,273	155,507
Delivery costs	14,310	22,503	30,403
Sales and marketing expense	45,307	65,996	74,745
Research and development expense	17,532	38,104	54,435
General and administration expense	46,532	66,222	81,446
Acquisition and integration costs (benefits)	—	24,372	(2,874)
Change in fair value of contingent consideration	—	1,374	(128,174)
Impairment of goodwill and intangible assets	—	—	453,288
Depreciation and amortization expense	7,826	29,871	37,544
Total costs and expenses	240,815	389,715	756,320
Operating loss	(53,923)	(122,599)	(457,778)
Other (expense) income:			
Interest expense, net	(3,048)	(12,563)	(2,556)
Foreign currency gain (loss)	1,549	(1,267)	(6,376)
Total other expense	(1,499)	(13,830)	(8,932)
Loss before income taxes	(55,422)	(136,429)	(466,710)
Income tax benefit	—	7,864	1,446
Net loss	(55,422)	(128,565)	(465,264)
Net loss attributable to common stockholders	\$ (55,422)	\$ (128,565)	\$ (465,264)
Net loss per share attributable to common stockholders, basic and diluted	\$ (2.04)	\$ (3.99)	\$ (13.92)
Weighted-average common shares outstanding, basic and diluted	27,213	32,202	33,419

See notes to the consolidated financial statements

CARDLYTICS, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(Amounts in thousands)

	Year Ended December 31,		
	2020	2021	2022
Net loss	\$ (55,422)	\$ (128,565)	\$ (465,264)
Other comprehensive loss:			
Foreign currency translation adjustments	(1,504)	678	5,112
Total comprehensive loss	\$ (56,926)	\$ (127,887)	\$ (460,152)

See notes to the consolidated financial statements

CARDLYTICS, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Amounts in thousands)

	Common Stock		Additional	Accumulated		Total
	Shares	Amount	Paid-In	Other	Accumulated	
			Capital	Comprehensive	Deficit	
				Income (loss)		
Balance – December 31, 2019	26,547	\$ 8	\$ 480,578	\$ 1,312	\$ (338,631)	\$ 143,267
Exercise of common stock options	467	—	10,176	—	—	10,176
Exercise of common stock warrants	9	—	—	—	—	—
Stock-based compensation	—	—	32,872	—	—	32,872
Issuance of common stock under the ESPP	59	—	2,837	—	—	2,837
Issuance of restricted stock	779	—	—	—	—	—
Issuance of convertible notes	—	—	51,416	—	—	51,416
Purchases of capped calls	—	—	(26,450)	—	—	(26,450)
Other comprehensive loss	—	—	—	(1,504)	—	(1,504)
Net loss	—	—	—	—	(55,422)	(55,422)
Balance – December 31, 2020	27,861	\$ 8	\$ 551,429	\$ (192)	\$ (394,053)	\$ 157,192
Exercise of common stock options	141	—	2,155	—	—	2,155
Stock-based compensation	—	—	50,224	—	—	50,224
Issuance of restricted stock	724	—	—	—	—	—
Issuance of common stock	3,850	1	484,048	—	—	484,049
Common stock to be issued for the acquisition of Dosh	916	—	117,349	—	—	117,349
Fair value of assumed Dosh options attributable to pre-combination service	—	—	3,593	—	—	3,593
Fair value of assumed Bridg options attributable to pre-combination service	—	—	841	—	—	841
Issuance of common stock under the ESPP	42	—	3,184	—	—	3,184
Other comprehensive loss	—	—	—	678	—	678
Net loss	—	—	—	—	(128,565)	(128,565)
Balance – December 31, 2021	33,534	\$ 9	\$ 1,212,823	\$ 486	\$ (522,618)	\$ 690,700
Cumulative effect upon adoption of ASU 2020-06	—	\$ —	\$ (51,417)	\$ —	\$ 11,312	\$ (40,105)
Exercise of common stock options	23	—	418	—	—	418
Stock-based compensation	—	—	46,810	—	—	46,810
Issuance of restricted stock	986	—	—	—	—	—
Common stock to be issued for the acquisition of Entertainment	173	—	11,937	—	—	11,937
Issuance of common stock under the ESPP	167	—	1,997	—	—	1,997
Repurchase and Cancellation of common stock	(1,406)	—	(40,000)	—	—	(40,000)
Other comprehensive income	—	—	—	5,112	—	5,112
Net loss	—	—	—	—	(465,264)	(465,264)
Balance – December 31, 2022	33,477	\$ 9	\$ 1,182,568	\$ 5,598	\$ (976,570)	\$ 211,605

See notes to the consolidated financial statements

CARDLYTICS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Amounts in thousands)

	Year Ended December 31,		
	2020	2021	2022
Operating activities			
Net loss	\$ (55,422)	\$ (128,565)	\$ (465,264)
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:			
Credit loss expense	1,196	1,702	2,399
Depreciation and amortization	7,826	29,871	37,544
Amortization of financing costs charged to interest expense	312	968	1,595
Amortization of right-of-use asset	3,766	5,783	6,196
Impairment of goodwill and intangible assets	—	—	453,288
Accretion of debt discount and non-cash interest expense	2,486	9,513	—
Stock-based compensation expense	32,396	50,264	44,686
Change in fair value of contingent consideration	—	1,374	(128,174)
Other non-cash (income) expense, net	(1,003)	1,343	6,589
Deferred implementation costs	4,598	3,785	—
Income tax benefit	—	(7,864)	(1,446)
Change in operating assets and liabilities:			
Accounts receivable and contracts assets, net	(2,396)	(27,936)	(4,546)
Prepaid expenses and other assets	(65)	(1,466)	535
Accounts payable	16	1,260	(893)
Other accrued expenses	(1,238)	(905)	(9,516)
Partner Share liability	(4,499)	9,139	1,721
Customer Incentive liability	4,429	13,211	1,382
Net cash used in operating activities	<u>(7,598)</u>	<u>(38,523)</u>	<u>(53,904)</u>
Investing activities			
Acquisition of property and equipment	(5,408)	(3,108)	(1,171)
Acquisition of patents	(76)	(133)	(175)
Capitalized software development costs	(4,633)	(9,323)	(12,140)
Business acquisitions, net of cash acquired	—	(494,131)	(2,274)
Net cash used in investing activities	<u>(10,117)</u>	<u>(506,695)</u>	<u>(15,760)</u>
Financing activities			
Principal payments of debt	(23)	—	(35)
Proceeds from issuance of convertible senior notes, net of issuance costs paid of \$6,900	223,100	—	—
Purchase of capped calls related to convertible senior notes	(26,450)	—	—
Proceeds from issuance of common stock	10,185	486,388	379
Repurchase of common stock	—	—	(40,000)
Deferred equity issuance costs	—	(190)	(157)
Debt issuance costs	(382)	(200)	(174)
Net cash received from (used in) financing activities	<u>206,430</u>	<u>485,998</u>	<u>(39,987)</u>
Effect of exchange rates on cash, cash equivalents and restricted cash	47	(567)	(1,926)
Net increase (decrease) in cash, cash equivalents and restricted cash	188,762	(59,787)	(111,577)
Cash, cash equivalents, and restricted cash — Beginning of period	104,587	293,349	233,562
Cash, cash equivalents, and restricted cash — End of period	<u>\$ 293,349</u>	<u>\$ 233,562</u>	<u>\$ 121,985</u>

See notes to the consolidated financial statements

CARDLYTICS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Amounts in thousands)

	Year Ended December 31,		
	2020	2021	2022
Reconciliation of cash, cash equivalents and restricted cash to the consolidated balance sheet:			
Cash and cash equivalents	\$ 293,239	\$ 233,467	\$ 121,905
Restricted cash	110	95	80
Total cash, cash equivalents and restricted cash — End of period	<u>\$ 293,349</u>	<u>\$ 233,562</u>	<u>\$ 121,985</u>
Supplemental schedule of non-cash investing and financing activities:			
Cash paid for interest	\$ 63	\$ 2,328	\$ 2,381
Amounts accrued for property and equipment	\$ 242	\$ 267	\$ 67
Amounts accrued for capitalized software development costs	\$ 68	\$ 253	\$ 155

See notes to the consolidated financial statements

CARDLYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. NATURE OF OPERATIONS

Cardlytics, Inc. (“we,” “our,” “us,” the “Company,” or “Cardlytics”) is a Delaware corporation and was formed on June 26, 2008. We operate an advertising platform within our own and our partners' digital channels, which includes online, mobile applications, email, and various real-time notifications (the "Cardlytics platform"). We also operate a customer data platform that utilizes point-of-sale data, including product-level purchase data, to enable marketers, in a privacy-protective manner, to perform analytics and targeted loyalty marketing and to measure the impact of their marketing (the "Bridg platform"). The partners for the Cardlytics platform are predominantly financial institutions ("FI partners") that provide us with access to their anonymized purchase data and digital banking customers. The partners for the Bridg platform are merchants that provide us with access to their point-of-sale data, including product-level purchase data. By applying advanced analytics to the purchase data we receive, we make it actionable, helping marketers reach potential buyers at scale, and measure the true sales impact of their marketing spend. We have strong relationships with leading marketers across a variety of industries, including retail, restaurant, travel and entertainment, direct-to-consumer, grocery and gas. Using our purchase intelligence, we present customers with offers to save money at a time when they are thinking of their finances.

We also operate through (1) Dosh Holdings, LLC, a wholly owned and operated subsidiary in the United States, (2) HSP EPI Acquisition, LLC ("Entertainment"), a wholly owned and operated subsidiary in the United States, (3) Cardlytics UK Limited, a wholly owned and operated subsidiary registered as a private limited company in England and Wales, and (4) Cardlytics Services India Private Limited, a wholly owned and operated subsidiary registered as a private limited company in India.

Stock Repurchases

On May 11, 2022, our Board of Directors authorized a stock repurchase program to repurchase up to \$40.0 million of our common stock. From May 11 to June 30, 2022, we paid \$40.0 million to repurchase 1,405,655 shares of our common stock at an average cost of \$28.44 per share and immediately canceled the repurchased shares.

Proceeds from Issuance of Common Stock

On March 5, 2021, we closed a public equity offering in which we sold 3,850,000 shares of common stock at a public offering price of \$130.00 per share for total gross proceeds of \$500.5 million. We received total net proceeds of \$484.0 million after deducting underwriting discounts and commissions of \$16.3 million and offering costs of \$0.2 million.

During 2020 and 2021, we received \$10.2 million and \$2.2 million, respectively, in proceeds from the exercise of options and warrants to purchase shares of common stock.

2020 Convertible Senior Notes

In September 2020, we issued convertible senior notes with an aggregate principal amount of \$230.0 million bearing an interest rate of 1.00% due in 2025 (the "Notes"). Refer to Note 9—Debt and Financing Arrangements for further details.

Acquisitions

On January 7, 2022, we purchased Entertainment for \$13.0 million in equity at an agreed-upon price of \$66.52 per share, subject to \$1.1 million of fair value adjustments based upon the close date, and \$2.3 million in cash, subject to \$0.4 million of adjustments, for an acquisition date fair value of \$14.6 million.

On May 5, 2021, we completed the acquisition of Bridg for purchase consideration of \$578.9 million. The purchase consideration consisted of a \$350.0 million cash purchase price, subject to \$2.8 million of adjustments and escrows, and contingent consideration with an initial fair value of \$230.9 million related to additional potential future payments. The potential payment within 30 days of the first anniversary of the acquisition (the "First Anniversary Payment") will be equal to 20 times the difference between the U.S. annualized recurring revenue ("ARR"), based on the month preceding the first anniversary and \$12.5 million. The potential payment within 30 days of the second anniversary of the acquisition (the "Second Anniversary Payment") will be equal to 15 times the difference between the ARR for customers as of the first anniversary based on the month preceding the second anniversary, and the prior ARR at the first anniversary. The Second Anniversary Payment is subject to a specified cap. At least 30% of the First Anniversary Payment and the Second Anniversary Payment will be in cash, with the remainder to be paid in cash or our common stock, at our option. If we choose to pay a portion of the First Anniversary Payment or Second Anniversary Payment in our common stock, the number of shares will be determined by dividing the amount of the payment by the trailing 20-day volume-weighted average price ending on the first anniversary date or second anniversary date, as applicable. We also assumed unvested options to purchase Bridg's common stock and attributed \$0.8 million of their fair value to the pre-combination service period. ARR is a performance metric defined within Item 2. "Management's Discussion and Analysis of Financial Condition and Results of Operations". Refer to Note 4—Business Combinations for further information.

On March 5, 2021, we completed the acquisition of Dosh Holdings, Inc. ("Dosh") for purchase consideration of \$277.6 million in a combination of cash and common stock. The total purchase consideration consisted of a \$150.0 million cash purchase price, subject to \$6.6 million of adjustments and escrows; and \$125.0 million of shares of our common stock at an agreed-upon price of \$136.33 per share, subject to \$7.6 million of fair value adjustments based upon our close date, for an acquisition date fair value of \$117.4 million. In addition, we assumed unvested options to purchase Dosh's common stock and attributed \$3.6 million of their fair value to the pre-combination service period. Refer to Note 4—Business Combinations for further information.

2. SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany transactions and balances have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements. Significant items subject to such estimates and assumptions include revenue recognition, internal-use software development costs, stock-based compensation, allowance for doubtful accounts, valuation of acquired intangible assets of Dosh and Bridg, valuation of contingent consideration for Bridg, valuation of long-lived assets, goodwill valuation, income tax including valuation allowance and contingencies. We base our estimates on historical experience and on assumptions that we believe are reasonable. Changes in facts or circumstances may cause us to change our assumptions and estimates in future periods and it is possible that actual results could differ from our current or revised future estimates

Restructuring and Reduction of Force

During the first quarter of 2020, we began a strategic shift within our organization to increase productivity and optimize performance. This plan resulted in severance and medical benefits totaling \$1.3 million during the year ended December 31, 2020. We recognize these costs when the extent of our actions is determined and the costs can be estimated. These charges are reflected on our consolidated statement of operations for the year ended December 31, 2020, as follows: \$1.1 million in sales and marketing expense, \$0.1 million in general and administrative expense and \$0.1 million in research and development expense.

As a part of our integration efforts with our acquired companies, we continued to evaluate the optimal structure of the combined organization. As a result, during the year ended December 31, 2021 we recognized \$1.2 million in severance and medical benefits related to our acquisitions. These charges are reflected on our consolidated statement of operations within acquisition and integration costs. Additionally, during the year ended December 31, 2021, we recognized \$0.8 million of severance and medical benefits charges related to internal restructuring. These charges are reflected on our consolidated statement of operations as follows: \$0.1 million in delivery costs, \$0.4 million in sales and marketing expense, and \$0.3 million in research and development expense. We recognize these costs when the extent of our actions is determined and the costs can be estimated.

During 2022, we initiated a strategic reduction of our forces in our U.S., U.K., and India operations, including the planned closure of our Indian office. We also began a strategic shift within our organization to migrate certain data and applications to a cloud computing environment. As part of these initiatives, we recognized severance and medical benefit costs of \$8.1 million. These charges are reflected on our condensed consolidated statement of operations as follows: \$1.9 million in delivery costs, \$2.1 million in sales and marketing expense, \$1.6 million in research and development expense and \$2.5 million in general and administrative expense. We recognize these costs when the extent of our actions are determined and the costs can be estimated. We plan to close our Indian office by the end of 2022. As of December 31, 2022, the remaining costs that have been incurred related to our restructuring and reduction of force but not yet paid are \$2.4 million.

Foreign Currency

The functional currency of our foreign wholly-owned subsidiaries is the local currency. We translate the financial statements of these subsidiaries into U.S. dollars each reporting period for purposes of consolidation. Assets and liabilities are translated at the period-end currency exchange rates, certain equity accounts are translated at historical exchange rates and income and expense amounts are translated at average currency exchange rates in effect for the period. The effect of these translation adjustments is reported in a separate component of stockholders' deficit titled accumulated other comprehensive income.

We are also subject to gains and losses from foreign currency denominated transactions and the remeasurement of foreign currency denominated balance sheet accounts, both of which are included in other (expense) income, net in the accompanying consolidated statements of operations. We recorded a foreign currency (gain) loss totaling \$(1.6) million, \$1.3 million and \$6.4 million in 2020, 2021 and 2022, respectively.

Partner Share and Other Third-Party Costs

We generally pay our partners a negotiated and fixed percentage of our billings to marketers less any Consumer Incentives that we pay to our partners' customers and certain third-party data costs ("Partner Share"). Partner Share and other third-party costs consist primarily of the Partner Share that we pay our partners, media and data costs, and deferred implementation costs incurred pursuant to our agreements with certain partners. To the extent that we use a specific partners' customer's anonymized purchase data in the delivery of our solutions, we generally pay the applicable partner a Partner Share calculated based on the relative contribution of the data provided by the partner to the overall delivery of the services. We expect that our Partner Share and other third-party costs will increase in absolute dollars as a result of our revenue growth.

Delivery Costs

Delivery costs consist primarily of personnel-related costs of our campaign, data operations and production support teams, including salaries, benefits, bonuses and payroll taxes, as well as stock-based compensation expense. Delivery costs also include hosting facility costs, internally developed and purchased or licensed software costs, outsourcing costs and professional services costs.

Macroeconomic Considerations

Unfavorable conditions in the economy both in the United States and abroad may negatively affect the growth of our business and our results of operations. For example, macroeconomic events, including the COVID-19 pandemic, rising inflation, the U.S. Federal Reserve raising interest rates and the Russia-Ukraine war, have led to economic uncertainty globally. Historically, during periods of economic uncertainty and downturns, businesses may slow spending on advertising, which may impact our business and our customers' businesses.

The effect of macroeconomic conditions may not be fully reflected in our results of operations until future periods. If, however, economic uncertainty increases or the global economy worsens, our business, financial condition and results of operations may be harmed. For further discussion of the potential impacts of macroeconomic events on our business, financial condition, and operating results, see the section titled "Risk Factors."

Revenue for the year ended December 31, 2020 was unfavorably affected by the COVID-19 pandemic and its impact on both consumer discretionary spending and marketers' ability to spend advertising budgets on our solutions. During the year ended December 31, 2021, we saw continued recovery of both consumer spending as well as the advertising budgets of our clients; however, many merchants continued to be impacted by labor shortages and disruptions in their supply chains. During the year ended December 31, 2022, we saw increasing pressure on consumer spending as well as the advertising budgets of our clients due to rising inflation. Due to continuing uncertainty regarding the severity and duration of the impacts of macroeconomic events on the global economy, we will continue to monitor this situation and the potential impacts to our business.

Business Combinations

We apply the acquisition method of accounting for business combinations. Under this method of accounting, all assets acquired and liabilities assumed are recorded at their respective fair values at the date of the acquisition. We allocate the purchase consideration to the net tangible and identifiable intangible assets. Determining the fair value of assets acquired and liabilities assumed requires management's judgment and often involves the use of significant estimates and assumptions. These estimates can include, but are not limited to, the cash flows that an asset is expected to generate in the future, the appropriate weighted-average cost of capital, and the cost savings expected to be derived from acquiring an asset. These estimates are inherently uncertain and unpredictable. We recognize costs directly associated with business combinations, including diligence efforts, legal and advisory costs, broker fees and insurance premiums, as acquisition and integration costs on our consolidated statements of operations.

Acquired Intangible Assets and Goodwill

Acquired intangible assets consist of identifiable intangible assets resulting from our business acquisition. Intangible assets are recorded at fair value on the date of acquisition and amortized over their estimated useful lives. The impairment analysis involves determining whether the estimated fair value of each intangible asset exceeds its carrying amount. If the fair value of the intangible asset exceeds its carrying amount, then the asset is not impaired. However, if the carrying amount exceeds the fair value of the asset, the amount of impairment would equal the excess carrying value. We evaluate the recoverability of our finite-lived intangible assets and other long-lived assets whenever events or substantive changes in circumstances indicate that the carrying amount may not be recoverable. These considerations are evaluated holistically to assess whether it is more likely than not that a reporting unit's carrying value exceeds its fair value. During 2022 we recorded an intangible asset impairment of \$56.4 million. Refer to Note 5—Goodwill and Acquired Intangibles for additional information.

Goodwill represents the purchase consideration of an acquired business that exceeds the fair value of the net tangible and identifiable intangible assets. Goodwill is evaluated for impairment by reporting unit annually in the fourth quarter, specifically October 1, and whenever events or changes in circumstances indicate the carrying value of goodwill may not be recoverable. Triggering events that may indicate impairment include, but are not limited to, a significant adverse change in customer demand or business climate or a significant decrease in expected cash flows. No impairment charges were recorded during 2020 and 2021. During 2022 we recorded impairment charges of \$396.2 million. Refer to Note 5—Goodwill and Acquired Intangibles for additional information.

Revenue Recognition

We determine revenue recognition through the following steps:

- identification of a contract with a customer;
- identification of the performance obligation(s) in the contract;
- determination of the transaction price;
- allocation of the transaction price to the performance obligation(s) in the contract and
- recognition of revenue when or as the performance obligation(s) are satisfied.

Cardlytics Platform

Our revenue generated from our Cardlytics platform consist of transaction-based fees made up of a significant volume of low-dollar transactions, sourced from multiple databases. The processing and recording of revenue are highly automated and are based on contractual terms with marketers, partners, and other parties. Because of the nature of our transaction-based fees, we use automated systems to process and record our revenue transactions.

We sell our solutions by entering into agreements directly with marketers or their marketing agencies, generally through the execution of insertion orders. The agreements state the terms of the arrangement, the negotiated fee, payment terms and the fixed period of time of the campaign. We consider a contract to exist when a campaign, which typically lasts 45 days, is published to an FI partner under the terms of an insertion order.

With respect to our Cardlytics platform service, our performance obligation is to offer incentives to partners' customers to make purchases from the marketer within a specified period. This performance obligation is a series that represents a stand ready obligation to provide a targeted campaign for the marketer to partners' customers. The Cardlytics platform fees represent variable consideration that is resolved when partners' customers make qualifying purchases during the marketing campaign term.

Subsequent to a qualifying purchase, the associated fees are generally not subject to refund or adjustment unless the fees from the marketing campaign exceed a contractual maximum (marketer budget). We have not constrained our revenue because adjustments have historically been immaterial and given the short duration of our marketing campaigns, any adjustments are recognized during the period of the marketing campaign. We recognize revenue for the Cardlytics platform fees over time using the right to invoice practical expedient because the amount billed is equal to the value delivered to marketers through qualified purchases by FIs' customers during that period.

Consumer Incentives

We report our revenue on our consolidated statements of operations net of Consumer Incentives. We do not provide the goods or services that are purchased by our partners' customers from the marketers to which the Consumer Incentives relate. Accordingly, the marketer is deemed to be the principal in the relationship with the customer and, therefore, the Consumer Incentive is deemed to be a reduction in the purchase price paid by the customer for the marketer's goods or services. While we are responsible for remitting Consumer Incentives to our FI partners for further payment to their customers, we function solely as an agent of marketers in these arrangements.

We invoice marketers monthly based on the qualifying purchases of partners' customers as reported by our partners during the month. Invoice payment terms, negotiated on a marketer-by-marketer basis, are typically between 30 to 60 days. However, for certain marketing agencies with sequential liability terms, payments are not due to us until such marketing agency has received payment from its marketer client. Accounts receivable is recorded at the amount of gross billings to marketers, net of allowances, for the fees and Consumer Incentives that we are responsible to collect. Our accrued liabilities also include the amount of Consumer Incentives due to FI partners. As a result, accounts receivable and accrued liabilities may appear large in relation to revenue, which is reported on a net basis.

Partner Share and Other Third-Party Costs

We report our revenue on our consolidated statements of operations gross of Partner Share. Partner Share costs are included in Partner Share and other third-party costs in our consolidated statements of operations, rather than as a reduction of revenue, because we and not our partners act as the principal in our arrangements with marketers. We are responsible for the fulfillment and acceptability of the services purchased by marketers. We also have latitude in establishing the price of our services, have discretion in supplier selection and earn variable amounts. Partners only supply consumer purchase data and digital marketing space and generally have no involvement in our marketing campaigns or contractual relationship with marketers.

Contract Costs

Given the short-term nature of our marketing campaigns, all contract costs are expensed as incurred since the expected period of benefit is less than one year. Costs to fulfill a contract include immaterial costs to set up a campaign that we expense as incurred due to the short-term nature of our marketing campaigns.

Bridg Platform

Contracts with customers are evaluated on a contract-by-contract basis as contracts may include multiple types of subscription-based services. Revenue is generated from the sale of subscriptions to our cloud-based customer data-platform and the related delivery of professional services such as implementation, onboarding and technical support. Our subscription contracts are generally 6 to 36 months in duration and are generally billed in advance on a monthly, quarterly or annual basis, with the option for renewal at the end of the contractual arrangement. We recognize revenue over the period in which such services are performed. Our model typically includes an up-front implementation fee with a proof-of-concept period that begins once implementation has completed. It is followed with a periodic commitment from the customer that commences upon completion of the implementation and/or proof-of-concept period through the remainder of the customer life. The periodic commitment includes, but is not limited to, a fixed periodic fee and/or a transactional fee based on system usage that exceeds committed minimums. If the up-front implementation fee is not distinct, revenue is deferred until the date the customer commences use of our services, at which point the up-front implementation fee is recognized ratably over the life of the customer arrangement.

For contracts that contain multiple performance obligations, which include combinations of subscriptions to our cloud-based services and related professional services, we account for individual services as a separate performance obligation if they are distinct. The service is distinct if the service is separately identifiable from other items in the arrangement and if a customer can benefit from it on its own or with other resources that are readily available to the customer. If these criteria are not met, the promised services are accounted for as a combined performance obligation.

The transaction price is determined based on the consideration to which we will be entitled in exchange for transferring products or services to the customer. We include any fixed charges within our contracts as part of the total transaction price. To the extent that variable consideration is not constrained, we include an estimate of the variable amount, as appropriate, within the total transaction price and update its assumptions over the duration of the contract. As a practical expedient, we do not adjust the transaction price for the effects of a significant financing component if, at contract inception, the period between customer payment and the transfer of services is expected to be one year or less.

Many of our contracts with customers contain some component of variable consideration; however, the constraint will generally not result in a reduction in the estimated transaction price for most forms of variable consideration. We may constrain the estimated transaction price in the event of a high degree of uncertainty as to the final consideration amount owed because of an extended length of time over which the fees may be adjusted.

The transaction price, including any discounts, is allocated between separate services in a contract that contains multiple performance obligations based on their relative standalone selling prices. The standalone selling prices are determined based on the market adjusted approach utilizing prices at which we separately sell or historically sold each service. For items that are not sold separately, we estimate the standalone selling prices using available information such as market conditions and internally approved pricing guidelines. In instances where there are no observable selling prices for professional services, we may apply the residual approach to estimate the standalone selling price of the subscription based services. In certain situations we allocate the variable consideration to a series of distinct services within a contract. We allocate variable payments to one or more, but not all, of the distinct services or to a series of distinct services in a contract when (i) the variable payment relates specifically to our effort to transfer the distinct service and (ii) the variable payment is for an amount that depicts the amount of consideration to which we expect to be entitled in exchange for transferring the promised services to the customer.

Contract Balances

Timing may differ between the satisfaction of contractual performance obligations to our customers and corresponding invoicing and cash inflows. Contract assets primarily relate to amounts for contracts with customers for which the amount of revenue recognized exceeds the amount billed to the customer. Contract assets are transformed to a receivable (billed or unbilled) once the right to payment is unconditional. Contract liabilities, or deferred revenue, are recorded for amounts collected in advance of the satisfaction of contractual performance obligations. Contract balances are reported in a net contract asset or liability position on a customer-by-customer basis at the end of each reporting period.

Contract Costs

Contract costs are recognized based on the transfer of services to which the asset relates. The recognition period will consider expected customer lives and whether the asset relates to services transferred under a specific anticipated contract. As of December 31, 2022, there are no contract costs subject to capitalization.

Accounts Receivable

Accounts receivable are carried at the original invoiced amount less an allowance for credit losses (formerly allowance for doubtful accounts), determined based on the probability of future collection. When we become aware of circumstances that may decrease the likelihood of collection, we record a specific allowance against amounts due, which reduces the receivable to the amount that we believe will be collected. For all other accounts receivable, we determine the adequacy of the allowance for credit losses based on historical loss patterns, the number of days that billings are past due and an evaluation of the potential risk of loss associated with specific accounts.

The following table presents changes in the allowance for credit losses (in thousands):

	Year Ended December 31,		
	2020	2021	2022
Beginning balance	\$ 255	\$ 587	\$ 1,327
Credit loss expense	1,196	1,702	2,399
Write-offs, net of recoveries	(864)	(962)	(1,918)
Ending balance	<u>\$ 587</u>	<u>\$ 1,327</u>	<u>\$ 1,808</u>

Unbilled receivables were \$0.5 million, \$2.2 million and \$1.6 million as of December 31, 2020, 2021 and 2022, respectively. An unbilled receivable represents revenue earned and recognized from customer activity that was not billed prior to the end of the reporting period. Unbilled receivables are included in accounts receivable and contract assets, net on our consolidated balance sheets.

Leases

At the inception or modification of a contract, we determine whether a lease exists and classify it as an operating or finance lease at commencement. Subsequent to commencement, lease classification is only reassessed upon a change to the expected lease term or contract modification. Finance and operating lease assets represent our right to use an underlying asset as lessee for the lease term, and lease obligations represent our obligation to make lease payments arising from the lease. Lease right-of-use assets and liabilities are recognized at the lease commencement date based on the present value of lease payments, net of incentives such as tenant improvement allowances, over the lease term. As our leases generally do not provide an implicit rate, we use our incremental borrowing rates as of the lease commencement date to determine the present value of lease payments. The incremental borrowing rate used is a fully collateralized rate that considers our credit rating, market conditions and the term of the lease at the lease commencement date.

We consider a termination or renewal option in the determination of the lease term when it is reasonably certain that we will exercise that option. Leases with an initial expected term of 12 months or less are not recorded in the Consolidated Balance Sheets and the related lease expense is recognized on a straight-line basis over the lease term. We have elected to include non-lease components, such as common-area maintenance costs, with lease payments for the purpose of calculating lease right-of-use assets and liabilities, to the extent that they are fixed. Non-lease components that are not fixed are expensed as incurred as variable lease payments.

We record operating lease expense using the straight-line method within General and administration expense and/or Research and development expense dependent upon the individual leased assets. Finance lease expense is recognized as amortization expense within Depreciation and amortization expense, and interest expense within Interest expense, net. For leases with step rent provisions whereby the rental payments increase over the life of the lease, and for leases with rent-free periods, we recognize expense on a straight-line basis over the expected lease term, based on the total minimum lease payments to be made or lease receipts expected to be received.

Operating and finance lease assets are reviewed for impairment based on an ongoing review of circumstances that indicate the assets may no longer be recoverable, such as closures of office spaces or data centers, and leased assets that are no longer being utilized in current operations, and other factors. When necessary, we calculate operating and finance lease impairments using a discount rate to calculate the present value of estimated subtenant rentals that could be reasonably obtained for the property or asset, if allowed by the lease. Lease impairment charges for properties or assets no longer used in operations are recorded as a component of Restructuring, acquisition and integration related expenses or General and administrative expenses in the Consolidated Statements of Operations, dependent upon the qualitative factors surrounding the impairment.

The calculation of lease impairment charges may require significant judgments and estimates, including estimated subtenant rentals, discount rates and future cash flows based on our experience and knowledge of the market in which the property or asset is located, previous efforts to dispose of similar assets and the assessment of existing market conditions. Impairments are recognized as a reduction of the carrying value of the right-of-use asset and finance lease assets. Refer to Note 7—Leases for additional information.

Property and Equipment

Property and equipment are stated at cost. Expenditures for maintenance and repairs are expensed as incurred, while 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 of property and equipment is determined using the straight-line method over the estimated useful lives of the applicable assets, which are as follows:

Computer equipment:	2–3 years
Furniture and fixtures:	5 years
Leasehold improvements:	Lesser of estimated useful life or life of the lease

Other Intangible Assets

Intangible assets, excluding those acquired from our business combinations, are recorded at cost and consist of costs incurred for software patent applications. As of December 31, 2022, we had eight issued patents relating to our software. We received approval for three patents in 2013, one patent in 2018, three patents in 2021 and one patent in 2022 and began amortizing the costs of obtaining these patents over the estimated remaining lives of the patents. If a patent application is rejected or if we abandon efforts to obtain a new patent, all deferred patent costs are expensed immediately. Deferred patent costs related to patents for which we have not yet obtained approval totaled \$0.4 million and \$0.1 million as of December 31, 2021 and 2022, respectively. In connection with our annual goodwill and intangible asset impairment assessment in the fourth quarter of 2022, we recorded an impairment of \$0.7 million related to our software patent applications, which is included in the impairment of goodwill and intangible assets line item in the consolidated statement of operations. Based on deferred patent costs as of December 31, 2022, the related amortization expense will be less than \$0.1 million in each of the next five years. Intangible assets are as follows (in thousands):

	December 31,	
	2021	2022
Deferred patent costs, gross	\$ 647	\$ 102
Less accumulated amortization	(85)	—
Deferred patent costs, net	<u>\$ 562</u>	<u>\$ 102</u>

Internal-Use Software Development Costs

Capitalized software development costs consist of costs incurred in the development of internal-use software, primarily associated with the development and enhancement of our Ads Manager and Ad Server. We capitalize the costs of software developed or obtained for internal use in accordance with ASC Topic 350-40, *Internal Use Software*. We begin to capitalize our costs upon completion of the preliminary project stage. We consider the preliminary project stage to be complete and the application development stage to have begun when preliminary development efforts are successfully completed, management has authorized and committed project funding and it is probable that the project will be completed, and the software will be used as intended. These costs are amortized on a straight-line basis over the estimated useful life of the related asset, generally estimated to be three years. Costs incurred in the preliminary project stage and post-implementation operation stages are expensed as incurred and recorded in research and development expense on our consolidated statements of operations.

During 2020, 2021 and 2022, we capitalized development costs for improvements to our platforms, including our Ads Manager and Ad Server, totaling \$4.3 million, \$10.1 million and \$12.8 million, respectively. During the first quarter of 2020, we redesigned certain elements of this project and wrote off development costs totaling \$1.0 million recognized in depreciation and amortization expense on our consolidated statement of operations.

Capitalized software development costs are as follows (in thousands):

	December 31,	
	2021	2022
Capitalized software development costs, gross	\$ 19,495	\$ 32,895
Less accumulated amortization	(6,364)	(12,970)
Capitalized software development costs, net	<u>\$ 13,131</u>	<u>\$ 19,925</u>

Debt Issuance Costs

Costs incurred to obtain loans, other than lines of credit, are recorded as a reduction of the carrying amount of the related liability and amortized over the applicable loans' life using the effective interest method. Costs incurred to obtain lines of credit are capitalized and included in other long-term assets on our consolidated balance sheets and amortized ratably over the term of the arrangement.

As described in Note 9—Debt and Financing Arrangements, on September 22, 2020, we issued the Notes with an aggregate principal amount of \$230.0 million bearing an interest rate of 1.00% due in 2025, including the exercise in full of the initial purchasers’ option to purchase up to an additional \$30.0 million principal amount of the Notes. The net proceeds from this offering were \$222.7 million, after deducting the initial purchasers’ discounts and commissions and the offering expenses payable by us. In accounting for the \$7.3 million issuance costs related to the Notes, the allocation of issuance costs incurred between the liability and equity components was based on their relative values.

Amortization of debt issuance costs included in interest expense, net totaled \$0.3 million, \$1.0 million and \$1.6 million in 2020, 2021 and 2022, respectively.

Deferred debt issuance costs related to our lines of credit included in other long-term assets are as follows (in thousands):

	December 31,	
	2021	2022
Debt issuance costs, gross	\$ 598	\$ 791
Less accumulated amortization	(459)	(593)
Debt issuance costs, net	<u>\$ 139</u>	<u>\$ 198</u>

Deferred debt issuance costs related to our Notes included in debt are as follows (in thousands):

	December 31,	
	2021	2022
Debt issuance costs, gross	\$ 5,596	\$ 7,275
Less accumulated amortization	(1,092)	(3,319)
Debt issuance costs, net	<u>\$ 4,504</u>	<u>\$ 3,956</u>

Future amortization of debt issuance costs is as follows (in thousands):

Years Ending December 31,	Amortization
2023	1,461
2024	1,461
2025	1,034
2026	—
Total	<u>\$ 3,956</u>

Advertising

We expense advertising costs as incurred. These costs are included in sales and marketing expense on our consolidated statements of operations. Advertising costs include direct marketing costs such as print advertisements, market research, direct mail, public relations and trade show expenses and totaled \$1.0 million, \$3.7 million and \$4.7 million in 2020, 2021 and 2022, respectively.

Stock-Based Compensation

We measure and recognize compensation expense based on the estimated fair value of the award on the grant date. The fair value is recognized as expense over the requisite service period, which is generally the vesting period of the respective award, on a straight-line basis when the only condition to vesting is continued service. We recognize the fair value of awards that contain performance conditions based upon the probability of the performance conditions being met. Expense for awards with performance conditions are estimated and adjusted on a quarterly basis based upon our assessment of the probability that the performance condition will be met. We recognize the fair value of awards that contain market conditions over the derived service period. Forfeitures are accounted for when they occur. Refer to Note 10—Stock-based Compensation for additional information regarding our specific award plans and estimates and assumptions used to determine fair value.

Fair Value of Financial Instruments

When required by GAAP, assets and liabilities are reported at fair value on our consolidated financial statements. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. Valuation inputs are arranged in a hierarchy that consists of the following levels:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date.
- Level 2 inputs are inputs other than Level 1 inputs such as quoted prices for similar assets or liabilities; quoted prices in markets with insufficient volume or infrequent transactions (less active markets); or model-derived valuations in which all significant inputs are observable or can be derived principally from or corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level 3 inputs are unobservable inputs for the asset or liability.

Our nonfinancial assets that we recognize or disclose at fair value on our consolidated financial statements on a nonrecurring basis include property and equipment, intangible assets, capitalized software development costs and deferred implementation costs. The fair values for these assets are evaluated when events or changes in circumstances indicate the carrying value may not be recoverable. Refer to Note 12—Fair Value Measurements for information regarding the fair value of our financial instruments.

Contingent Consideration

The consideration for the Company's acquisitions may include future payments that are contingent upon the occurrence of a particular event. The Company records a contingent consideration obligation for such contingent payments at fair value on the acquisition date. The Company estimates the fair value of contingent consideration obligations through valuation models designed to estimate the probability of such contingent payments based on various assumptions and incorporating estimated success rates. Estimated payments are discounted using present value techniques to arrive at an estimated fair value at the balance sheet date. Changes in the fair value of the contingent consideration obligations are recognized within the Company's Consolidated Statements of Operations and Comprehensive Loss. Changes in the fair value of the contingent consideration obligations can result from changes to one or multiple inputs, including adjustments to the discount rates and assumptions used in preparing these models which include estimates such as revenue volatility, annualized recurring revenue, revenue discount rate, weighted average cost of capital, and our common stock volatility. Substantial judgment is employed in determining the appropriateness of these assumptions as of the acquisition date and for each subsequent period. Accordingly, changes in assumptions could have a material impact on the amount of contingent consideration expense the Company records in any given period. Refer to Note 12—Fair Value Measurements for information regarding the fair value of our financial instruments.

Income Taxes

Income taxes are accounted for using the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective income tax bases, and operating loss and tax credit carryforwards. Valuation allowances are provided when we determine that it is more likely than not that all of, or a portion of, deferred tax assets will not be utilized in the future.

Significant judgment is required in determining any valuation allowance recorded against net deferred tax assets. In assessing the need for a valuation allowance, we consider all available evidence, including past operating results, estimates of future taxable income and the feasibility of tax planning strategies. In the event that we change our determination as to the amount of deferred tax assets that can be realized, we will adjust our valuation allowance with a corresponding impact to the provision for income taxes in the period in which such determination is made.

Estimates of future taxable income are based on assumptions that are consistent with our plans. Assumptions represent management's best estimates and involve inherent uncertainties and the application of management's judgment. If actual amounts differ from our estimates, the amount of our tax expense and liabilities could be materially impacted.

We have recorded a full valuation allowance related to our net deferred tax assets due to the uncertainty of the ultimate realization of the future benefits of those assets.

For tax years beginning on or after January 1, 2022, the Tax Cuts and Jobs Act of 2017 eliminated the option to deduct research and development expenditures, including software development, as defined under IRC Section 174, in the year incurred. Instead, taxpayers are required to amortize such expenditures over five years if incurred in the U.S. and over fifteen years if incurred in a foreign jurisdiction. This new requirement caused us to utilize significant federal and state tax net operating loss carryforwards in the current year. The depreciation and amortization deferred income taxes line above was updated to include these capitalized research and development expenses for December 31, 2022.

We recognize the tax effects of an uncertain tax position only if it is more likely than not to be sustained based solely on its technical merits as of the reporting date, and then, only in an amount more likely than not to be sustained upon review by the tax authorities. Where applicable, we classify associated interest and penalties as income tax expense. The total amounts of interest and penalties were not material. We consider many factors when evaluating and estimating our tax positions and tax benefits, which may require periodic adjustments and which may not accurately anticipate actual outcomes.

3. ACCOUNTING STANDARDS

Recently Adopted Accounting Pronouncements

In February 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2016-02, *Leases (Topic 842)* to increase the transparency and comparability among organizations as it relates to lease assets and lease liabilities, by requiring lessees to recognize a right-of-use asset and lease liability for all leases with terms of more than 12 months, with exceptions. Effective January 1, 2020, we early adopted this guidance using a modified retrospective approach, which was required for all leases that exist at or commence after the date of the initial application with an option to use certain practical expedients. We have elected to use these practical expedients, which allow us to treat all components of our leases as a single component, not to reassess lease classification or whether an arrangement is or contains a lease and not to reassess its initial accounting for direct lease costs. During the first quarter of 2020, we recorded right-of-use assets of \$10.3 million, lease liabilities of \$13.5 million and eliminated deferred rent liabilities of \$3.2 million. These amounts represent right-of-use assets of \$7.4 million, lease liabilities of \$10.6 million and deferred rent liabilities of \$3.2 million as of the adoption date of ASU 2016-02 and right-of-use assets and lease liabilities of \$2.9 million, respectively, for office space entered into during the quarter. The adoption of this guidance did not have a significant impact on our consolidated statements of operations or cash flows.

On January 1, 2020, we adopted ASU 2015-05, *Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40): Customer’s Accounting for Fees Paid in a Cloud Computing Arrangement*, to help entities evaluate the accounting for fees paid by a customer in a cloud computing arrangement (hosting arrangement) by providing guidance for determining when the arrangement includes a software license. The adoption of this guidance did not have a material effect on our consolidated financial statements.

On January 1, 2020, we adopted ASU 2018-15, *Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40): Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement that is a Service Contract*, which addresses the accounting for implementation, setup and other upfront costs incurred in a hosting arrangement. The adoption of this guidance did not have a material effect on our consolidated financial statements.

On January 1, 2022 we adopted ASU 2020-06, *Debt—Debt with Conversion Options (“Subtopic 470-20”) and Derivatives and Hedging—Contracts in Entity’s Own Equity (“Subtopic 815-40”)*, which simplifies the accounting for certain financial instruments with characteristics of liabilities and equity, including convertible instruments and contracts on an entity's own equity. Upon adoption, we recorded a decrease in accumulated deficit of \$11.3 million, an increase to long-term debt of \$40.2 million and a decrease to additional paid in capital of \$51.5 million. Refer to Note 9, “Debt and Financing Arrangements” for further information about the Notes.

On January 1, 2022 we adopted ASU 2021-08, *Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers*, which require that an entity (acquirer) to recognize and measure contract assets and contract liabilities acquired in a business combination in accordance with Topic 606. The adoption of this guidance did not have a material effect on our consolidated financial statements.

4. BUSINESS COMBINATIONS

Our acquisitions were accounted for as business combinations and the total purchase consideration of each was allocated to the net tangible and intangible assets and liabilities acquired based on their fair values on the acquisition dates with the remaining amounts recorded as goodwill. The values assigned to the assets acquired and liabilities assumed are based on preliminary estimates of fair value available as of the date of this Annual Report on Form 10-K may be adjusted during the measurement period for each acquisition of up to 12 months from the dates of acquisition as further information becomes available. Any changes in the fair values of the assets acquired and liabilities assumed during the measurement period may result in adjustments to goodwill.

During the years ended December 31, 2021 and December 31, 2022 we incurred \$24.4 million of costs and \$2.9 million of benefit in connection with our acquisitions, respectively. The benefit was due to a reduction of the estimated brokerage fee related to our reduced estimate of contingent consideration related to our Bridg acquisition. These costs (benefits) are included in acquisition and integration costs (benefit) on our condensed consolidated statements of operations and primarily represent legal, accounting and broker fees. The results of Entertainment have been included in the consolidated financial statements since its date of acquisition. For the year ended December 31, 2021, Dosh and Bridg's combined revenue included in the consolidated statement of operations were approximately 8% of consolidated revenue. For the year ended December 31, 2022, Entertainment's combined revenue included in the consolidated statement of operations was approximately 3% of consolidated revenue, respectively. Due to the continued integration of the combined businesses, it was impractical to determine the earnings.

For the acquisitions of Dosh, Bridg and Entertainment, as applicable, the estimated fair values of merchant relationships, partner relationships, and the card-linked subscriber base were determined using the replacement cost method and lost profits, as applicable, which required us to estimate the costs to recreate an asset of equivalent utility at prices available at the time of the valuation analysis and the lost profits over the period of time to recreate the asset. Trade names were valued using the "relief-from-royalty" approach. This method assumes that trademarks and trade names have value to the extent that their owner is relieved of the obligation to pay royalties for the benefits received from them. This method required us to estimate the future revenues for the related brands, the appropriate royalty rates and the weighted-average costs of capital. Developed technology for Entertainment was valued using the replacement cost method, which required us to estimate the costs to recreate an asset of equivalent utility at prices available at the time of the valuation analysis. Developed technology for Dosh and Bridg was valued using the excess earnings method, an income approach. Under the excess earnings method, the fair value of an intangible asset is equal to the present value of the asset's projected incremental after-tax cash flows (excess earnings) remaining after deducting the market rates of return on the estimated value of contributory assets (contributory charge) over its remaining useful life.

During the year ended December 31, 2022 we recognized a goodwill impairment of \$396.2 million and an intangible asset impairment of \$56.4 million. Refer to Note 5—Goodwill and Acquired Intangibles for further details.

Acquisition of Entertainment

On January 7, 2022, we completed the acquisition of Entertainment for purchase consideration of \$14.6 million, as presented below (in thousands):

	January 7, 2022
Fair value of common stock transferred	\$ 11,937
Cash paid to extinguish acquiree debt	2,053
Cash paid to settle pre-acquisition liabilities and acquiree deal-related costs	624
Cash paid to membership interest holders	24
Cash receivable from membership interest holders pursuant to finalization of net working capital	(61)
Total purchase consideration	<u>\$ 14,577</u>

The following table presents the preliminary purchase consideration allocation recorded on our condensed consolidated balance sheet as of the acquisition date (in thousands):

	January 7, 2022
Cash and cash equivalents	\$ 376
Accounts receivable and other assets	1,259
Intangible assets	9,800
Goodwill	5,002
Accounts payable and other liabilities	(1,860)
Total purchase consideration	<u>\$ 14,577</u>

The goodwill was primarily attributed to the value of future synergies created with our current and future offerings. Goodwill is not expected to be deductible for income tax purposes.

The following table presents the components of identifiable intangible assets acquired and their estimated useful lives as of the date of acquisition (dollars in thousands):

	Fair Value	Useful life (in years)
Trade name	\$ 800	3.0
Developed technology	700	3.0
Merchant relationships	8,300	4.0

Acquisition of Bridg

On May 5, 2021, we completed the acquisition of Bridg for purchase consideration of \$578.9 million, as presented below (in thousands):

	May 5, 2021
Cash paid to common and preferred stockholders, warrant holders and vested option holders	\$ 337,166
Cash paid to extinguish acquiree debt	1,949
Cash paid to settle pre-acquisition liabilities and acquiree deal-related costs	8,012
Fair value of contingent consideration	230,921
Fair value of assumed options attributable to pre-combination service	841
Total purchase consideration	<u>\$ 578,889</u>

The following table presents the purchase consideration allocation recorded on our consolidated balance sheet as of the acquisition date (in thousands):

	May 5, 2021
Cash and cash equivalents	\$ 1,630
Accounts receivable and other assets	1,989
Intangible assets	64,700
Goodwill	538,271
Accounts payable and other liabilities	(20,694)
Deferred tax liabilities	(7,007)
Total purchase consideration	<u>\$ 578,889</u>

The goodwill was primarily attributed to the value of future growth expected for the Bridg platform and of synergies created with our current and future offerings. Goodwill is not expected to be deductible for income tax purposes.

The following table presents the components of identifiable intangible assets acquired and their estimated useful lives as of the date of acquisition (dollars in thousands):

	<u>Fair Value</u>	<u>Useful life (in years)</u>
Trade name	\$ 200	2.0
Developed technology	53,500	6.0
Merchant relationships	11,000	5.0

As a part of this acquisition, we have agreed to make a First Anniversary Payment equal to 20 times the annualized recurring revenue ("ARR"), based on the month preceding the anniversary, less \$12.5 million, and a Second Anniversary Payment equal to 15 times the ARR for customers as of the first anniversary based on the month preceding the second anniversary, less the prior ARR at the first anniversary. The Second Anniversary Payment is subject to a specified cap. Refer to Note 12—Fair Value Measurements for further discussion.

As of December 31, 2022, the First Anniversary Payment has not been made and an agreement regarding the amount of the First Anniversary Payment has not been reached. Per the terms of the Agreement and Plan of Merger, we delivered the First Earnout Statement within thirty days of the end of the First Earnout Period. We subsequently agreed to extend the Stockholder Representative's review period. During the third quarter, we received an Earnout Objection Notice from the Stockholder Representative that alleges a material understatement of the First Anniversary Payment amount. We are continuing the dispute-resolution process specific to the First Anniversary Payment outlined in the Agreement and Plan of Merger, which was filed with the Securities and Exchange Commission as Exhibit 10.1 to a Form 8-K on November 18, 2022.

Acquisition of Dosh

On March 5, 2021, we completed our acquisition of Dosh for purchase consideration of \$277.6 million, as presented below (in thousands):

	<u>March 5, 2021</u>
Cash paid to common and preferred stockholders, warrant holders and vested option holders	\$ 136,626
Cash paid to extinguish acquiree debt	16,574
Cash paid to settle pre-acquisition liabilities and acquiree deal-related costs	3,463
Fair value of common stock transferred	117,354
Fair value of assumed options attributable to pre-combination service	3,593
Total purchase consideration	<u>\$ 277,610</u>

The following table presents the purchase consideration allocation recorded on our consolidated balance sheet as of the acquisition date (in thousands):

	<u>March 5, 2021</u>
Cash and cash equivalents	\$ 7,323
Accounts receivable and other assets	6,146
Intangible assets	80,000
Goodwill	205,690
Accounts payable and other liabilities	(4,146)
Consumer Incentive liability	(15,101)
Deferred tax liabilities	(2,302)
Total purchase consideration	<u>\$ 277,610</u>

The goodwill was primarily attributed to the value of synergies created with our current and future offerings and of future growth expected from the labor force of Dosh. Goodwill is not expected to be deductible for income tax purposes. During the fourth quarter of 2021, we recorded a measurement period adjustment of \$1.5 million of additional fair value of developed technology. During the fourth quarter of 2021, we recorded a measurement period adjustment to our income tax provision resulting in \$2.3 million of additional goodwill. Refer to Note 11—Income Taxes for further details.

The following table presents the components of identifiable intangible assets acquired and their estimated useful lives as of the date of acquisition (dollars in thousands):

	Fair Value	Useful life (in years)
Trade name	\$ 2,500	3.0
Developed technology	37,500	6.0
Merchant relationships	21,000	5.0
Partner relationships	2,000	7.0
Card-linked subscriber user base	\$ 17,000	5.0

Pro forma consolidated results of operations

The following unaudited pro forma financial information presents combined results of operations for the period presented as if the acquisition of Entertainment had been completed on January 1, 2021 and the acquisitions of Dosh and Bridg had been completed on January 1, 2020. The pro forma information includes adjustments to depreciation expense for property and equipment acquired, to amortize expense for the intangible assets acquired, and to eliminate the acquisition transaction expenses recognized in the period. The pro forma financial information is for informational purposes only and is not necessarily indicative of the consolidated results of operations of the combined business had the acquisitions actually occurred on January 1, 2021 and January 1, 2020, respectively, or the results of future operations of the combined business. For instance, planned or expected operational synergies following the acquisition are not reflected in the pro forma information. Consequently, actual results will differ from the unaudited pro forma information presented below.

	Year Ended December 31,	
	2021	2022
Revenue	\$ 276,563	\$ 298,563
Net loss	(134,925)	(465,536)

5. GOODWILL AND ACQUIRED INTANGIBLES

The changes in the carrying amount of goodwill for the year ended December 31, 2022 are as follows (in thousands):

	Cardlytics Platform, U.S.	Bridg Platform	Consolidated
Balance as of December 31, 2020	\$ —	\$ —	\$ —
Goodwill additions	205,690	536,826	742,516
Balance as of December 31, 2021	205,690	536,826	742,516
Goodwill additions	5,062	—	5,062
Measurement period adjustments	(60)	1,445	1,385
Goodwill impairment	(46,262)	(349,980)	(396,242)
Balance as of December 31, 2022	\$ 164,430	\$ 188,291	\$ 352,721

Goodwill is tested annually for impairment, unless certain triggering events require an interim impairment analysis, including macroeconomic conditions, industry and market considerations, costs factors, overall financial performance, and other relevant entity-specific events and changes. These considerations are evaluated holistically to assess whether it is more likely than not that a reporting unit's carrying value exceeds its fair value. Our reporting units consist of the Cardlytics platform in the U.S., the Cardlytics platform in the U.K. and the Bridg platform. There is no goodwill recorded within the Cardlytics platform in the U.K.

As a result of the sustained decline in our stock price, we determined that it was necessary to perform an interim impairment test for goodwill as of June 30, 2022. As a result of our interim impairment test, we determined that the carrying value of the Bridg platform, which is comprised entirely of an acquired business, exceeded its fair value, and consequently, we recognized a goodwill impairment of \$83.1 million, with \$455.1 million of goodwill remaining. As a result, the Bridg platform reporting unit had a fair value that is equal to carrying value as of the June 30, 2022 valuation date. The methods of determining fair value of the reporting units at June 30, 2022 included a combination of the discounted cash flow method under the income approach, and to a lesser extent the market approach.

We performed our annual impairment test as of October 1, 2022 and determined that the carrying value of both the Cardlytics platform in the U.S. and the Bridg platform exceeded their respective fair values, and we recognized goodwill impairment of \$313.1 million.

The decline in the fair values of both the Cardlytics platform in the U.S. and the Bridg platform reporting units below their respective carrying values resulted from a continued slowdown in the global economy and decreased consumer spend, and a sustained decline in our stock price. The method of determining fair values of the reporting units at October 1, 2022 was the discounted cash flow method under the income approach, and to a lesser extent the market approach. The most significant assumptions utilized in the determination of the estimated fair of the Bridg platform and the Cardlytics platform in the U.S. are the discount rate and forecasts of future revenues and cash flows.

We prepared cash flow projections based on management's estimates of revenue growth rates and earnings growth rates for each reporting unit, taking into consideration the historical performance and the current macroeconomic, industry, and market conditions. The discount rate, which is consistent with a weighted average cost of capital that is likely to be expected by a market participant, is based upon industry required rates of return, including consideration of both debt and equity components of the capital structure. Our discount rate may be impacted by adverse changes in the macroeconomic environment and volatility in the equity and debt markets.

Acquired intangible assets subject to amortization as of December 31, 2021 were as follows:

	Cost	Accumulated Amortization	Net	Weighted Average Remaining Useful Life
	(in thousands)			(in years)
Trade name	\$ 2,700	\$ (753)	\$ 1,947	2.1
Developed technology	91,000	(11,026)	79,974	5.3
Merchant relationships	32,000	(4,900)	27,100	4.2
Partner relationships	2,000	(235)	1,765	6.2
Card-linked subscriber user base	17,000	(2,798)	14,202	4.2
Total other intangible assets	<u>\$ 144,700</u>	<u>\$ (19,712)</u>	<u>\$ 124,988</u>	

Amortization expense of acquired intangibles for the twelve months ended December 31, 2021 was \$19.7 million.

We evaluate the recoverability of our finite-lived intangible assets and other long-lived assets whenever events or substantive changes in circumstances indicate that the carrying amount may not be recoverable. Prior to the quantitative goodwill impairment test, we evaluated the recoverability of these long-lived assets for our asset groups. The evaluation is based on the cash flows generated by the underlying asset groups, including estimated future operating results, trends or other determinants of fair value. If the total of the expected future undiscounted cash flows were less than the carrying amount of the asset group, we would recognize an impairment charge to the extent the carrying amount of the asset group exceeded its estimated fair value.

In connection with our annual goodwill impairment assessment, in the fourth quarter of 2022, we also recorded impairments of intangible assets that are included in our Cardlytics platform in the U.S. segment, which primarily related to developed technology and customer relationship intangible assets from a previous acquisition. These intangible asset impairments totaled \$56.4 million and are included in the impairment of goodwill and intangible assets line item in the consolidated statement of operations.

Our impairment analysis at October 1, 2022 incorporated revised forecasts that took into account the continued slowdown in the global economy and decreased consumer spend during the quarter and expected impacts of these disruptions on our results in the near term. Given the significant level of uncertainty that currently exists, management applied several alternative scenarios for market and company performance over the next several years to determine fair value. Other key assumptions were updated as appropriate, including the discount rate, which increased as a result of an increase in the equity risk premium, which was partially offset by a decrease in the risk free rate.

Acquired intangible assets subject to amortization as of December 31, 2022 were as follows:

	Cost	Accumulated Amortization	Impairments of Intangible Assets	Net	Weighted Average Remaining Useful Life
	(in thousands)				(in years)
Trade name	\$ 3,500	\$ (1,744)	\$ (1,185)	\$ 571	1.4
Developed technology	91,700	(24,882)	(27,630)	39,188	3.6
Merchant relationships	40,300	(12,301)	(14,385)	13,614	1.7
Partner relationships	2,000	(450)	(1,550)	—	0.0
Card-linked subscriber user base	17,000	(5,355)	(11,645)	—	0.0
Total other intangible assets	<u>\$ 154,500</u>	<u>\$ (44,732)</u>	<u>\$ (56,395)</u>	<u>\$ 53,373</u>	

Amortization expense of acquired intangibles for the twelve months ended December 31, 2022 was \$25.0 million.

As of December 31, 2022, we expect amortization expense in future periods to be as follows (in thousands):

	Amount
2023	13,765
2024	13,732
2025	13,228
2026	9,670
2027	2,978
Thereafter	—
Total expected future amortization expense	<u>\$ 53,373</u>

6. REVENUE

The Cardlytics Platform

The Cardlytics platform is our proprietary native bank advertising channel that enables marketers to reach consumers through the FIs' trusted and frequently visited digital banking channels. Working with the marketer, we design a campaign that targets customers based on their purchase history. The consumer is offered an incentive to make a purchase from the marketer within a specified period. We use a portion of the fees that we collect from marketers to provide these consumer incentives to our FIs' customers after they make qualifying purchases ("Consumer Incentives"). Leveraging our powerful purchase intelligence platform, we are able to create compelling Consumer Incentives that have the potential to increase return on advertising spend for marketers and measure the effectiveness of the advertising. During 2020, 2021 and 2022, Consumer Incentives totaled \$76.5 million, \$127.0 million and \$143.9 million, respectively. We pay certain partners a negotiated and fixed percentage of our billings to marketers less any Consumer Incentives that we pay to partners' customers and certain third-party data costs ("Partner Share"). Revenue on our consolidated statements of operation is presented net of Consumer Incentives and gross of Partner Share.

The Cardlytics platform is priced predominantly in two ways: (1) Cost per Served Sale ("CPS"), and (2) Cost per Redemption ("CPR").

- **CPS.** Our primary pricing model is CPS, which we created to meet the media buying preferences of marketers. We generate revenue by charging a percentage, which we refer to as the CPS Rate, of all purchases from the marketer by consumers who (1) are served marketing and (2) subsequently make a purchase from the marketer during the campaign period, regardless of whether consumers select the marketing and thereby becomes eligible to earn the applicable Consumer Incentive. We set CPS Rates for marketers based on our expectation of the marketer's return on spend for the relevant campaign. Additionally, we set the amount of the Consumer Incentives payable for each campaign based on our estimation of our ability to drive incremental sales for the marketer. We seek to optimize the level of Consumer Incentives to retain a greater portion of billings. However, if the amount of Consumer Incentives exceeds the amount of billings that we are paid by the applicable marketer we are still responsible for paying the total Consumer Incentive. This has occurred infrequently and has been immaterial in amount for each of the periods presented. In some instances, we may also charge the marketer the Consumer Incentive, in which case the marketer determines the level of Consumer Incentive for the campaign.
- **CPR.** Under our CPR pricing model, marketers generally specify and fund the Consumer Incentive and pay us a separate negotiated, fixed marketing fee for each purchase that we generate. We generally generate revenue if the consumer (1) is served marketing, (2) selects the marketing and thereby becomes eligible to earn the applicable Consumer Incentive, and (3) makes a qualifying purchase from the marketer during the campaign period. We set the CPR fee for marketers based on our estimation of the marketers' return on spend for the relevant campaign.

The following table summarizes revenue by pricing model (in thousands):

	Year Ended December 31,		
	2020	2021	2022
Cost per Served Sale	\$ 131,045	\$ 175,434	\$ 180,701
Cost per Redemption	53,838	81,911	87,992
Other	2,009	1,409	8,492
Cardlytics platform revenue	<u>\$ 186,892</u>	<u>\$ 258,754</u>	<u>\$ 277,185</u>

The Bridg platform

The Bridg platform generates revenue through the sale of subscriptions to our cloud-based customer-data platform and the delivery of professional services, such as implementation, onboarding and technical support in connection with each subscription. We recognize subscription revenue on a ratable basis over the contract term beginning on the date that our service is made available to the customer. For non-recurring services or transactional based fees dependent on system usage, revenue is recognized as services are delivered. Our subscription contracts are generally 6 to 36 months in duration and are generally billed in advance on a monthly, quarterly or annual basis.

The following table summarizes revenue from the Bridg platform (in thousands):

	Year Ended December 31,	
	2021	2022
Subscription revenue	\$ 8,207	\$ 21,190
Other revenue	155	167
Bridg platform revenue	<u>\$ 8,362</u>	<u>\$ 21,357</u>

The following table summarizes contract balances from the Bridg platform (in thousands):

Contract Balance Type	Consolidated Balance Sheets Location	Year Ended December 31,	
		2021	2022
Contract assets, current	Accounts receivable and contract assets, net	\$ 52	\$ 28
Contract assets, long-term	Other long-term assets, net	26	—
Total contract assets		<u>\$ 78</u>	<u>\$ 28</u>
Contract liabilities, current	Deferred revenue	\$ 1,627	\$ 1,750
Contract liabilities, long-term	Long-term deferred revenue	173	334
Total contract liabilities		<u>\$ 1,800</u>	<u>\$ 2,084</u>

The following information represents the total transaction price for the remaining performance obligations as of December 31, 2022 related to contracts expected to be recognized over future periods. This includes deferred revenue on our consolidated balance sheets and contracted amounts that will be invoiced and recognized as revenue in future periods. As of December 31, 2022, we had \$20.2 million of remaining performance obligations, of which \$15.9 million is expected to be recognized in the next twelve months, with the remaining amount recognized thereafter. The remaining performance obligations exclude future transaction revenue of variable consideration that are allocated to wholly unsatisfied distinct services that form part of a single performance obligation and meets certain variable allocation criteria.

7. LEASES

We have various non-cancellable operating and finance leases for our office spaces, data centers and operational assets with lease periods expiring between 2023 and 2027. During the year ended December 31, 2021, we recognized additional right-of-use assets and lease liabilities related to our operating leases of \$5.1 million and \$5.5 million, respectively. This includes \$1.8 million of new lease agreements related to data center expansion, \$0.6 million related to the renewal or modification of pre-existing data center lease agreements, \$0.4 million of new lease agreements related to office space expansion and \$0.9 million related to the renewal or modification of pre-existing office space lease agreements. Additionally, right-of-use assets and lease liabilities of \$1.4 million and \$1.8 million, respectively, were recorded related to the acquisitions of Dosh and Bridg and assumption of their existing lease agreements. Refer to Note 4—Business Combinations for further information. During the year ended December 31, 2022, we recognized additional right-of-use assets and lease liabilities of \$2.5 million related to new lease agreements and lease modifications for office space.

During the year ended December 31, 2021, we incurred an impairment of \$0.6 million to the right-of-use assets under operating leases, related to the discontinued use of office space lease obtained during the Dosh acquisition. The impairment is reflected in acquisition and integration costs in the Consolidated Statements of Operations and was attributable to the Cardlytics platform operating segment. Refer to Note 15—Segments for more information on our operating segments. During the year ended December 31, 2022, we incurred an impairment of \$0.9 million to the right-of-use-assets as a result of decommissioning our data centers and the planned closure of our office in India.

During the year ended December 31, 2021 and 2022, respectively, we made cash payments of \$7.3 million and \$8.2 million for operating leases which are included in cash flows received from (used in) operating activities in our consolidated statement of cash flows.

Lease assets and liabilities, net, are as follows (in thousands):

Lease Type	Consolidated Balance Sheets Location	December 31,	
		2021	2022
Operating lease assets	Right-of-use assets under operating leases, net	\$ 10,196	\$ 6,571
Finance lease assets	Property and equipment, net	86	48
Total lease assets		10,282	6,619
Operating lease liabilities, current	Current operating lease liabilities	6,028	4,910
Operating lease liabilities, long-term	Long-term operating lease liabilities	6,801	4,306
Finance lease liabilities, current	Accrued expenses	36	38
Finance lease liabilities, long-term	Other long-term liabilities	50	3
Total lease liabilities		\$ 12,915	\$ 9,257

The following table summarizes activity related to our leases (in thousands):

	December 31,	
	2021	2022
Operating lease expense	\$ 5,632	\$ 6,598
Variable lease expense	936	1,294
Short-term lease expense	119	459
Total net operating lease cost	\$ 6,687	\$ 8,351

The following table presents our weighted average borrowing rates and weighted average lease terms:

	December 31,	
	2021	2022
Operating leases:		
Weighted average borrowing rate	3.4 %	4.2 %
Weighted average remaining lease term (years)	2.36	2.26

The following table summarizes future maturities of lease liabilities as of December 31, 2022 (in thousands):

Fiscal Year	Operating Leases	
2023	\$	5,087
2024		2,409
2025		1,196
2026		599
Thereafter		397
Total lease payments		9,688
Imputed interest		472
Total lease liabilities	\$	9,216

8. PROPERTY AND EQUIPMENT

Significant components of property and equipment are as follows (in thousands):

	December 31,	
	2021	2022
Computer equipment	\$ 28,848	\$ 26,260
Leasehold improvements	7,689	7,863
Furniture and fixtures	1,232	1,273
Construction in progress	29	41
Property and equipment, gross	37,798	35,437
Less accumulated depreciation and amortization	(26,525)	(29,521)
Property and equipment, net	\$ 11,273	\$ 5,916

Depreciation expense was \$5.6 million, \$6.7 million and \$5.4 million in 2020, 2021 and 2022, respectively.

9. DEBT AND FINANCING ARRANGEMENTS

Our debt consists of the following (in thousands):

	December 31,	
	2021	2022
Convertible senior notes, net	\$ 184,398	\$ 226,047

Accrued interest is included within accrued expenses in our consolidated balance sheet. We had accrued interest on debt of \$0.7 million and \$0.7 million as of December 31, 2021 and 2022, respectively.

2020 Convertible Senior Notes

On September 22, 2020, we issued Notes with an aggregate principal amount of \$230.0 million bearing an interest rate of 1.00% due in 2025, including the exercise in full of the initial purchasers' option to purchase up to an additional \$30.0 million principal amount of the Notes. The Notes were issued pursuant to an indenture, dated September 22, 2020 (the "Indenture"), between us and U.S. Bank National Association, as trustee.

The Notes are general senior, unsecured obligations and will mature on September 15, 2025, unless earlier converted, redeemed or repurchased. The Notes bear interest at a rate of 1.00% per year, payable semiannually in arrears on March 15 and September 15 of each year, which began on March 15, 2021. The Notes are convertible at the option of the holders at any time prior to the close of business on the business day immediately preceding June 15, 2025, only under the following circumstances: (1) during any calendar quarter commencing after the calendar quarter ending on December 31, 2020 (and only during such calendar quarter), if the last reported sale price of our common stock, for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price for the Notes on each applicable trading day; (2) during the five business day period after any ten consecutive trading day period (the "measurement period") in which the trading price (as defined in the Indenture) per \$1,000 principal amount of the Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of common stock and the conversion rate for the Notes on each such trading day; (3) if we call such Notes for redemption, at any time prior to the close of business on the scheduled trading day immediately preceding the redemption date; or (4) upon the occurrence of specified corporate events as set forth in the Indenture. On or after June 15, 2025 until the close of business on the second scheduled trading day immediately preceding the maturity date, holders of the Notes may convert all or any portion of their Notes at any time, regardless of the foregoing circumstances. Upon conversion, we may satisfy our conversion obligation by paying and/or delivering, as the case may be, cash, shares of common stock or a combination of cash and shares of common stock, at our election, in the manner and subject to the terms and conditions provided in the Indenture. We currently intend to settle the principal amount of the Notes with cash.

The conversion rate for the Notes will initially be 11.7457 shares of common stock per \$1,000 principal amount of Notes, which is equivalent to an initial conversion price of approximately \$85.14 per share of common stock. The conversion rate for the Notes is subject to adjustment under certain circumstances in accordance with the terms of the Indenture. In addition, following certain corporate events that occur prior to the maturity date of the Notes or if we deliver a notice of redemption in respect of the Notes, we will, in certain circumstances, increase the conversion rate of the Notes for a holder who elects to convert its Notes in connection with such a corporate event or convert its notes called for redemption during the related redemption period (as defined in the Indenture), as the case may be.

We may not redeem the Notes prior to September 20, 2023. We may redeem for cash all or any portion of the Notes, at our option, on or after September 20, 2023 and prior to the 36th scheduled trading day immediately preceding the maturity date, if the last reported sale price of our common stock has been at least 130% of the conversion price for the Notes then in effect for at least 20 trading days (whether or not consecutive) during any 30 consecutive trading day period (including the last trading day of such period) ending on, and including, the trading day immediately preceding the date on which we provide notice of redemption at a redemption price equal to 100% of the principal amount of the Notes to be redeemed, plus accrued and unpaid interest to, but excluding, the redemption date. No sinking fund is provided for the Notes. If we elect to redeem less than all of the Notes, at least \$75.0 million aggregate principal amount of Notes must be outstanding and not subject to redemption as of the relevant redemption notice date.

If we undergo a Fundamental Change (as defined in the Indenture), then, except as set forth in the Indenture, holders may require, subject to certain exceptions, us to repurchase for cash all or any portion of their Notes at a fundamental change repurchase price equal to 100% of the principal amount of the Notes to be repurchased, plus accrued and unpaid interest to, but excluding, the fundamental change repurchase date.

The Indenture includes customary covenants and sets forth certain events of default after which the Notes may be declared immediately due and payable and sets forth certain types of bankruptcy or insolvency events of default involving us after which the Notes become automatically due and payable. The following events are considered “events of default” under the Indenture:

- default in any payment of interest on any Note when due and payable and the default continues for a period of 30 days;
- default in the payment of principal of any Note when due and payable at its stated maturity, upon optional redemption, upon any required repurchase, upon declaration of acceleration or otherwise;
- failure by us to comply with our obligation to convert the Notes in accordance with the Indenture upon exercise of a holder’s conversion right, and such failure continues for three business days;
- failure by us to give a fundamental change notice, notice of a make-whole fundamental change or notice of a specified corporate event, in each case when due and such failure continues for one business day;
- failure by us to comply with its obligations in respect of any consolidation, merger or sale of assets;
- failure by us to comply with any of our other agreements in the Notes or the Indenture for 60 days after written notice of such failure from the trustee or the holders of at least 25% in principal amount of the Notes then outstanding;
- default by us or any of our significant subsidiaries (as defined in the Indenture) with respect to any mortgage, agreement or other instrument under which there may be outstanding, or by which there may be secured or evidenced, any indebtedness for money borrowed in excess of \$35,000,000 (or its foreign currency equivalent), in the aggregate of us and/or any such significant subsidiary, whether such indebtedness now exists or shall hereafter be created, (i) resulting in such indebtedness becoming or being declared due and payable prior to its stated maturity date or (ii) constituting a failure to pay the principal of any such indebtedness when due and payable (after the expiration of all applicable grace periods) at its stated maturity, upon required repurchase, upon declaration of acceleration or otherwise, and in the cases of clauses (i) and (ii), such acceleration shall not have been rescinded or annulled or such failure to pay or default shall not have been cured or waived, or such indebtedness is not paid or discharged, as the case may be, within 30 days after written notice to us by the trustee or to us and the trustee by holders of at least 25% in aggregate principal amount of the Notes then outstanding in accordance with the Indenture; and
- certain events of bankruptcy, insolvency or reorganization of us or any of our significant subsidiaries.

If certain bankruptcy and insolvency-related events of default with respect to us occur, the principal of, and accrued and unpaid interest on, all of the then outstanding Notes shall automatically become due and payable. If an event of default with respect to the Notes, other than certain bankruptcy and insolvency-related events of default with respect to us, occurs and is continuing, the trustee by notice to us or the holders of at least 25% in principal amount of the outstanding Notes by notice to us and the trustee, may, and the trustee at the request of such holders shall, declare the principal of, and accrued and unpaid interest on, all of the then-outstanding Notes to be due and payable. Notwithstanding the foregoing, the Indenture provides that, to the extent we so elect, the sole remedy for an event of default relating to certain failures by us to comply with certain reporting covenants in the Indenture will, for the first 365 days after the occurrence of such event of default, consist exclusively of the right to receive additional interest on the Notes at a rate equal to 0.25% per annum of the principal amount of the Notes outstanding for each day during the first 180 days after the occurrence of such an event of default and 0.50% per annum of the principal amount of the Notes outstanding from the 181st day to, and including, the 365th day following the occurrence of such event of default, as long as such event of default is continuing (in addition to any additional interest that may accrue as a result of a registration default (as set forth in the Indenture)).

The Indenture provides that we shall not consolidate with or merge with or into, or sell, convey, transfer or lease all or substantially all of the consolidated properties and assets of our subsidiaries, taken as a whole, to, another person (other than any such sale, conveyance, transfer or lease to one or more of our direct or indirect wholly owned subsidiaries), unless: (i) the resulting, surviving or transferee person (if not us) is a corporation organized and existing under the laws of the United States of America, any State thereof or the District of Columbia, and such corporation (if not us) expressly assumes by supplemental indenture all of our obligations under the Notes and the Indenture; and (ii) immediately after giving effect to such transaction, no default or event of default has occurred and is continuing under the Indenture.

The net proceeds from this offering were \$222.7 million, after deducting the initial purchasers’ discounts and commissions and the offering expenses payable by us. We used \$26.5 million of the net proceeds to pay the cost of the capped call transactions described below.

The Notes are accounted for in accordance with FASB ASC Subtopic 470-20, *Debt with Conversion and Other Options*. Pursuant to ASC Subtopic 470-20, issuers of certain convertible debt instruments, such as the Notes, that have a net settlement feature and may be settled wholly or partially in cash upon conversion are required to separately account for the liability (debt) and equity (conversion option) components of the instrument. The carrying amount of the liability component of the instrument was computed using a discount rate of 6.50%, which was determined by estimating the fair value of a similar liability without the conversion option using Level 3 inputs. The amount of the equity component is then calculated by deducting the fair value of the liability component from the principal amount of the instrument. The difference between the principal amount and the liability component represents a debt discount that is amortized to interest expense over the respective term of the Notes using the effective interest rate method. The equity component is recorded in Additional Paid-in Capital and is not remeasured as long as it continues to meet the conditions for equity classification. On January 1, 2022 we adopted ASU 2020-06, *Debt—Debt with Conversion Options* which simplifies the accounting for certain financial instruments with characteristics of liabilities and equity, including convertible instruments and contracts on an entity's own equity. Upon adoption, we recorded a decrease in accumulated deficit of \$11.3 million, an increase to long-term debt of \$40.2 million and a decrease to additional paid in capital of \$51.5 million. In accounting for the issuance costs related to the Notes, the allocation of issuance costs incurred between the liability and equity components was based on their relative values.

The net carrying amount of the liability component of the Notes is as follows (in thousands):

	December 31,	
	2021	2022
Principal	\$ 230,000	\$ 230,000
Minus: Unamortized debt discount	(41,098)	—
Minus: Unamortized issuance costs	(4,504)	(3,956)
Net carrying amount of the liability component	<u>\$ 184,398</u>	<u>\$ 226,044</u>

The net carrying amount of the equity component of the Notes is as follows (in thousands):

	December 31,
	2021
Proceeds allocated to the conversion options (debt discount)	\$ 53,096
Minus: Issuance costs	(1,680)
Net carrying amount of the equity component	<u>\$ 51,416</u>

Interest expense recognized related to the Notes is as follows (in thousands):

	December 31,	
	2021	2022
Contractual interest expense (due in cash)	\$ 2,300	\$ 2,300
Amortization of debt discount	9,513	—
Amortization of debt issuance costs	874	1,461
Total interest expense related to the Notes	<u>\$ 12,687</u>	<u>\$ 3,761</u>
Effective interest rate	5.52 %	1.64 %

Capped Call Transactions

In connection with the issuance of the Notes, we entered into privately negotiated capped call transactions (the "Capped Calls") with an affiliate of one of the initial Note purchasers and certain other financial institutions. The Capped Calls are intended to reduce potential dilution to our common stock upon any conversion of Notes and/or offset any cash payments we are required to make in excess of the principal amount of converted Notes, as the case may be. The Capped Calls are recorded in stockholders' equity and are not accounted for as derivatives. The cost of \$26.5 million incurred to purchase the Capped Calls was recorded as a reduction to additional paid-in capital in the accompanying consolidated balance sheet.

The Capped Calls each have an initial strike price of \$85.14 per share, subject to certain adjustments, which corresponds to the initial conversion price of the Notes. The Capped Calls have an initial cap price of \$128.51 per share, subject to certain adjustments.

2018 Loan Facility

On May 21, 2018, we entered into a Loan and Security Agreement with Pacific Western Bank (the “Lender”) consisting of a \$30.0 million asset-based revolving line of credit (“2018 Line of Credit”) and a \$20.0 million term loan (“2018 Term Loan”) (collectively, the “2018 Loan Facility”). We used the entire \$20.0 million in proceeds from the 2018 Term Loan and an advance of \$27.4 million under the 2018 Line of Credit to repay all outstanding obligations under our prior line of credit and term loan.

On September 17, 2020, we amended our 2018 Loan Facility to allow for the issuance of the Notes. On December 30, 2020, we amended our 2018 Loan Facility to increase the capacity of our Line of Credit, from \$40.0 million to \$50.0 million. This amendment also extended the maturity date of the 2018 Loan Facility from May 14, 2021 to December 31, 2022. On April 2022, we amended our 2018 Loan Facility to increase the capacity of our Line of Credit from \$50.0 million to \$60.0 million with an option to increase to \$75.0 million upon syndication. This amendment also extended the maturity date of the 2018 Loan Facility from December 31, 2022 to April 29, 2024. As part of this amendment, the former cash covenant, as described below, was removed and was replaced with a requirement to maintain a minimum level of adjusted contribution and a minimum adjusted cash of \$25.0 million, which is reduced by eligible accounts receivable in excess of the loan capacity. On November 29, 2022 we amended our 2018 Loan Facility to modify the eligible account receivable to exclude UK accounts, reduce the ability to borrow up to 85% of the amount of our eligible accounts receivable to 50% and adjusted the required minimum level of adjusted contribution. On February 16, 2023 we amended our 2018 Loan Facility to remove and replace the former adjusted contribution covenant with a requirement to maintain a minimum level of adjusted EBITDA. As of December 31, 2022, we had \$60.0 million of unused borrowings available under our 2018 Line of Credit.

Prior to the December 2020 amendment, the 2018 Loan Facility contained moving trailing 12-month billing covenants, which ranged from \$210.0 million to \$255.0 million, during the term of the facility. The former terms of the 2018 Loan Facility also required us to maintain a total cash balance plus liquidity under the 2018 Line of Credit of not less than \$5.0 million. Effective with the December 2020 amendment, the former billings and liquidity covenants were removed and were replaced with a requirement to maintain a cash to funded senior debt ratio under the 2018 Line of Credit of 1.25:1.00.

Under the 2018 Loan Facility relating to the 2018 Line of Credit, we are able to borrow up to the lesser of \$60.0 million or 50% of the amount of our eligible accounts receivable. Interest on advances under the 2018 Line of Credit bears an interest rate equal to the prime rate of 7.50% as of December 31, 2022. In addition, we are required to pay an unused line fee of 0.15% per annum on the average daily unused amount of the \$60.0 million revolving commitment. Interest accrued on the 2018 Term Loan at an annual rate of interest equal to the prime rate minus 2.75%, or 2.00% at the date of repayment in September 2019.

The 2018 Loan Facility includes customary representations, warranties and covenants (affirmative and negative), including restrictive covenants that prohibit mergers, acquisitions and dispositions of assets, incurrence of indebtedness and encumbrances on our assets and the payment or declaration of dividends; in each case subject to specified exceptions.

The 2018 Loan Facility also includes standard events of default, including in the event of a material adverse change. Upon the occurrence of an event of default, the lender may declare all outstanding obligations immediately due and payable and take such other actions as are set forth in the 2018 Loan Facility and increase the interest rate otherwise applicable to advances under the 2018 Line of Credit by an additional 3.00%. All of our obligations under the 2018 Loan Facility are secured by a first priority lien on substantially all of our assets. The 2018 Loan Facility does not include any prepayment penalties.

We believe we were in compliance with all financial covenants as of December 31, 2022.

Future Payments

Aggregate future payments of principal due upon maturity are as follows (in thousands):

<u>Years Ending December 31,</u>	<u>Convertible Senior Notes</u>
2023	\$ —
2024	—
2025	230,000
2026	—
Total debt	<u>\$ 230,000</u>

10. STOCK-BASED COMPENSATION

Our 2018 Equity Incentive Plan ("2018 Plan") became effective in February 2018. Prior to the 2018 Plan, we granted awards under our 2008 Stock Plan ("2008 Plan"). Any awards granted under the 2008 Plan remain subject to the terms of our 2008 Plan and applicable award agreements, and shares subject to awards granted under our 2008 Plan that are forfeited, canceled or expired prior to vesting become available for use under our 2018 Plan. As of December 31, 2022, there were 405,830 shares of our common stock reserved for issuance under our 2018 Plan. The number of shares of our common stock reserved for issuance under our 2018 Plan will automatically increase on January 1 of each year, beginning on January 1, 2019 and continuing through and including January 1, 2028, by 5% of the total number of shares of our capital stock outstanding on December 31 of the preceding calendar year or a lesser number of shares determined by our board of directors. Accordingly, the number of shares of our common stock reserved for issuance under our 2018 Plan increased by 1,673,858 shares on January 1, 2023.

The 2018 Plan provides for the grant of stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards, performance-based stock awards and other forms of equity compensation, which are collectively referred to as stock awards. Additionally, the 2018 Plan provides for the grant of performance cash awards.

On July 18, 2022, our Board adopted the Cardlytics, Inc. 2022 Inducement Plan ("2022 Inducement Plan"). Our Board also adopted a form of stock option grant notice and agreement and a form of restricted stock unit grant notice and agreement for use with the 2022 Inducement Plan. We reserved a total of 1,500,000 shares of our Common Stock under the 2022 Inducement Plan. On January 18, 2023, our Board approved an amendment to the Inducement Plan to reserve an additional 350,000 shares of our common stock.

The following table summarizes the allocation of stock-based compensation on the consolidated statements of operations (in thousands):

	Year Ended December 31,		
	2020	2021	2022
Delivery costs	\$ 1,181	\$ 1,865	\$ 2,682
Sales and marketing expense	9,857	13,780	11,935
Research and development expense	4,713	10,328	13,262
General and administration expense	16,645	24,291	16,807
Total stock-based compensation expense	<u>\$ 32,396</u>	<u>\$ 50,264</u>	<u>\$ 44,686</u>

During 2020, 2021 and 2022, we capitalized \$0.5 million, \$0.7 million and \$1.4 million, respectively, of stock-based compensation expense for software development. Additionally, during 2021, we recognized \$12.5 million expense related to our assumption of unvested options and RSU and PSU grants to employees of our acquired businesses.

As of December 31, 2021, we have accrued \$0.8 million of stock-based compensation for bonus in lieu of cash compensation which was not settled by the end of the year. This amount is presented within accrued compensation on our condensed consolidated balance sheet. This amount was settled in January 2022.

Common Stock Options

The term of each option to purchase shares of our common stock pursuant to the 2018 Plan is set by our board of directors or a committee thereof. Option awards are generally granted with an exercise price not less than the fair value per share of our common stock at the grant date. Option awards generally vest over four years and expire 10 years following the date of grant.

A summary of common stock option activity under our 2018 Plan is as follows (in thousands, except per share amounts):

	Shares	Weighted-Average Exercise Price Per Share	Weighted Average Contractual Life (in years)	Aggregate Intrinsic Value ⁽¹⁾ (in thousands)
Outstanding - December 31, 2019	1,000	\$ 22.99		
Granted	—	—		
Exercised	(467)	21.78		\$ 29,523
Forfeited	(19)	27.83		
Cancelled	(1)	21.89		
Outstanding - December 31, 2020	513	\$ 23.91		
Granted	—	—		
Exercised	(106)	19.11		\$ 9,710
Cancelled	(1)	22.16		
Outstanding - December 31, 2021	406	\$ 25.17		
Granted	—	—		
Exercised	(16)	23.77		\$ 335
Cancelled	(31)	23.60		
Outstanding - December 31, 2022	359	\$ 25.37	1.10	\$ —
Exercisable - December 31, 2022	359	\$ 25.37	1.10	\$ —

(1) For options exercised during the year, the aggregate intrinsic value represents the total pre-tax intrinsic value received by option holders based on the closing price of our common stock as reported on the Nasdaq Global Market on the exercise date. For options outstanding and exercisable at December 31, 2022, the aggregate intrinsic value represents the total pre-tax intrinsic value based on the \$5.78 closing price of our common stock as reported on the Nasdaq Global Market on December 31, 2022 that would have been received by option holders had all in-the-money options been exercised on that date.

The total fair value of options vested during 2020, 2021 and 2022 was approximately \$2.3 million, \$0.5 million and zero, respectively. All stock option awards outstanding under our 2018 Plan have vested as of December 31, 2022.

Common Stock Options from Bridg Acquisition

In connection with the acquisition of Bridg, each unvested option to purchase shares of Bridg common stock outstanding as of the acquisition date was converted to unvested options to purchase shares of our common stock. These awards were granted under the Ecinity, Inc. 2012 Equity Incentive Plan ("Bridg Plan") and were separately registered with the Securities and Exchange Commission on Form S-8 on August 3, 2021. The maximum aggregate number of shares of our common stock that may be issued upon exercise of these awards is 21,797 shares, and we do not expect to grant any additional awards under the Bridg Plan. The converted awards retain the same terms and conditions as the awards granted by Bridg prior to the acquisition. The awards have remaining vesting periods ranging from less than one year to four years.

The following table summarizes changes in common stock options from the Bridg acquisition:

	Shares (in thousands)	Weighted- Average Exercise Price	Weighted Average Contractual Life (in years)	Aggregate Intrinsic Value (in thousands) ⁽¹⁾
Options outstanding — December 31, 2020	—	\$ —		
Assumed	22	8.46		
Exercised	(4)	8.53		\$ 318
Options outstanding — December 31, 2021	18	8.45	9.35	\$ 1,023
Assumed	—	—		
Exercised	(2)	8.61		\$ 87
Forfeited	(11)	8.37		
Canceled	(2)	8.28		
Options outstanding — December 31, 2022	3	8.67	8.35	\$ —
Exercisable — December 31, 2022	3	\$ 8.72	8.35	\$ —

(1) For options exercised during the period, the aggregate intrinsic value represents the total pre-tax intrinsic value received by option holders based on the closing price of our common stock as reported on the Nasdaq Global Market on the exercise date. For options outstanding and exercisable at December 31, 2022, the aggregate intrinsic value represents the total pre-tax intrinsic value based on the \$5.78 per share closing price of our common stock as reported on the Nasdaq Global Market on December 31, 2022, that would have been received by option holders had all in-the-money options been exercised on that date.

The total fair value of options vested during the twelve months ended December 31, 2022 was \$0.1 million. As of December 31, 2022, unamortized stock-based compensation expense related to unvested common stock options was \$0.1 million, and the weighted-average period over which such stock-based compensation expense will be recognized was 1.4 years.

The acquisition date fair value of the converted options was determined using the Black-Scholes options pricing model. The fair value identified was then allocated between pre-combination service, attributed to purchase consideration net of a 20% anticipated forfeiture rate, and post-combination service, to be recognized as stock-based compensation expense over the remaining vesting term.

The Black-Scholes options pricing model is affected by the estimated fair value of our common stock as well as the following significant inputs:

	May 5, 2021
Value of Common Stock	\$ 106.34
Expected Term	7.0
Volatility	56.6 %
Risk-free interest rate	1.1 %
Exercise Price	\$6.54 - 9.81
Dividend Rate	— %

Common Stock Options from Dosh Acquisition

In connection with the acquisition of Dosh, each unvested option to purchase shares of Dosh common stock outstanding as of the acquisition date was converted to unvested options to purchase shares of our common stock. These awards were granted under the Dosh Holdings, Inc. 2017 Stock Incentive Plan ("Dosh Plan") and were separately registered with the Securities and Exchange Commission on Form S-8 on April 9, 2021. The maximum aggregate number of shares of our common stock that may be issued upon exercise of these awards is 104,098 shares, and we do not expect to grant any additional awards under the Dosh Plan. The converted awards retain the same terms and conditions as the awards granted by Dosh prior to the acquisition. The awards have remaining vesting periods ranging from less than one year to four years.

The following table summarizes changes in common stock options from the Dosh acquisition:

	Shares (in thousands)	Weighted- Average Exercise Price	Weighted Average Contractual Life (in years)	Aggregate Intrinsic Value (in thousands) ⁽¹⁾
Options outstanding — December 31, 2020	—	\$ —		
Assumed	104	3.06		
Exercised	(30)	3.06		\$ 2,492
Forfeited	(44)	3.06		
Options outstanding — December 31, 2021	30	3.06	9.15	\$ 1,847
Exercised	(5)	3.06		\$ 230
Forfeited	(7)	3.06		
Options outstanding — December 31, 2022	18	3.06	8.18	\$ 46
Exercisable — December 31, 2022	9	\$ 3.06	8.18	\$ 24

(1) For options exercised during the period, the aggregate intrinsic value represents the total pre-tax intrinsic value received by option holders based on the closing price of our common stock as reported on the Nasdaq Global Market on the exercise date. For options outstanding and exercisable at December 31, 2022, the aggregate intrinsic value represents the total pre-tax intrinsic value based on the \$5.78 per share closing price of our common stock as reported on the Nasdaq Global Market on December 31, 2022, that would have been received by option holders had all in-the-money options been exercised on that date.

The total fair value of options vested during the twelve months ended December 31, 2022 was \$0.9 million. As of December 31, 2022, unamortized stock-based compensation expense related to unvested common stock options was \$0.8 million, and the weighted-average period over which such stock-based compensation expense will be recognized was 1.37 years.

The acquisition date fair value of the converted options was determined using the Black-Scholes options pricing model. The fair value identified was then allocated between pre-combination service, attributed to purchase consideration net of a 20% anticipated forfeiture rate, and post-combination service, to be recognized as stock-based compensation expense over the remaining vesting term.

The Black-Scholes options pricing model is affected by the estimated fair value of our common stock as well as the following significant inputs:

	March 5, 2021
Value of Common Stock	\$ 128.06
Expected Term	7.0
Volatility	54.6 %
Risk-free interest rate	1.1 %
Exercise Price	\$ 3.06
Dividend Rate	— %

Restricted Stock Units

We grant restricted stock units ("RSUs") to employees and our non-employee directors. The following table summarizes changes in RSUs, inclusive of performance-based RSUs:

	Shares (in thousands)	Weighted-Average Grant Date Fair Value Per Share	Weighted-Average Remaining Contractual Term (in years)	Unamortized Compensation Costs (in thousands)
Unvested - December 31, 2019	1,741	\$ 18.55		
Granted	1,758	43.07		
Vested	(779)	28.56		
Forfeited/canceled	(286)	23.34		
Unvested - December 31, 2020	2,434	\$ 32.49		
Granted	975	106.24		
Vested	(724)	32.51		
Forfeited	(391)	51.54		
Unvested - December 31, 2021	2,294	\$ 60.58		
Granted	6,182	24.74		
Vested	(984)	49.15		
Forfeited	(1,536)	59.94		
Unvested - December 31, 2022	5,956	\$ 25.43	2.93	\$ 116,941

Service-based Restricted Stock Units

During 2022, we granted 4,441,032 RSUs to employees, executives, and our non-employee directors, which have annual vesting periods ranging from immediately vesting to four years. We also granted 1,345,261 RSUs to our recently hired Chief Executive Officer, which have a four year vesting period. During 2021, we additionally granted 30,624 immediately vesting RSUs resulting from the modification of awards through separation agreements. The immediately vesting awards replaced previously granted RSUs which were cancelled as a result of the modification. As of December 31, 2022, there was approximately \$116.9 million of unrecognized compensation expense related to RSUs, which is expected to be recognized over a weighted-average period of 2.9 years. The aggregate intrinsic value based on the \$5.78 closing price of our common stock as reported on the Nasdaq Global Market on December 31, 2022 of unvested RSUs is \$34.4 million as of December 31, 2022.

Subsequent to December 31, 2022, we granted 527,308 RSUs to employees, which have annual vesting periods ranging from two to four years. The unamortized stock-based compensation expense related to all RSUs granted subsequent to December 31, 2022 is \$3.1 million.

Performance-based Restricted Stock Units

During 2019, we granted 1,252,500 performance-based RSUs ("2019 PSUs"). The 2019 PSUs are composed of four equal tranches, each of which have an independent performance-based vesting condition. The vesting criteria for the four tranches are as follows:

- a minimum growth rate in adjusted contribution over a trailing 12-month period,
- a minimum number of advertisers that are billed above a specified amount over a trailing 12-month period,
- a minimum cumulative adjusted EBITDA target over a trailing 12-month period, and
- a minimum trailing 30-day average closing price of our common stock.

The vesting conditions of each of the four tranches must be achieved within four years of the grant date. Upon a vesting event, 50% of the related tranche vests immediately, 25% of the related tranche vests six months after the achievement date and 25% of the related tranche vests 12 months after the achievement date. Adjusted EBITDA and adjusted contribution are performance metrics defined within Item 2. "Management's Discussion and Analysis of Financial Condition and Results of Operations." In August and November 2019, the compensation committee of our board of directors certified that the target minimum trailing 30-day average closing price of our common stock and target minimum cumulative adjusted EBITDA over a trailing 12-month period, respectively, were achieved resulting in the immediate vesting of 50% of the related PSU tranches. In February 2020, 25% of the 30-day average closing price of our common stock PSU tranche vested upon the six-month anniversary of the tranche's achievement date and the remaining 25% of the tranche vested in August 2020 upon the twelve-month anniversary of the tranche's achievement date. In May 2020, 25% of the adjusted EBITDA tranche vested upon the six-month anniversary of the tranche's achievement date, and the remaining 25% of the tranche vested in November 2020 upon the twelve-month anniversary of the tranche's achievement date. In October 2021, the compensation committee of our board of directors certified that the target number of advertisers that were billed over a specified amount during a trailing 12-month period had been achieved resulting in the immediate vesting of 50% of the related PSU tranche. In December 2021, the compensation committee of our board of directors certified that the target growth rate for adjusted contribution during a trailing 12-month period had been achieved resulting in the immediate vesting of 50% of the related PSU tranche.

In April 2020, we granted 476,608 performance-based restricted stock units ("2020 PSUs"), of which 443,276 units have a performance-based vesting condition based on a minimum average revenue per user ("ARPU") target over a trailing 12-month period and 33,332 units have the same performance-based vesting conditions as those that unmet at the time under the 2019 PSUs described above. ARPU is a performance metric defined within Item 2. "Management's Discussion and Analysis of Financial Condition and Results of Operations." The ARPU vesting condition must be achieved within four years of the grant date. Upon the vesting event, 50% of the award vests immediately, 25% of the award vests six months after achievement date and 25% of the award vests 12 months after the achievement date. During the year-ended December 31, 2022, we reassessed the likelihood of achieving the 2020 PSUs performance-based vesting condition and concluded the achievement is no longer probable. As a result of the change in estimate, we have recognized the cumulative expense associated with the 2020 PSUs from the grant date as a benefit to stock-based compensation during the year ended December 31, 2022.

In April 2021, we granted 110,236 performance-based restricted stock units ("2021 PSUs") consisting of two tranches. The first tranche consists of 55,118 units that have a performance-based vesting condition based on a minimum revenue target over a trailing 12-month period. The units in this first tranche fully vest upon achievement. The second tranche consists of 55,118 units with a performance-based vesting condition based on a different minimum revenue target over a trailing 12-month period. Half of the units in the second tranche vest upon achievement and the remaining units vest six months after the achievement date, subject to continued service. Each performance-based vesting condition within the two tranches must be achieved within four years of the grant date and are subject to certification by the compensation committee of our board of directors.

Additionally, in April 2021, we granted 10,000 performance-based restricted stock units which have the same unmet vesting condition as the 2020 PSUs based on a minimum ARPU target over a trailing 12-month period as described above.

In July 2021, we granted 34,344 performance-based restricted stock units ("Bridg PSUs") which have performance-based vesting conditions based on the achievement of a minimum ARR target by the first anniversary of the Bridg acquisition. Vesting is tied to the percentage of the ARR target achieved during the specified period with 50% of the units vesting between 80% - 99.99% achievement and 100% of the units vesting upon 100% achievement. If these percentages are not met, no Bridg PSUs will vest.

In September 2021, we granted 6,666 PSUs which have the same unmet vesting conditions of the 2020 PSUs, 6,667 PSUs which have the same unmet revenue target vesting condition of the 2021 PSUs and 6,667 PSUs which have the same unmet different revenue target vesting condition of the 2021 PSUs as described above.

In March 2022 and August 2022, we granted 269,202 and 25,248 performance-based restricted stock units ("2022 PSUs"), respectively, consisting of three tranches. The first two tranches each represent 25% of the grant, and each vest upon the achievement of certain milestones related to the installation of our Ad Server at our FI Partners. 50% of the third tranche vests upon the achievement of a certain number of advertisers purchasing both the Cardlytics and Bridg platforms at a target incremental billings amount over 2021, and the remaining 50% of the tranche vests six months after this target is achieved. In December 2022, the compensation committee of our board of directors certified that the first tranche's milestone related to the installation of our Ad Server at our FI partners had been achieved, which resulted in the immediate vesting of the first tranche representing 25% of the grant.

In July 2022, we granted 100,990 PSUs which vest on the achievement of specific revenue-based performance metrics ("2022 Bridg PSUs"). With the exception of the 2020 PSUs, we believe that the achievement of all of the above referenced performance-based vesting conditions are probable before the awards' respective expiration dates.

Employee Stock Purchase Plan

Our board of directors adopted and our stockholders have approved our 2018 Employee Stock Purchase Plan ("2018 ESPP"). Our 2018 ESPP became effective on February 8, 2018, the date our registration statement in connection with our IPO was declared effective and enables eligible employees to purchase shares of our common stock at a discount. Purchases will be accomplished through participation in discrete offering periods. On each purchase date, eligible employees will purchase our common stock at a price per share equal to 85% of the lesser of the fair market value of our common stock on the first trading day of the offering period or the date of purchase. During 2020, 2021 and 2022, a total of 59,173, 41,473 and 167,622 shares of common stock were purchased by employees under the 2018 ESPP, respectively.

As of December 31, 2022, 878,969 shares of common stock were reserved for issuance pursuant to our 2018 ESPP. Additionally, the number of shares of our common stock reserved for issuance under our 2018 ESPP will automatically increase on January 1 of each year, beginning on January 1, 2019 and continuing through and including January 1, 2026, by the lesser of (i) 1% of the total number of shares of our common stock outstanding on December 31 of the preceding calendar year, (ii) 500,000 shares of our common stock or (iii) such lesser number of shares of common stock as determined by our board of directors. Accordingly, the number of shares of our common stock reserved for issuance under our 2018 ESPP increased by 334,771 shares on January 1, 2023. Shares subject to purchase rights granted under our 2018 ESPP that terminate without having been issued in full will not reduce the number of shares available for issuance under our 2018 ESPP.

11. INCOME TAXES

Domestic and foreign components of loss before income taxes are as follows (in thousands):

	Year Ended December 31,		
	2020	2021	2022
Domestic	\$ (42,613)	\$ (122,087)	\$ (455,202)
Foreign	(12,809)	(14,342)	(11,508)
Loss before income taxes	<u>\$ (55,422)</u>	<u>\$ (136,429)</u>	<u>\$ (466,710)</u>

The significant components of income tax (expense) benefit are as follows (in thousands):

	Year Ended December 31,		
	2020	2021	2022
Current:			
Federal	\$ —	\$ —	\$ —
State	—	—	—
Foreign ⁽¹⁾	—	—	—
Total current	<u>—</u>	<u>—</u>	<u>—</u>
Deferred:			
Federal	23,062	31,106	38,508
State	3,744	4,942	6,317
Foreign	1,713	2,184	3,075
Change in uncertain tax positions	(117)	(596)	(587)
Change in valuation allowance	(28,402)	(29,772)	(45,867)
Total deferred	<u>—</u>	<u>7,864</u>	<u>1,446</u>
Income tax benefit	<u>\$ —</u>	<u>\$ 7,864</u>	<u>\$ 1,446</u>

(1) The current income tax (expense) during 2020, 2021 and 2022 excludes Indian income tax expense of less than \$0.3 million, \$0.2 million and \$0.2 million, respectively.

The following table summarizes the significant differences between the U.S. federal statutory tax rate and our effective tax rate:

	Year Ended December 31,		
	2020	2021	2022
Tax benefit at federal statutory rate	21.00 %	21.00 %	21.00 %
State income taxes, net of federal benefit	— %	2.08 %	0.08 %
Change in federal and state statutory rate	0.35 %	(0.14)%	0.15 %
Foreign rate differential	(0.62)%	(0.19)%	0.01 %
Goodwill impairment	— %	— %	(17.82)%
Contingent liability remeasurement	— %	— %	5.71 %
Other adjustments	7.36 %	4.68 %	1.03 %
Valuation allowance	(28.57)%	(21.75)%	(9.87)%
Income tax benefit	<u>(0.48)%</u>	<u>5.68 %</u>	<u>0.29 %</u>

The significant components of deferred income taxes are as follows (in thousands):

	December 31,	
	2021	2022
Net operating loss carry-forwards	\$ 145,273	\$ 155,949
Allowance for credit losses	212	776
Depreciation and amortization	(42,053)	1,485
Stock-based compensation	7,889	7,020
Deferred costs	7,898	6,599
IRC Section 163(j) interest expense limitation	77	—
Other tax credit carry-forward	4,249	5,683
Other temporary differences	322	1,936
Valuation allowance	(123,867)	(179,448)
Net long-term deferred tax asset	<u>\$ —</u>	<u>\$ —</u>

We have generated historical net losses and recorded a full valuation allowance against our net deferred tax assets, and we expect to maintain a full valuation allowance in the near term. Realization of any of our net deferred tax assets depends upon future earnings, the timing and amount of which are uncertain. During 2022, we released \$1.4 million of our valuation allowance related to net deferred tax liabilities arising from the acquisitions of Bridg resulting in an income tax benefit of \$1.4 million reflected on our consolidated statement of operations. Deferred tax liabilities for Bridg primarily related to acquired intangible assets.

The following table presents changes in our valuation allowance (in thousands):

	Year Ended December 31,		
	2020	2021	2022
Beginning balance	\$ (70,231)	\$ (85,991)	\$ (123,867)
Allowance for domestic and foreign net operating loss carry-forwards	(26,277)	(51,856)	(13,360)
Rate change on domestic net operating loss carry-forwards	(82)	419	235
Convertible debt additional paid-in capital tax adjustment - valuation allowance impact	12,642	—	(9,714)
Other changes	(2,043)	13,561	(32,742)
Ending balance	<u>\$ (85,991)</u>	<u>\$ (123,867)</u>	<u>\$ (179,448)</u>

As of December 31, 2021 and 2022 we have \$586.2 million and \$625.5 million, respectively, of gross U.S. federal net operating loss carry forwards that will begin to expire in the 2028 tax year. Additionally, we have \$243.6 million and \$254.1 million of gross state net operating loss carry-forwards as of December 31, 2021 and 2022, respectively that will expire between the 2022 and 2042 tax years for states that do not have indefinite carry-forward periods for net operating losses generated in recent years.

Ownership changes, as defined by IRC Section 382, may limit the amount of net operating losses that a company may utilize to offset future taxable income and taxes payable. Pursuant to IRC Section 382, an ownership change occurs when the stock ownership of 5% stockholders increases by more than 50% over a testing period of three years. We have experienced ownership changes in the past, and it is possible that we have undergone ownership changes subsequent to April 2, 2020, the date of our most recent evaluation, or that we may undergo such a change in the future. Any such ownership change may limit our ability to utilize net operating losses.

Our results during 2020, 2021 and 2022 reflect state tax credits related to hiring and research activities that are utilized through the reduction of state payroll tax withholdings totaling \$1.4 million, \$1.3 million and \$0.9 million, respectively.

As of December 31, 2021 and 2022, Cardlytics UK had gross net operating losses of \$43.0 million and \$47.8 million, respectively. Foreign net operating loss carry-forwards expire according to the rules of each country. In the U.K., there is an indefinite carry-forward period. As of December 31, 2022, Cardlytics UK held cash and cash equivalents of \$3.4 million. While our investment in Cardlytics UK is not considered to be permanently invested, we do not plan to repatriate these funds. Further, although the tax basis of our investment in Cardlytics UK exceeds its book basis, we have not recorded a deferred tax asset since we do not believe that a reversal of this temporary difference will occur in the foreseeable future.

The following table summarizes the activity related to our gross unrecognized tax benefits that would affect our effective tax rate, if recognized (in thousands):

	Year Ended December 31,		
	2020	2021	2022
Beginning balance	\$ 185	\$ 302	\$ 1,128
Increase related to current year tax position	117	826	478
Ending balance	<u>\$ 302</u>	<u>\$ 1,128</u>	<u>\$ 1,606</u>

All such positions, if recognized, would impact our effective tax rate. We do not currently anticipate any of our positions to change significantly in the next 12 months. Our tax filings from inception remain subject to income tax examinations.

12. FAIR VALUE MEASUREMENTS

We record the fair value of assets and liabilities in accordance with ASC 820, Fair Value Measurement (“ASC 820”). ASC 820 defines fair value as the price received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date and in the principal or most advantageous market for that asset or liability. The fair value should be calculated based on assumptions that market participants would use in pricing the asset or liability, not on assumptions specific to the entity.

In addition to defining fair value, ASC 820 expands the disclosure requirements around fair value and establishes a fair value hierarchy for valuation inputs. The hierarchy prioritizes the inputs into three levels based on the extent to which inputs used in measuring fair value are observable in the market. Each fair value measurement is reported in one of the three levels, which is determined by the lowest level input that is significant to the fair value measurement in its entirety.

During the year ended December 31, 2022 we recognized a goodwill impairment of \$396.2 million. The fair value of our reporting units was classified in Level 3 of the fair value hierarchy due to the significance of unobservable inputs developed using company-specific information. Refer to Note 5—Goodwill and Acquired Intangibles for further details.

These levels are:

- Level 1 - quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2 - quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument.
- Level 3 - unobservable inputs reflecting management’s own assumptions about the inputs used in pricing the asset or liability at fair value.

Contingent consideration for the acquisition of Bridg

The contingent consideration for the acquisition of Bridg is composed of the First Anniversary Payment and the Second Anniversary Payment. The fair value of contingent consideration in connection with the Bridg acquisition is as follows (in thousands):

	December 31, 2021			
	Level 1	Level 2	Level 3	Total
Liabilities:				
Current contingent consideration	\$ —	\$ —	\$ 182,470	\$ 182,470
Long-term contingent consideration	—	—	49,825	49,825
Total liabilities	\$ —	\$ —	\$ 232,295	\$ 232,295

	December 31, 2022			
	Level 1	Level 2	Level 3	Total
Liabilities:				
Current contingent consideration	\$ —	\$ —	\$ 104,121	\$ 104,121
Long-term contingent consideration	—	—	—	—
Total liabilities	\$ —	\$ —	\$ 104,121	\$ 104,121

The following table shows a reconciliation of the beginning and ending fair value measurements of our contingent consideration, which we have valued using level 3 inputs:

	December 31, 2021	December 31, 2022
Beginning balance	\$ —	\$ 232,295
Increase due to acquisition		230,921
Unrealized loss due to change in fair value		1,374
Ending balance	\$ 232,295	\$ 104,121

As of December 31, 2022, we have determined the First Anniversary Payment to be \$126.4 million, inclusive of \$118.7 million of contingent consideration and \$7.7 million of broker fees and other costs, which is included in accrued expenses on our consolidated balance sheets. The fair value of the contingent consideration related to the First Anniversary Payment is \$47.6 million, which reflects the impact of a \$71.1 million mark-to-market reduction in fair value of the 2,068,995 shares of our common stock that we expect to issue to satisfy 70% of the contingent consideration to Bridg shareholders at an agreed-upon volume-weighted average price of \$40.15 per share. These shares have been revalued based on the \$5.78 per share closing price of our common stock as reported on the Nasdaq Global Market on December 31, 2022. As of December 31, 2022, the First Anniversary Payment has not been settled. Refer to Note 4—Business Combinations for further discussion.

As of December 31, 2022, we have estimated the Second Anniversary Payment to be \$67.8 million, inclusive of \$62.6 million of contingent consideration and \$5.2 million of broker fees and other costs, which is included in accrued expenses on our consolidated balance sheets. The fair value of the contingent consideration related to the Second Anniversary Payment is \$56.6 million. In order to determine the fair value, we simulated forecasted revenue using a revenue volatility assumption from comparable market data. We then determined the appropriate discount rate for the assumed cash component and used a Monte Carlo simulation for the assumed stock component. The assumptions used in preparing this model includes estimates such as revenue volatility, revenue discount rate, weighted average cost of capital, and our common stock volatility.

The following table summarizes key assumptions used for estimating the fair value of the contingent consideration:

	December 31, 2021	December 31, 2022
Revenue volatility	20.0 %	20.0 %
Revenue discount rate	4.7 %	8.7 %
Weighted average cost of capital	12.5 %	17.0 %
Common stock volatility	69.0 %	156.0 %
Portion to be paid in cash	30.0 %	30.0 %

13. COMMITMENTS AND CONTINGENCIES

Implementation Costs

Agreements with certain partners require us to fund the development of specific enhancements, pay for certain implementation fees, or make milestone payments upon the deployment of our solution. Amounts paid to partners are included in deferred implementation costs on our consolidated balance sheets the earlier of when paid or earned and are amortized over the remaining term of the related contractual arrangements. Amortization and impairment is included in Partner Share and other third-party costs on our consolidated statements of operations and is presented in amortization and impairment of deferred implementation costs on our consolidated statement of cash flows. Certain of these agreements provide for future reductions in Partner Share due to the partner. These reductions in Partner Share are recorded as a reduction to deferred implementation costs and also result in a cumulative adjustment to accumulated amortization.

During 2020 and 2021, we recognized write offs of deferred implementation costs totaling \$0.7 million and \$1.0 million, respectively, in Partner Share and other third-party costs on our consolidated statements of operations, upon the notification from one of our partners about plans to end the use of certain platform features prior to the end of our contractual arrangement with the partner.

The following table presents changes in deferred implementation costs (in thousands):

	December 31,		
	2020	2021	2022
Beginning balance	\$ 8,383	\$ 3,785	\$ —
Recoveries through Partner Share	—	—	—
Amortization	(3,915)	(2,826)	—
Impairment	(683)	(959)	—
Ending balance	<u>\$ 3,785</u>	<u>\$ —</u>	<u>\$ —</u>

We have a minimum Partner Share commitment to a certain FI partner totaling \$10.0 million over a 12-month period which began on April 1, 2022. To the extent that this commitment is expected to exceed the amount of Partner Share otherwise payable to such FI partner in the absence of such commitment, we accrue any expected shortfall over the commitment period. We accrued for zero and \$3.2 million of expected minimum Partner Share commitment shortfalls as of December 31, 2021 and 2022, respectively.

Other Commitments

We lease property and equipment under non-cancelable operating lease agreements. Refer to Note 7—Leases for further details. In September 2020, we issued convertible senior notes with an aggregate principal amount of \$230.0 million bearing an interest rate of 1.00% due in 2025. Refer to Note 9—Debt and Financing Arrangements for further details. In connection with our acquisition of Bridg, we will owe a brokerage fee derived from the amount of the First Anniversary Payment and the Second Anniversary Payment, if any. See Note 4—Business Combinations for further details.

In March 2022, we entered into a cloud hosting arrangement guaranteeing an aggregate spend of \$7.2 million over the first twelve months of the arrangement. In January 2023 we renewed our agreement guaranteeing an aggregated spend of \$13.5 million over a twelve month period.

Litigation

From time to time, we may become involved in legal actions arising in the ordinary course of business including, but not limited to, intellectual property infringement and collection matters. We make assumptions and estimates concerning the likelihood and amount of any potential loss relating to these matters using the latest information available. We record a liability for litigation if an unfavorable outcome is probable and the amount of loss or range of loss can be reasonably estimated. If an unfavorable outcome is probable and a reasonable estimate of the loss is a range, we accrue the best estimate within the range. If no amount within the range is a better estimate than any other amount, we accrue the minimum amount within the range. If an unfavorable outcome is probable but the amount of the loss cannot be reasonably estimated, we disclose the nature of the litigation and indicates that an estimate of the loss or range of loss cannot be made. If an unfavorable outcome is reasonably possible and the estimated loss is material, we disclose the nature and estimate of the possible loss of the litigation. We do not disclose information with respect to litigation where an unfavorable outcome is considered to be remote or where the estimated loss would not be material. We are currently in a dispute with the Bridg Stockholder Representative regarding the amount of the First Anniversary Payment. Refer to Note 4—Business Combinations for further discussion. Other than this dispute, we are not presently a party to any legal proceedings that, if determined adversely to us, would individually or taken together have a material adverse effect on our business, operating results, financial condition or cash flows. 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.

14. EARNINGS PER SHARE

Diluted net loss per share is the same as basic net loss per share for 2020, 2021 and 2022 because the effects of potentially dilutive items were anti-dilutive, given our net loss during these periods. The following securities have been excluded from the calculation of diluted weighted-average common shares outstanding because the effect is anti-dilutive (in thousands):

	December 31,		
	2020	2021	2022
Common stock options	513	454	380
Convertible Senior Notes	2,701	2,701	2,701
Restricted stock units	2,434	2,294	5,956
Common stock issuable pursuant to the ESPP	4	9	95

15. SEGMENTS

As of December 31, 2022, we have three operating segments: the Cardlytics platform in the U.S. and U.K. and the Bridg platform, as determined by the information that our Chief Executive Officer, who we consider our chief operating decision-maker ("CODM"), uses to make strategic goals and operating decisions. Our Cardlytics platform operating segments in the U.S. and U.K. represent our proprietary advertising channels and are aggregated into one reportable segment given their similar economic characteristics, nature of service, types of customers and method of distribution. Subsequent to the acquisition of Bridg, our CODM began reviewing Bridg's revenue and operating expenses. Therefore, we consider the Bridg platform to be a separate operating segment. Our CODM allocates resources to, and evaluates the performance of, our operating segments based on revenue and adjusted contribution. Our CODM does not review assets by operating segment for the purposes of evaluating performance or allocating resources.

Revenue can be directly attributable to each segment. With the exception of deferred implementation costs, Partner Share and other third-party costs is also directly attributable to each segment. The accounting policies of each of our reportable segments are the same as those described in the summary of significant accounting policies.

The following table provides information regarding our reportable segments (in thousands):

	Year Ended December 31,		
	2020	2021	2022
Cardlytics platform			
Adjusted contribution	\$ 82,182	\$ 121,675	\$ 122,981
Plus: Adjusted Partner Share and other third-party costs ⁽¹⁾	104,710	137,079	154,204
Revenue	<u>\$ 186,892</u>	<u>\$ 258,754</u>	<u>\$ 277,185</u>
Bridg platform			
Adjusted contribution	\$ —	\$ 7,953	\$ 20,054
Plus: Adjusted Partner Share and other third-party costs ⁽¹⁾	—	409	1,303
Revenue	<u>\$ —</u>	<u>\$ 8,362</u>	<u>\$ 21,357</u>
Total			
Adjusted contribution	\$ 82,182	\$ 129,628	\$ 143,035
Plus: Adjusted Partner Share and other third-party costs ⁽¹⁾	104,710	137,488	155,507
Revenue	<u>\$ 186,892</u>	<u>\$ 267,116</u>	<u>\$ 298,542</u>

(1) Adjusted Partner Share and other third-party costs presented above represents GAAP Partner Share and other third-party data costs less deferred implementation costs, which is detailed below in our reconciliation of GAAP loss before income taxes to adjusted contribution.

Adjusted Contribution

Adjusted contribution measures the degree by which revenue generated from our marketers exceeds the cost to obtain the purchase data and the digital advertising space from our partners. Adjusted contribution demonstrates how incremental revenue on our platforms generates incremental amounts to support our sales and marketing, research and development, general and administration and other investments. Adjusted contribution is calculated by taking our total revenue less our Partner Share and other third-party costs exclusive of deferred implementation costs, which is a non-cash cost. Adjusted contribution does not take into account all costs associated with generating revenue from advertising campaigns, including sales and marketing expenses, research and development expenses, general and administrative expenses and other expenses, which we do not take into consideration when making decisions on how to manage our advertising campaigns.

The following table presents a reconciliation of loss before income taxes presented in accordance with GAAP to adjusted contribution (in thousands):

	Year Ended December 31,		
	2020	2021	2022
Adjusted contribution	\$ 82,182	\$ 129,628	\$ 143,035
Minus:			
Deferred implementation costs ⁽¹⁾	4,598	3,785	—
Delivery costs	14,310	22,503	30,403
Sales and marketing expense	45,307	65,996	74,745
Research and development expense	17,532	38,104	54,435
General and administration expense	46,532	66,222	81,446
Change in fair value of contingent consideration	—	1,374	(128,174)
Impairment of goodwill and intangible assets	—	—	453,288
Acquisition and integration costs (benefits)	—	24,372	(2,874)
Depreciation and amortization expense	7,826	29,871	37,544
Total non-operating (income) expense	1,499	13,830	8,932
Loss before income taxes	<u>\$ (55,422)</u>	<u>\$ (136,429)</u>	<u>\$ (466,710)</u>

(1) Deferred implementation costs is excluded from adjusted Partner Share and other third-party costs, which is shown above in our reconciliation of GAAP revenue to adjusted contribution.

The following tables provide geographical information (in thousands):

	Year Ended December 31,		
	2020	2021	2022
Revenue:			
United States	\$ 172,808	\$ 246,315	\$ 275,256
United Kingdom	14,084	20,801	23,286
Total	<u>\$ 186,892</u>	<u>\$ 267,116</u>	<u>\$ 298,542</u>

	December 31,	
	2021	2022
Property and equipment:		
United States	\$ 7,750	\$ 4,453
United Kingdom	3,423	1,463
India	100	—
Total	<u>\$ 11,273</u>	<u>\$ 5,916</u>

Capital expenditures within the United Kingdom and India were \$2.8 million, \$0.7 million and \$0.5 million during 2019, 2021 and 2022, respectively.

Concentrations of Risk

Cash and Cash Equivalents

Financial instruments that potentially subject us to concentrations of credit risk consist primarily of cash and cash equivalents and accounts receivable. A majority of our cash and cash equivalents are held in fully FDIC-insured demand deposit accounts that distribute funds, and credit risk, over a vast number of financial institutions. Our remaining cash and cash equivalents are held in treasury obligation funds and money market accounts with six financial institutions, which we believe are of high credit quality.

Marketers

Our revenue and accounts receivable are diversified among a large number of marketers segregated by both geography and industry. During 2020, 2021 and 2022, our top five marketers accounted for 35%, 29% and 17% of our revenue, respectively, with one marketer accounting for over 10% during 2020 and 2021. No marketer represented over 10% during 2022. As of December 31, 2021 and 2022, our top five marketers accounted for 19% and 18% of our accounts receivable, respectively, with no individual marketer representing over 10% as of the end of each period, respectively.

FI Partners

Our business is substantially dependent on a limited number of FI partners. We require participation from our FI partners in the Cardlytics platform and access to their purchase data in order to offer our solutions to marketers and their agencies. We must have FI partners with a sufficient number of customers and levels of customer engagement to ensure that we have robust purchase data and marketing space to support a broad array of incentive programs for marketers. Our agreements with a substantial majority of our FI partners have terms of three to seven years but are generally terminable by the FI partner on 90 days or less prior notice. If an FI partner terminates its agreement with us, we would lose that FI as a source of purchase data and online banking customers.

During 2020 and 2021, our top two FI partners combined to account for over 75% of the total Partner Share we paid to all partners, with each representing over 25%. No other partner accounted for over 10% of Partner Share during these periods. During 2022, our top three FI partners combined to account for over 80% of the total Partner Share we paid to all partners, with the top two FI partners each representing over 20% and third largest FI partner representing over 10% of Partner Share. No other partner accounted for over 10% of Partner Share during these periods.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Based on the evaluation of our disclosure controls and procedures as of December 31, 2022, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining an adequate system of internal control over financial reporting, as defined in the Exchange Act Rule 13a-15(f). Management conducted an assessment of our internal control over financial reporting based on the framework established in 2013 by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control-Integrated Framework. Based on the assessment, management concluded that, as of December 31, 2022, our internal control over financial reporting was effective.

Our independent registered public accounting firm has issued an attestation report on the effectiveness of our internal control over financial reporting, which appears in this Annual Report.

Remediation of a Material Weakness

We recognize the importance of the control environment as it sets the overall tone for the Company and is the foundation for all other components of internal control. Consequently, we designed and implemented remediation measures to address the material weakness related to our review and oversight of our third-party valuation specialists, as further described in Item 9A of our Annual Report on Form 10-K and Form 10-K/A filed with the SEC on March 1, 2022 and May 2, 2022, respectively. In light of the material weakness, we performed the following remediation actions during the year ended December 31, 2022:

- Evaluated the design of the level of precision of the review of third-party valuation specialists
- Enhanced level of precision of the review of third-party valuation specialists

We consider our remediation efforts with respect to the material weakness to be complete as of December 31, 2022 because we believe the enhanced controls have operated for a sufficient period of time and management has concluded, through testing, that the controls are operating effectively.

Changes in Internal Control Over Financial Reporting

Except for our remediation of the material weakness described above, there was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the three months ended December 31, 2022 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Cardlytics, Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Cardlytics, Inc. and subsidiaries (the "Company") as of December 31, 2022, 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, 2022, 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, 2022, of the Company and our report dated March 1, 2023, 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

Atlanta, Georgia

March 1, 2023

ITEM 9B. OTHER INFORMATION.

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III.

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item is incorporated by reference to our Proxy Statement for the 2023 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission ("SEC") within 120 days of the fiscal year ended December 31, 2022.

We have adopted a Code of Business Conduct and Ethics (the "Code of Conduct") applicable to all of our employees, executive officers and directors. The Code of Conduct is available on our website at www.cardlytics.com. The Nominating and Corporate Governance Committee of our Board of Directors is responsible for overseeing the Code of Conduct and must approve any waivers of the Code of Conduct for employees, executive officers and directors. If we make any substantive amendments to the Code of Conduct or we grant any waiver from a provision of the Code of Conduct to any executive officer or director, we will promptly disclose the nature of the amendment or waiver on our website. Information contained on, or that can be accessed through, our website is not incorporated by reference into this Annual Report on Form 10-K.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated by reference to our Proxy Statement for the 2023 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the fiscal year ended December 31, 2022.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item is incorporated by reference to our Proxy Statement for the 2023 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the fiscal year ended December 31, 2022.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information required by this item is incorporated by reference to our Proxy Statement for the 2023 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the fiscal year ended December 31, 2022.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this item is incorporated by reference to our Proxy Statement for the 2023 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the fiscal year ended December 31, 2022.

PART IV.

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as part of this Annual Report:

- (i) Consolidated Financial Statements and Reports of Independent Registered Public Accounting Firm are shown in the Index to Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.
- (ii) All financial statement schedules are omitted because they are not applicable or the required information is shown in the financial statements or notes thereto.
- (iii) Exhibits are incorporated herein by reference or are filed with this Annual Report as indicated below.

(b) Exhibits:

Exhibit	Exhibit Description	Incorporated by Reference			
		Schedule /Form	File Number	Exhibit	Filing Date
3.1	Amended and Restated Certificate of Incorporation of the Registrant	S-1	333-222531	3.2	1/12/2018
3.2	Amended and Restated Bylaws of the Registrant	S-1	333-222531	3.4	1/12/2018
4.1	Form of Common Stock Certificate of the Registrant	S-1/A	333-222531	4.1	1/29/2018
4.2	Amended and Restated Investors' Rights Agreement by and among the Registrant and certain of its stockholders, dated May 4, 2017	S-1	333-222531	4.2	1/12/2018
4.3	Description of Cardlytics, Inc. Common Stock	10-K	001-38386	4.3	3/3/2020
4.4	Indenture, dated as of September 22, 3030, by and between the Registrant ant U.S. Bank National Association, as Trustee.	8-K	001-38386	4.1	9/22/2020
4.5	Form of Global Note, representing the Registrant's 1.00% Convertible Senior Notes due 2025 (included as Exhibit A to the Indenture filed as Exhibit 4.4)	8-K	001-38386	4.2	9/22/2020
10.1	Office Lease Agreement, dated as of August 5, 2013, by and between the Registrant and Jamestown Ponce City Market, L.P., as amended to date	S-1	333-222531	10.12	1/12/2018
10.2†	2008 Stock Plan and Forms of Option Agreement, Notice of Stock Option Grant, Exercise Notice, Restricted Stock Unit Notice and Restricted Stock Unit Agreement thereunder, as amended to date	S-1/A	333-222531	10.1	1/29/2018
10.3†	2018 Equity Incentive Plan and Forms of Stock Option Agreement, Notice of Exercise and Stock Option Grant Notice thereunder	S-1/A	333-222531	10.2	1/29/2018
10.4†	2018 Employee Stock Purchase Plan	S-1/A	333-222531	10.3	1/29/2018
10.5†	Form of restricted securities unit award of the Registrant	S-1	333-222531	10.8	1/12/2018
10.6†	Form of Indemnity Agreement by and between the Registrant and each of its directors and executive officers	S-1	333-222531	10.9	1/12/2018
10.7†	Form of Amended and Restated Separation Pay Agreement by and between the Registrant and each of Scott D. Grimes, Lynne M. Laube, David T. Evans and Kirk L. Somers	S-1/A	333-222531	10.11	1/29/2018
10.8#	Software License, Customization and Maintenance Agreement, dated as of November 4, 2010 by and between the Registrant and Bank of America, N.A., as amended to date	S-1	333-222531	10.16	1/12/2018

10.9#	<u>Master Agreement and Schedule #1 to the Master Agreement, dated May 3, 2018 and May 7, 2018, respectively, by and between the Company and JPMorgan Chase Bank, National Association</u>	10-Q	001-38386	10.1	8/14/2018
10.10	<u>Loan and Security Agreement, dated as of May 21, 2018, among Cardlytics, Inc., as Borrower and Pacific Western Bank, as Lender</u>	10-Q	001-38386	10.2	8/14/2018
10.11	<u>First Amendment to Loan and Security Agreement, dated March 27, 2019, among Cardlytics, Inc., as Borrower and Pacific Western Bank, as Lender</u>	10-Q	001-38386	10.2	5/9/2019
10.12	<u>Non-Employee Director Compensation Plan</u>	10-K	001-38386	10.13	3/1/2022
10.13	<u>Second Amendment to Loan and Security Agreement, dated May 14, 2019, among Cardlytics, Inc., as Borrower and Pacific Western Bank, as Lender</u>	10-Q	001-38386	10.2	8/8/2019
10.14	<u>Third Amendment to Loan and Security Agreement, dated September 24, 2019, among Cardlytics, Inc., as Borrower and Pacific Western Bank, as Lender</u>	10-Q	001-38386	10.1	11/12/2019
10.15	<u>2018 Amendment to Schedule #1 to the Master Agreement, dated October 23, 2018, by and between the Registrant and JPMorgan Chase Bank, N.A.</u>	10-K	001-38386	10.22	3/3/2020
10.16	<u>Fourth Amendment to Loan and Security Agreement, dated February 27, 2020, among Cardlytics, Inc., as Borrower and Pacific Western Bank, as Lender</u>	10-Q	001-38386	10.1	5/11/2020
10.17	<u>Second Amendment to Schedule #1, dated June 4, 2020, among Cardlytics, Inc. and JPMorgan Chase Bank, National Association</u>	10-Q	001-38386	10.1	8/4/2020
10.18	<u>Fifth Amendment to Loan and Security Agreement, dated September 17, 2020, amount Cardlytics, Inc., as Borrower and Pacific Western Bank, as Lender</u>	10-Q	001-38386	10.1	11/2/2020
10.19^	<u>2020 Amendment to General Services Agreement, dated December 2, 2020, by and between the Registrant and Bank of America, N.A.</u>	10-K	001-38386	10.27	3/3/2021
10.20	<u>Sixth Amendment to Loan and Security Agreement, dated December 30, 2020, amount Cardlytics, Inc., as Borrower and Pacific Western Bank, as Lender</u>	10-K	001-38386	10.28	3/3/2021
10.21	<u>Form of Confirmation for Capped Call Transactions</u>	8-K	001-38386	10.1	9/22/2020
10.22	<u>Assumption Agreement and Seventh Amendment to Loan and Security Agreement, dated as of March 5, 2021, by and among Cardlytics, Inc., as Borrower, BSpears Merger Sub II, LLC, as additional borrower, and Pacific Western Bank, as Lender</u>	10-Q	001-38386	10.1	5/4/2021
10.23	<u>Assumption Agreement and Seventh Amendment to Loan and Security Agreement, dated as of April 7, 2021, by and among Cardlytics, Inc., as Borrower, BSpears Merger Sub II, LLC, as additional borrower, and Pacific Western Bank, as Lender</u>	10-Q	001-38386	10.1	8/3/2021

10.24	<u>Assumption Agreement and Eighth Amendment to Loan and Security Agreement, dated as of May 5, 2021, by and among Cardlytics, Inc., as Borrower, BSpears Merger Sub II, LLC, as additional borrower, and Pacific Western Bank, as Lender</u>	10-Q	001-38386	10.2	8/3/2021
10.25	<u>Agreement and Plan of Merger, dated April 12, 2021, by and among Cardlytics, Inc., Bridg, Inc., Mr. T Merger Sub, Inc., and Shareholder Representative Services LLC</u>	8-K	001-38386	10.1	11/18/2022
10.26	<u>2020 Bonus Plan of the Registrant</u>	10-K	001-38386	10.31	3/1/2022
10.27	<u>2021 Bonus Plan of the Registrant</u>	10-K	001-38386	10.32	3/1/2022
10.28	<u>Assumption Agreement and Tenth Amendment to Loan and Security Agreement, dated as of April 29, 2022, by and among Cardlytics, Inc., as Borrower and Pacific Western Bank, as Lender</u>	10-Q	001-38386	10.1	5/2/2022
10.29	<u>Form of Transition Agreement by and between the Registrant and Kirk L. Somers</u>	10-Q	001-38386	10.1	8/2/2022
10.30	<u>General Service Agreement dated as of July 7, 2022 by and between the Registrant and Bank of America, N.A.</u>	10-Q	001-38386	10.2	8/2/2022
10.31	<u>Statement of Work Agreement dated as of July 7, 2022 by and between the Registrant and Bank of America, N.A.</u>	10-Q	001-38386	10.3	8/2/2022
10.32	<u>Transition Letter Agreement between Lynne M. Laube and Cardlytics, Inc.</u>	10-Q	001-38386	10.1	11/1/2022
10.33	<u>Offer Letter Agreement between Karim Tamsamani and Cardlytics, Inc.</u>	10-Q	001-38386	10.2	11/1/2022
10.34	<u>Severance Agreement between Karim Tamsamani and Cardlytics, Inc.</u>	10-Q	001-38386	10.3	11/1/2022
10.35	<u>Severance Agreement between Nick Lynton and Cardlytics, Inc.</u>	10-Q	001-38386	10.4	11/1/2022
10.36	<u>2022 Inducement Plan</u>	10-Q	001-38386	10.7	11/1/2022
10.37	<u>Form of option grant notice and agreement under 2022 Inducement Plan</u>	10-Q	001-38386	10.8	11/1/2022
10.38	<u>Form of restricted stock unit grant notice and agreement under 2022 Inducement Plan</u>	10-Q	001-38386	10.9	11/1/2022
10.39	<u>Resignation and Release Agreement between Lynne Laube and Cardlytics, Inc.</u>	8-K	001-38386	10.1	11/14/2022
10.40	<u>Resignation and Release Agreement between Scott Grimes and Cardlytics, Inc.</u>	8-K	001-38386	10.2	11/14/2022
10.41*	<u>Assumption Agreement and Eleventh Amendment to Loan and Security Agreement, dated as of November 29, 2022, by and among Cardlytics, Inc., as Borrower and Pacific Western Bank, as Lender</u>				
10.42*	<u>Offer Letter Agreement between Amit Gupta and Cardlytics, Inc.</u>				
10.43*	<u>Severance Agreement between Amit Gupta and Cardlytics, Inc.</u>				
10.44*	<u>Assumption Agreement and Twelfth Amendment to Loan and Security Agreement, dated as of February 16, 2023, by and among Cardlytics, Inc., as Borrower and Pacific Western Bank, as Lender</u>				
10.45*	<u>Amendment to Inducement Plan</u>				
10.46*	<u>2022 Bonus Plan of the Registrant</u>				
21.1	<u>Subsidiaries of the Registrant</u>	10-Q	001-38386	21.1	8/14/2018
23.1*	<u>Consent of Deloitte & Touche LLP, independent registered public accounting firm</u>				

31.1*	<u>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</u>
31.2*	<u>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</u>
32.1**	<u>Certification of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</u>
101.ins	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.sch	XBRL Taxonomy Schema Linkbase Document
101.cal	XBRL Taxonomy Calculation Linkbase Document
101.def	XBRL Taxonomy Definition Linkbase Document
101.lab	XBRL Taxonomy Label Linkbase Document
101.pre	XBRL Taxonomy Presentation Linkbase Document
104.0	Cover page formatted as Inline XBRL and contained in Exhibit 101

* Filed herewith

** Furnished herewith

^ Certain portions of this exhibit, indicated by asterisks, have been omitted pursuant to Item 601(b)(10) of Regulation S-K because they are not material and would likely cause competitive harm to the registrant if publicly disclosed.

† Indicated management contract or compensatory plan

Confidential treatment has been granted from the Securities and Exchange Commission as to certain portions of this document

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.

Cardlytics, Inc.

March 1, 2023

By: /s/ Karim Tamsamani

Karim Tamsamani
Chief Executive Officer
(Principal Executive 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 and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Karim Tamsamani</u> Karim Tamsamani	Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	March 1, 2023
<u>/s/ Andrew Christiansen</u> Andrew Christiansen	Chief Financial Officer <i>(Principal Financial and Accounting Officer)</i>	March 1, 2023
<u>/s/ David L. Adams</u> David L. Adams	Director	March 1, 2023
<u>/s/ John V. Balen</u> John V. Balen	Board Chairman	March 1, 2023
<u>/s/ Jessica Jensen</u> Jessica Jensen	Director	March 1, 2023
<u>/s/ John Klinck</u> John Klinck	Director	March 1, 2023
<u>/s/ Aimée Lopic</u> Aimée Lopic	Director	March 1, 2023
<u>/s/ Chris Suh</u> Chris Suh	Director	March 1, 2023
<u>/s/ Tony Weisman</u> Tony Weisman	Director	March 1, 2023