
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)



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

For the fiscal year ended December 31, 2021

OR



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

For transition period from to
Commission File Number 001-40325

AppLovin Corporation

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

45-3264542

(I.R.S. Employer
Identification No.)

**1100 Page Mill Road
Palo Alto, California 94304**

(Address of registrant's principal executive offices, including zip code)

(800) 839-9646

(Registrant's telephone number, including area code)

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

<u>Title of each class</u>	<u>Trading Symbol</u>	<u>Name of each exchange on which registered</u>
Class A common stock, par value \$0.00003 per share	APP	The Nasdaq Stock Market LLC

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

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

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

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

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

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

Large accelerated filer ☐
Non-accelerated filer ☒

Accelerated filer ☐
Smaller reporting company ☐
Emerging growth company ☐

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

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

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

The aggregate market value of the registrant's voting and non-voting common equity held by non-affiliates of the registrant on June 30, 2021, the last business day of its most recently completed second fiscal quarter, was \$15.45 billion based on the closing sales price of the registrant's Class A common stock on that date. Shares of the registrant's Class A common stock and Class B common stock held by each executive officer and director and by each person who may be deemed to be an affiliate of the registrant have been excluded from this computation. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of March 4, 2022, the number of shares of the registrant's Class A common stock outstanding was 297,163,913 and the number of shares of the registrant's Class B common stock outstanding was 78,662,622.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's proxy statement for the 2022 Annual Meeting of Stockholders are incorporated herein by reference in Part III of this Annual Report on Form 10-K to the extent stated herein. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days after the end of the registrant's fiscal year ended December 31, 2021.

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NOTE ABOUT FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the federal securities laws, which statements involve substantial risks and uncertainties. Forward-looking statements generally relate to future events or our future financial or operating performance. In some cases, you can identify forward-looking statements because they contain words such as “may,” “will,” “should,” “expect,” “plan,” “anticipate,” “could,” “intend,” “target,” “project,” “contemplate,” “believe,” “estimate,” “predict,” “potential,” or “continue” or the negative of these words or other similar terms or expressions that concern our expectations, strategy, plans, or intentions. Forward-looking statements contained in this Annual Report on Form 10-K include statements about:

- our future financial performance, including our expectations regarding our revenue, cost of revenue, and operating expenses, and our ability to achieve or maintain future profitability;
- the sufficiency of our cash and cash equivalents to meet our liquidity needs;
- the demand for our AppLovin Software Platform and AppLovin Apps;
- our ability to attract and retain business clients and users;
- our ability to develop new products, features, and enhancements for our AppLovin Core Technologies and AppLovin Software Platform and to launch or acquire new AppLovin Apps and successfully monetize them;
- our ability to compete with existing and new competitors in existing and new markets and offerings;
- our ability to successfully acquire and integrate companies and assets and to expand and diversify our operations through strategic acquisitions and partnerships;
- our ability to maintain the security and availability of our AppLovin Core Technologies, AppLovin Software Platform, and AppLovin Apps;
- our expectations regarding the effects of existing and developing laws and regulations, including with respect to taxation and privacy and data protection;
- our ability to manage risk associated with our business;
- our expectations regarding new and evolving markets;
- our ability to develop and protect our brand;
- our expectations and management of future growth;
- our expectations concerning relationships with third parties;
- our ability to attract and retain employees and key personnel;
- our integration plans following our acquisition of MoPub;
- our integration plans and performance expectations for, and the expected timing for the closing of, our acquisition of Wurl;
- our expectations regarding our share repurchase program;
- our ability to maintain, protect and enhance our intellectual property; and
- the increased expenses associated with being a public company.

We caution you that the foregoing list may not contain all of the forward-looking statements made in this Annual Report on Form 10-K.

You should not rely upon forward-looking statements as predictions of future events. We have based the forward-looking statements contained in this Annual Report on Form 10-K primarily on our current expectations and projections about future events and trends that we believe may affect our business, financial condition, results of operations, and prospects. The outcome of the events described in these forward-looking statements is subject to risks, uncertainties, and other factors, including those described in the section titled “Risk Factors” and elsewhere in this Annual Report on Form 10-K. Moreover, we operate in a very competitive and rapidly changing environment. New risks and uncertainties emerge from time to time and it is not possible for us to predict all risks and uncertainties that could have an impact on the forward-looking statements contained in this Annual Report on Form 10-K. We cannot assure you that the results, events, and circumstances reflected in the forward-looking statements will be achieved or occur, and actual results, events, or circumstances could differ materially from those described in the forward-looking statements.

Neither we nor any other person assumes responsibility for the accuracy and completeness of any of these forward-looking statements. Moreover, the forward-looking statements made in this Annual Report on Form 10-K relate only to events as of the date on which the statements are made. We undertake no obligation to update any forward-looking statements made in this Annual Report on Form 10-K to reflect events or circumstances after the date of this Annual

Report on Form 10-K or to reflect new information or the occurrence of unanticipated events, except as required by law. We may not actually achieve the plans, intentions, or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, partnerships, mergers, dispositions, joint ventures, or investments we may make.

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this Annual Report on Form 10-K, 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. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

Part I

Item 1. Business

Our mission is to grow the mobile app ecosystem by enabling the success of mobile app developers.

Our software solutions provide advanced tools for mobile app developers to grow their businesses by automating and optimizing the marketing and monetization of their apps. Our software, coupled with our deep industry knowledge and expertise, has allowed us to rapidly scale a successful and diversified portfolio of owned mobile apps. We have also accelerated our market penetration through an active acquisition and partnership strategy. Our scaled and integrated business model sits at the nexus of the mobile app ecosystem, which creates a durable competitive advantage that has fueled our clients' success and our strong growth.

Over the past two decades, mobile apps have become integral to our lives. Mobile apps offer a wide array of applications, such as allowing users to seamlessly share ideas, make purchases, monitor health, and access entertainment. Growth of the mobile app ecosystem benefits mobile app users, but makes it harder for mobile app developers, and particularly indie developers, to scale and succeed in a crowded market. Most developers lack access to the marketing, monetization, and data analytics tools required to stand out among millions of competing mobile apps or attract sufficient numbers of mobile app users to create and sustain a successful long-term business.

The marketing and monetization challenges faced by mobile app developers are particularly acute for developers of mobile games, which is one of the largest and fastest-growing segments within the mobile app ecosystem.

AppLovin is critical to the success of mobile app developers, in particular mobile game developers, solving key marketing and monetization challenges. Through our technologies and scaled distribution, developers are able to manage, optimize, and analyze their marketing investments, and improve the monetization of their apps. The key elements of our solutions are delivered through the AppLovin Core Technologies and AppLovin Software Platform:

- *AppLovin Core Technologies:* Our foundational technology infrastructure which powers our Software Platform and, in turn, our Apps. Our Core Technologies consist of our AXON machine-learning recommendation engine, our App Graph, and our elastic cloud infrastructure. Our App Graph stores and manages anonymized data from hundreds of millions of mobile devices we reach every day, which our AXON engine then leverages to better predict and match users to relevant advertising content.
- *AppLovin Software Platform:* A comprehensive suite of tools for developers to get their mobile apps discovered and downloaded by the right users, optimize return on marketing spend, and maximize monetization of engagement. Our Software Platform is comprised of three solutions:
 - AppDiscovery, our marketing software solution, is the cornerstone of our Software Platform, augmented by our rapidly growing MAX monetization solution. AppDiscovery is powered by AXON and provides the technology to match advertiser demand with publisher supply through auctions at vast scale and microsecond-level speeds.
 - Adjust is our SaaS mobile marketing platform which allows marketers to make smarter decisions through measurement, attribution, and fraud prevention.
 - MAX utilizes an advanced in-app bidding technology that optimizes the value of a developer's advertising inventory by running a real-time competitive auction, driving more competition, and higher returns for publishers.

In 2018, given an opportunity to scale our own apps using our Software Platform, insights, and expertise in the mobile app ecosystem, we launched our first-party content strategy, AppLovin Apps. Today, our Apps consist of a globally diversified portfolio of over 350 free-to-play mobile games across five genres, run by nineteen studios including studios that we own (Owned Studios) and others that we partner with (Partner Studios). Our Apps provide data and insights as users play games, thus improving our App Graph and AXON recommendation engine. Our studios generally focus on the

development of easy to learn and play games, which appeal to a broad range of demographics, but also develop several games for other genres.

The combination of our Core Technologies, Software Platform, and Apps forms a strategic flywheel that drives growth across our business and furthers our competitive advantages. As more developers use our Software Platform to market and monetize their mobile apps, we gain access to more users and more user engagement further strengthening our scaled distribution. As our distribution grows, we gain better insights for our App Graph and AXON recommendation engine, which then further enhances our Software Platform. This continuously improving flywheel helps developers that use our Software Platform to create and sustain successful businesses, growing both our own business and the mobile app ecosystem.

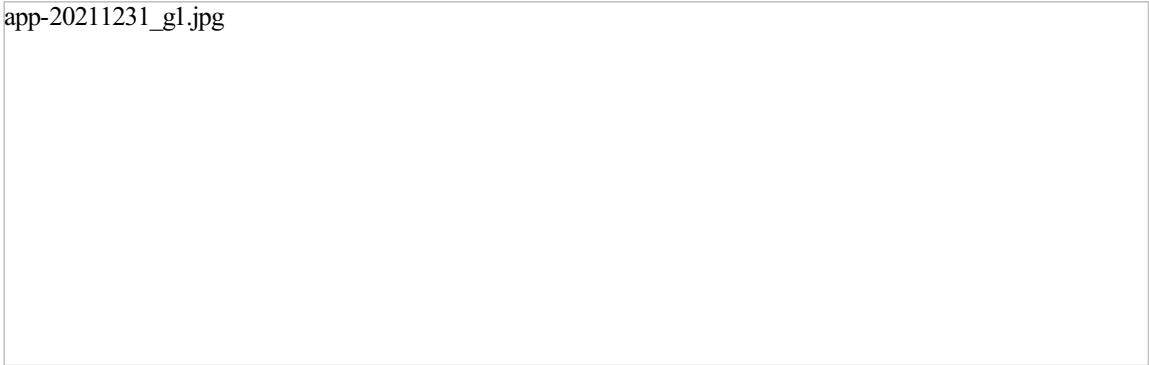
We accelerate our capabilities and enhance our strategic position in the mobile app ecosystem by actively pursuing acquisitions and partnerships for new technologies and apps. Insights that we derive from our strategic position and flywheel allow us to proactively identify attractive acquisition and partnership opportunities across the mobile app ecosystem. From the beginning of 2018 through December 31, 2021, we have invested over \$2.5 billion across 27 strategic acquisitions and partnerships with app studios, games, and software platforms. In the case of new apps, we are able to deploy our Software Platform and expertise to accelerate revenue growth, enabling us to target strong returns on investment. Strategic acquisitions and partnerships will continue to be a part of our growth strategy going forward.

How We Grow the Mobile App Ecosystem

We have built and invested in our Core Technologies and Software Platform, which expand the mobile app ecosystem by solving key developer growth challenges. We deliver value to mobile app developers by helping scale their businesses and maximize their revenue through our marketing and monetization technologies and expertise. Our Core Technologies and Software Platform combine marketing, monetization, and analytics into a single unified technology stack.

AppLovin's Integrated Approach

app-20211231_g1.jpg



AppLovin Core Technologies

Our Core Technologies are our foundational technology infrastructure, which powers our Software Platform and, in turn, our Apps. Our Core Technologies consist of our AXON machine-learning recommendation engine, our App Graph data management layer, and our elastic cloud infrastructure. Our Core Technologies catalogue and consolidate interactions every day into our proprietary App Graph. AXON receives information from our App Graph and uses its machine-learning algorithms to match each user to relevant advertising content, driving better engagement and monetization.

Our flexible, robust cloud infrastructure is the backbone of our Core Technologies. This proprietary system allows us to operate at massive scale and process significant data while maintaining a high degree of flexibility, so that we may keep pace with the ever-evolving needs of our customers. Our globally distributed data infrastructure ensures we are able to connect with devices worldwide and process aggregate user activity across our Software Platform.

AppLovin Software Platform

Our Software Platform provides a comprehensive suite of tools for developers to grow their businesses by automating and optimizing the marketing and monetization of their apps. This suite is made up of three key solutions:

- **AppDiscovery** is our marketing software solution, which matches advertiser demand with publisher supply through auctions at vast scale and microsecond-level speeds. AppDiscovery is powered by our AXON machine-

learning recommendation engine with predictive algorithms that enable developers to match their apps to users that are more likely to download them.

- **Adjust** is an analytics platform that helps marketers grow their mobile apps with solutions for measuring and optimizing campaigns and protecting user data. Adjust powers thousands of apps with built-in intelligence and automation, backed by responsive global customer support.
- **MAX** is our in-app bidding software that optimizes the value of an app's advertising inventory by running a real-time competitive auction, driving more competition and higher returns for publishers. Many developers that integrate MAX have experienced a measurable increase in their average revenue per daily active user over traditional monetization tools and save countless hours because they are able to automate manual monetization work through its advanced feature set.

When deployed together, our Software Platform helps developers better reach and monetize a more precisely targeted and valuable user base.

Our Software Platform is delivered through an integrated and seamless user interface, allowing developers to accelerate their revenue opportunities, reduce the time they spend on marketing and monetization, and focus on what they do best—developing apps.

AppLovin Apps

Our Apps consist of a globally diversified portfolio of over 350 free-to-play mobile games run by nineteen studios with a deep bench of talented developers. Our diversified portfolio covers five gaming genres, the most frequent of which is casual games, and appeals to a broad global audience across different ages, genders, and locations.

Our Owned Studios and Partner Studios utilize our Software Platform to market and monetize our Apps. When using our Software Platform, our Apps have an economic advantage, which benefits our business as a whole. The strategy of our studios is to allow developers to focus on creating great Apps, while leveraging our Software Platform and expertise to unlock the potential of those Apps.


Our Strategic Flywheel

The mutually reinforcing combination of our Software Platform's scaled distribution, our App's first-party content, and our Core Technologies' recommendation engine creates a powerful flywheel effect that enhances each component and importantly improves our overall strategic position and capabilities. As our Software Platform improves and is able to deliver more effective ads to more relevant users, more developers use and integrate their apps with our Software Platform, growing our scaled distribution. This grows the number of users on and level of engagement with our Apps and third-party apps. With a larger number of users engaged with our Software Platform and our Apps, our App Graph gains more insights and data. The enhanced App Graph feeds our Core Technologies, including our AXON machine-learning recommendation engine, improving its insights and matching capabilities. As the insights generated by AXON improve, the effectiveness of our Software Platform is enhanced in real-time. Improvements to our Software Platform lead to more developer demand, restarting the virtuous cycle of our strategic flywheel.

Our Software Platform benefits from more apps and users from both our Apps and those of third-party developers. Through more volume and strong underlying software, our Software Platform can better match and price the supply of advertising inventory and demand from advertisers, helping users discover the apps they love and delivering better returns for developers. Apps—whether third party or our own—benefit from the improved marketing and monetization capabilities of our Software Platform, driving growth in users and revenue. With greater scale and resources, developers can reinvest to create new apps, improve existing apps, and further invest in user acquisition, thereby growing the overall mobile app ecosystem.

We derive highly strategic insights from our flywheel. As the largest user of our Software Platform, our Apps benefit from the expertise and cost savings of our Software Platform, leading to greater returns on user acquisition spend. This allows our Apps to make significant investments in user acquisition, giving us further insights into the effectiveness of our tools and monetization strategies across the ecosystem.

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Our Strategic Acquisitions and Partnerships

We accelerate our technical capabilities, strategic positioning, and growth through strategic acquisitions and partnerships. We have developed a proven and repeatable process for acquiring highly sophisticated technology that enhances our Core Technologies and Software Platform and for selecting and scaling our Apps global portfolio. Our business sits at the nexus of the mobile app ecosystem, which gives us deep insights into potential acquisitions and partnerships. Additionally, as a first-hand participant in the mobile app ecosystem, we have developed a strong relationship with other participants, allowing us to more easily identify and enter into partnerships or acquire companies and technologies. Our acquisitions and partnerships include investments in software, such as our acquisitions of Adjust, MAX, MoPub, and SafeDK, and game studios, such as our acquisition of PeopleFun and partnership with Belka Games.

Our unique and active role in the ecosystem allows us to make informed, data-driven decisions regarding which tools best address developer pain points. As part of AppLovin, our strategic acquisitions and partnerships benefit from our software and expertise, typically achieving step-function improvements in performance. Once we have acquired or partnered with a studio, we allow the studio to maintain its creative autonomy and help the studio to manage its business needs by leveraging all of the tools and capabilities of our Core Technologies and Software Platform. Given our strategic insights and long-standing relationships with many game studios, we are able to identify highly attractive acquisitions and partnerships. From the beginning of 2018 through December 31, 2021, we have invested over \$2.5 billion across 27 strategic acquisitions and partnerships in software and gaming.

Benefits to Mobile App Developers

We enable mobile app developers to:

- **Reach and attract users at scale.** Our Software Platform reaches millions of users per day, enabling developers to target and find the right users for their apps worldwide. Developers are able to set their user acquisition and revenue goals to target the most relevant, highest value users.
- **Maximize monetization of engagement.** Developers use our Software Platform to generate incremental revenue by maximizing the monetization of their mobile app ad inventory. Our tools operate at nearly instantaneous speeds and at vast scale to enhance monetization for developers while preserving the end user experience.
- **Leverage proprietary data and insights.** Developers benefit from accessing comprehensive real-time insights through our customized user dashboards, helping them optimize campaigns, improve user engagement, and manage their return on investment.

- **Automate time consuming and manual processes.** Our Software Platform automates marketing and monetization, allowing developers to focus on improving their apps rather than managing complex go-to-market processes manually.
- **Seamlessly adapt to industry innovation.** Our cloud-based Core Technologies and Software Platform are continuously updated as the mobile app ecosystem evolves. Developers on our Software Platform benefit from this ongoing advancement and optimization, and are able to rapidly adapt to industry changes in marketing and monetization without losing focus on mobile app creation.

Our Strategy for Growth

We have a comprehensive strategy to continue our growth and further enhance our market position in the mobile app ecosystem.

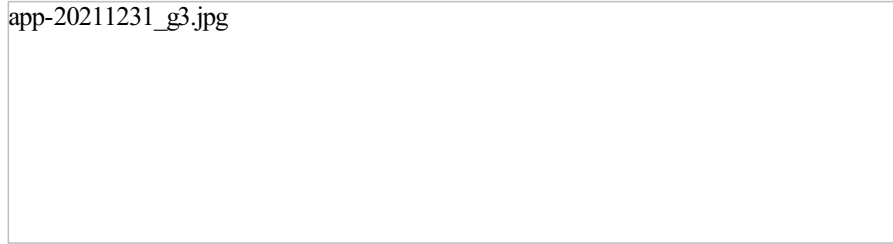
- **Existing market expansion.** We have an attractive market opportunity within our growing mobile app segments and will continue to invest across our Core Technologies, Software Platform, and Apps.
- **Enhance and extend machine-learning platform technologies.** As we increase our scale and reach, we benefit from compounding improvements to our AXON machine-learning recommendation engine, which in turn improves the efficacy and growth of our Software Platform solutions.
- **Expand distribution reach and software capabilities.** Improvements to AXON and our App Graph help to accelerate AppDiscovery's growth. We also see an opportunity to increase market adoption of our MAX monetization solution, in part, through our acquisition of MoPub. By integrating MoPub's reach and product features into our existing Software Platform, we expect to better maximize revenue growth and improve efficiencies for our combined customers.
- **Grow AppLovin Apps.** We intend to grow our AppLovin Apps portfolio by making appropriate user acquisition investments, using live-ops to enhance engagement and monetization of our Apps, and launching new titles.
- **New market extensions.** We believe our technology and expertise are applicable to other market segments and geographies that we do not currently address:
 - **Expand into other mobile app segments and industries.** Our long-term objective is to power and operate mobile apps across multiple verticals such as e-commerce, entertainment, and health and wellness. We believe our deep expertise and capabilities in the complex mobile gaming sector will allow us to successfully apply our technology in other verticals.
 - **Geographic expansion and industry partnerships.** We have a large international expansion opportunity given only 40% of our total revenue came from outside of the United States in 2021. To expand our reach, we plan to further invest in our sales and marketing to increase penetration among new and existing clients.
 - **Other performance marketing and yield marketing categories.** We believe our technology and expertise are applicable to other large and growing performance marketing categories beyond mobile apps.
- **Pursue accretive strategic acquisitions and partnerships.** Given our proven track record, long-standing relationships with key industry players, and reputation as a partner of choice, we have a deep pipeline of software and app investment opportunities which we will continue to pursue.

Our Core Technologies, Software Platform, and Apps

We solve the marketing and monetization challenges facing mobile app developers through our Core Technologies and Software Platform. We help grow the worldwide mobile app ecosystem by enabling developers to scale their businesses while remaining focused on creating and improving their apps. We scale our own Apps by fully utilizing our Software Platform and expert insights, while continuously improving our software for the benefit of all developers.

AppLovin Core Technologies

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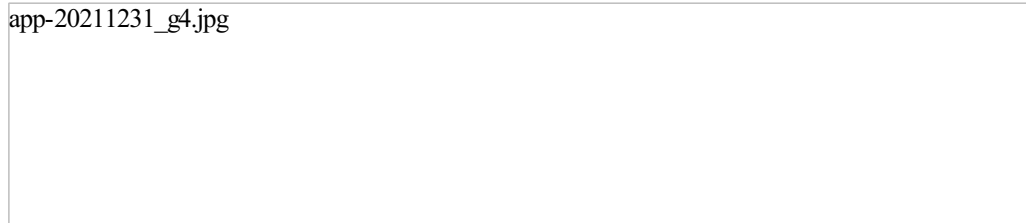


Our Core Technologies power our client-facing Software Platform and consist of our AXON machine-learning recommendation engine, our App Graph, and a flexible, robust cloud infrastructure. The underlying elastic architecture is managed through multiple cloud providers and our own co-located data centers, handling massive amounts of data while remaining flexible enough to rapidly add new solutions and technology in response to changing market and customer needs. Our Core Technologies process device-level data from millions of devices. Our App Graph stores and manages this anonymized data allowing AXON to then leverage it to better predict and match users to relevant advertising content. These insights fuel our Software Platform, which better matches users to content and create a more personalized experience.

Our Software Platform also enables real-time auctions that optimize the value for each impression, while simultaneously enabling developers to attain an attractive value for each of the impressions from their inventory. The sum total of these mutually reinforcing software elements has created a robust and successful marketing and monetization engine that operates at high scale and speed.

AppLovin Software Platform

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Our comprehensive Software Platform enables app developers to automate their mobile app marketing, engagement, and monetization efforts in three core ways. First, we provide marketing technology that allows developers to reach more of the most suitable users with personalized content, in order to increase the number of users who download and engage with their apps. Second, we provide developers with monetization and analytics technology to maximize the value of their inventory by obtaining a high price for each impression. Third, we provide developers a set of capabilities to optimize their apps and help streamline their businesses.

Our key Software Platform offerings are AppDiscovery, Adjust and MAX.

AppDiscovery

AppDiscovery is a suite of marketing solutions that enables developers to automate, optimize, and manage their marketing efforts. AppDiscovery is powered by machine-learning with predictive algorithms that enable developers to match their apps to users that are more likely to download them. This form of personalized advertising focuses on the end user, enabling the advertisers to find the right users and delivering to users more of what they are likely to be interested in. AppDiscovery leverages our AXON machine-learning recommendation engine to target the right users with the right marketing campaign, at scale. Advertisers not only attract users that download, but also find a high volume of users that stay and engage with their apps for greater retention and ultimately, increased opportunities for better monetization. Revenue from AppDiscovery comprises a vast majority of revenue from our Software Platform.

With AppDiscovery, advertisers can define the framework of their campaigns in the following ways:

- **Reach:** Advertisers identify what they are willing to pay to acquire their target users. Our technology finds the users at that value who are most likely to download and engage with the app.

- **Global scale:** Advertisers can choose to connect with users in different regions around the world, and our technology suggests the best locations based on their parameters.
- **Retain and engage:** Our algorithms automatically adjust based on the likelihood users will engage. Our clients can analyze by retention periods from initial app download onwards, so that advertisers understand the effectiveness of their marketing investments.
- **Targeted returns:** Advertisers set their goals and target return on ad sales and our algorithms adjust cost and campaign specifics to meet them.

AppDiscovery includes the following features:

- **Advanced campaign management:** An interface to create, manage, and automatically optimize campaigns based on return on ad sales goals.
- **Real-time analytics:** An interface to see results and optimize against them with our ROI-based analytics environment.
- **Life-Time-Value (LTV) reporting:** A tool that breaks down campaign results by source and location, allowing advertisers to make real-time, informed decisions about the value and longevity of their campaigns.
- **High quality and quantity creatives:** Advertisers can make and test as many creatives as needed. They also have access to our in-house creative team for expert ad creation and testing strategies.

Adjust

Adjust is our SaaS mobile marketing platform which allows clients to better understand their users' journey while allowing marketers to make smarter decisions through measurement, attribution, and fraud prevention.

MAX

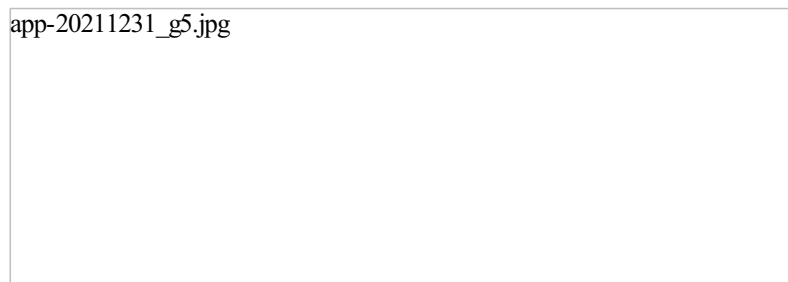
MAX is a suite of monetization solutions that optimize the value of a developer's traffic by running a single unbiased auction in which advertisers bid simultaneously, driving more competition and higher prices for publishers. MAX auctions are more effective than historical tools and approaches because MAX yields more targeted users for advertisers and enables publishers to achieve better prices for each impression. MAX has become the preferred in-app bidding solution for many developers worldwide, helping drive meaningful growth and momentum for MAX.

MAX includes the following features:

- **Advanced in-app bidding technology:** MAX's competitive auctions happen in real time with the most bidding platforms in the industry bidding simultaneously for developers' inventory at high volume. The competitive global demand helps maximize average revenue per user on each impression with many developers experiencing a measurable increase when moving to MAX.
- **Automated monetization:** MAX saves developers time through its extensive suite of APIs for automation.
- **Ad quality assurance and review:** MAX drives superior user experience with exclusive features that automatically flag risky content to keep developers' brands safe.
- **Powerful insights:** MAX helps developers better understand the LTV for each user and increase revenue to maximize yield for each ad opportunity.

AppLovin Apps

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Today, our Apps consist of a globally diversified portfolio of over 350 free-to-play mobile games across five genres, run by nineteen studios located worldwide with a deep bench of talented developers. Our Owned Studios and Partner Studios have developed and published games across a number of genres including: casual, hypercasual, match-three,

midcore, and card/casino. Our Apps contribute a highly predictable and diversified stream of revenue which we leverage to invest into acquiring more users and driving continued growth.

A diverse portfolio allows us to reach multiple user demographics and diversify our mobile game development across many different genres. We have a broad audience on our Apps and this allows our Software Platform to connect users to a wide range of content. Today, a large segment of our portfolio is casual games which have a lower risk of development and generally have more predictable revenue streams and return on investments. Casual games can be played a few minutes at a time and appeal to a wide range of users across many highly attractive demographics.

Our Owned Studios and Partner Studios leverage live ops to quickly iterate and increase in-game monetization by optimizing app economies and improving in-game conversion on items and offers. Our Software Platform and expertise provide analytical tools, testing capabilities, and other solutions such as distributed development, competitive insights, localizations resources, creative services to develop and test ads and resource centers to access design and development expertise.

We also provide a set of services that help both our Apps and third-party developers optimize their games and leverage our expertise to better streamline their business operations.

Competition

We operate in a fragmented mobile app ecosystem composed of divisions of large, well-established companies as well as privately-held companies. The large companies in our ecosystem may play multiple different roles given the breadth of their businesses.

- Advertisers typically engage with several advertising platforms and networks to purchase advertisements on mobile games and other mobile apps, looking to optimize their marketing investments. Such advertising platform companies vary in size and include players such as Facebook, Google, Amazon, and Unity Software, as well as various private companies. Several of these platforms, including Facebook, Google, Amazon, and Unity Software, are also our partners and clients.
- There are many companies that develop online and mobile games and other mobile apps. The larger gaming companies in our ecosystem include Activision Blizzard (Microsoft), Tencent, and Zynga (Take-Two Interactive), as well as other public and private companies. Many of these companies are also our partners and clients. We also expect new developers to enter the market and existing companies to allocate more resources to develop and market more mobile games and apps.

We believe that the principal competitive factors in our market are:

- the ability to enhance and improve technologies and offerings;
- knowledge, expertise, and experience in the mobile app ecosystem;
- relationships with third parties in the mobile app ecosystem;
- the ability to reach and target a large number of users;
- the ability to identify and execute on strategic transactions;
- the ability to successfully launch and monetize mobile apps;
- the pricing and perceived value of offerings;
- brand and reputation; and
- ability to expand into new offerings and geographies.

We believe we compete favorably with respect to these factors.

Our Values

Our AppLovin Values capture our company's culture and guide our approach on how we build and grow our business with all stakeholders:

We seek excellence, together. We know that our customers trust us to deliver immersive experiences and best-in-class tools. We take this very seriously, challenging one another to always do better. We are our toughest critics and most loyal fans. While we value individual initiative, we collaborate to drive forward as one team.

We are tenacious, move fast, and deliver. We move quickly and intentionally. Together we set a fast pace with high expectations, and then move beyond. We leverage all of our resources so we do not miss opportunities and find ways to deliver exceptional solutions.

We operate with integrity and intellectual honesty. We may move quickly and deliver, but we do it the right way. We do what is fair and operate with integrity because that is always the best course for customers, partners and all other stakeholders.

We foster entrepreneurship to challenge what is next. Taking risks and embracing challenges are part of our DNA. We empower our employees to try new things, question others, and innovate. This opens doors to new opportunities, which leads to more successful outcomes.

We excel through our culture of equality. Diversity and inclusion are principles that guide how we build our teams, grow our employees, and develop our company. We celebrate different approaches, points of view, and our diverse voices. It connects us with the players, developers, and global communities we serve.

Our employees are a key reason for our success and are essential for our continued growth. We benefit from a distributed global workforce and we plan to continue investing in hiring employees in our many locations worldwide. Our culture, industry success, and competitive compensation enable us to successfully retain our employees and to effectively recruit and retain new talent. We were named one of the Hottest Adtech Companies of 2021 by Business Insider, as well as a Certified Great Place to Work in 2021 and 2022. The San Francisco Business Times and Silicon Valley Business Journal awarded us one of the Bay Area's Best Places to Work in 2019, 2020, and 2021.

Research and Development

Continued investment in research and development is important to advancing our Core Technologies, Software Platform, and Apps. These advancements are key to attaining our strategic objectives and meeting the evolving needs of our customers. The underlying elastic architecture of our Core Technologies allows us to create, test, and deploy new features rapidly while distributing them globally. We also continue to invest in new and existing Apps.

Our research and development team is working on cutting edge technologies, which allows us to attract top talent globally. As of December 31, 2021, we had approximately 864 employees, or 54% of our total headcount, involved in research and development and related activities. Our research and development organization is based in Palo Alto, California with additional resources around the world.

Intellectual Property

Our success depends in part upon our ability to protect our intellectual property rights with respect to our Core Technologies, Software Platform, and Apps, and to operate without infringing, misappropriating or otherwise violating valid and enforceable third-party intellectual property. We seek to accomplish that objective by establishing intellectual property rights in and protecting those assets through a combination of patents, patent applications, registered and unregistered trademarks, copyrights, trade secrets, license agreements, confidentiality procedures, non-disclosure agreements with third parties, and other contractual measures. Though we rely in part upon these legal and contractual protections, we believe that factors, such as our unique position in the mobile app ecosystem and as one of the largest mobile game publishers, our flywheel advantage, our expertise and determination of our employees, and the functionality and flexibility of our Core Technologies and Software Platform in an ever-evolving industry, are also key contributors to our success.

As of December 31, 2021, we owned the following trademarks related to the business: 63 registered trademarks in the United States, 16 pending trademark applications in the United States, as well as 647 registered trademarks in non-U.S. jurisdictions, and 71 pending trademark applications in various non-U.S. jurisdictions. We also have registered domain names for websites that we use in our business, such as www.applovin.com. Finally, as of December 31, 2021, we owned the following patents related to the business: 60 issued U.S. patents, 5 U.S. patent applications, 24 non-U.S. issued patents, and 22 non-U.S. pending patent applications. Our issued U.S. patents, and any patents that may issue from our pending applications, are scheduled to expire at dates ranging between 2022 and 2039, excluding any additional term for patent term adjustments or extensions. We have acquired a number of patents through our acquisitions that are not critical to the combined business on a post-closing basis. As such, we regularly review our patent portfolio, and have and expect to continue to abandon the prosecution of patents that are not critical to our operations.

We intend to pursue additional intellectual property protection to the extent we believe it would advance our business objectives and maintain our competitive position. Notwithstanding these efforts, there can be no assurance that we will adequately protect our intellectual property or that it will provide any competitive advantage. We take steps to protect our proprietary information, in part, by entering into confidentiality agreements with our employees, consultants, developers, and vendors, and generally limiting access to and distribution of our proprietary information. However, we cannot assure you that the steps taken by us will prevent misappropriation of our proprietary rights. Despite our efforts to protect our intellectual property rights, unauthorized parties may attempt to copy aspects of our Core Technologies, Software Platform, or Apps or obtain and use information that we regard as proprietary. Policing unauthorized use of our proprietary rights is difficult and time consuming. Further, our intellectual property rights may be invalidated, circumvented, or challenged. In addition, the laws of some foreign countries do not protect our proprietary rights to the same extent as the laws of the United States, and many foreign countries do not enforce these laws as diligently as government agencies and private

parties in the United States. See the section titled “Risk Factors—Risks Related to Intellectual Property” for more information regarding risks related to intellectual property.

Employees and Additional Team Members

As of December 31, 2021, we had a total of 1,594 full-time employees located in fourteen countries. As a result of our 27 strategic acquisitions and partnerships, we also have access to approximately 2,721 additional team members, approximately 74% of whom are research and development resources and all of whom are located outside of the United States. Our geographic diversification enhances our ability to retain and attract highly skilled talent as well as manage our headcount costs. As of December 31, 2021, approximately 47% of our full-time employees were located outside of the United States. None of our employees are represented by a labor union. In certain countries in which we operate, we are subject to, and comply with, local labor law requirements, which may automatically make our employees subject to industry-wide collective bargaining agreements. We have not experienced any work stoppages and we consider our relations with our employees to be good. We work to identify, attract, and retain employees who are aligned with and will help us progress towards our mission, and we seek to provide competitive cash and equity compensation.

Compliance with Government Regulation

We are subject to various federal, state, and international laws and regulations that affect companies conducting business on mobile platforms, including those relating to privacy, data protection, and the use and protection of data from employees, users and others (including minors), the internet, behavioral advertising, mobile apps, content, advertising and marketing activities, sweepstakes and giveaways, and anti-corruption. Additional laws and regulations relating to these areas likely will be passed in the future, and these or existing laws and regulations may be interpreted or enforced in new or expanded manners, each of which could result in significant limitations on ways we can collect and process data of users, employees and others, communicate with users, and operate our business. New and evolving laws and regulations, and changes in their enforcement and interpretation, may require changes to our Core Technologies, Software Platform, Apps, or business practices, and may significantly increase our compliance costs and otherwise adversely affect our business and results of operations. As our business expands to scale our Software Platform and include additional Apps, and our operations continue to expand internationally, our compliance requirements and costs may increase and we may be subject to increased regulatory scrutiny.

Data Privacy and Security Laws

The data we collect and otherwise process is integral to our Core Technologies, Software Platform and Apps, providing us with insights to improve our developer tools, to optimize app discovery and monetization and to improve our Apps. Our collection, use, receipt, and other processing of data in our business subjects us to numerous U.S. state and federal laws and regulations, and foreign laws and regulations, addressing privacy, data protection and the collection, storing, sharing, use, transfer, disclosure, protection and processing of certain types of data. Such regulations include, for example, the European Union General Data Protection Regulation, the Children's Online Privacy Protection Act, Section 5(a) of the Federal Trade Commission Act, and the California Consumer Privacy Act. We work to comply with, and to help allow developers and ecosystem partners to comply with, applicable laws and regulations relating to privacy, data protection and information security. This helps underpin our strategy of building trust and providing a strong experience to ecosystem partners and clients. See the section titled “Risk Factors—Risks Related to Our Business—We are subject to laws and regulations concerning privacy, information security, data protection, consumer protection, and protection of minors, and these laws and regulations are continually evolving. Our actual or perceived failure to comply with these laws and regulations could adversely affect our business, financial condition, and results of operations” for additional information about our approach to laws and regulations relating to privacy, data protection, and information security.

Corporate Information

We were incorporated under the laws of the state of Delaware in July 2011. Our principal executive offices are located at 1100 Page Mill Road, Palo Alto, California 94304, and our telephone number is (800) 839-9646. Our website address is www.applovin.com. Information contained on, or that can be accessed through, our website does not constitute part of this Annual Report on Form 10-K and inclusions of our website address in this Annual Report on Form 10-K are inactive textual references only. You should not consider information contained on our website to be part of this Annual Report on Form 10-K or in deciding whether to purchase shares of our Class A common stock.

“AppLovin,” our logo, and our other registered or common law trademarks, service marks, or trade names appearing in this Annual Report on Form 10-K are the property of AppLovin Corporation. Other trademarks and trade names referred to in this Annual Report on Form 10-K are the property of their respective owners.

Available Information

Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to reports filed pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, are filed with the SEC. Such reports and other information filed by us with the SEC are available free of charge on our website at www.investors.applovin.com when such reports are available on the SEC's website. The SEC maintains an

internet site that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC at www.sec.gov. The information contained on the websites referenced in this Annual Report on Form 10-K is not incorporated by reference into this filing. Further, our references to website URLs are intended to be inactive textual references only.

We announce material information to the public through filings with the SEC, the investor relations page on our website, press releases, public conference calls, webcasts, and our corporate blog at blog.applovin.com in order to achieve broad, non-exclusionary distribution of information to the public and for complying with our disclosure obligations under Regulation FD. We encourage investors, the media, and others to follow the channels listed above and to review the information disclosed through such channels. Any updates to the list of disclosure channels through which we will announce information will be posted on the investor relations page on our website.

Item 1A. Risk Factors

Investing in our Class A 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 in this Annual Report on Form 10-K, including the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and our consolidated financial statements and the related notes, included elsewhere in this Annual Report on Form 10-K before making a decision to invest in our Class A common stock. Our business, financial condition, results of operations, or prospects could also be adversely affected by risks and uncertainties that are not presently known to us or that we currently believe are not material. If any of the risks actually occur, our business, financial condition, results of operations, and prospects could be adversely affected. In that event, the market price of our Class A common stock could decline, and you could lose all or part of your investment.

Risk Factor Summary

Our business operations are subject to numerous risks, factors and uncertainties, including those outside of our control, that could cause our actual results to be harmed, including risks regarding the following:

Business, Operational and Industry Factors

- our limited operating history;
- the unpredictability of our results of operations;
- competition in our industry;
- our ability to adapt to technological change;
- our ability to attract and retain clients;
- our ability to improve the effectiveness and predictability of our advertising and maintain and improve our machine-learning (ML) engine AXON;
- our ability to maintain or increase advertiser demand and third-party publisher supply, the quantity, or quality of advertisements shown to users, or our pricing of advertisements;
- our ability to launch or acquire new AppLovin Apps and successfully monetize or improve them and existing Apps;
- our ability to retain existing advertisers, publishers and users or add new advertisers, publishers and users cost-effectively;
- risks related to our strategic acquisitions and partnerships, including integration, managing growth, increased costs, and tax risks;
- our ability to maintain relationships with our Partner Studios;
- our reliance on third-party platforms to distribute our AppLovin Apps and collect revenue;
- concentration of our revenue sources;
- our recent rapid growth, and ability to manage growth;
- expansion into new business opportunities;
- our ability to effectively manage our growing international operations;
- the impact of the geopolitical climate on our operations, including, for example, the impact to our business and certain of our strategic partners impacted by the current warfare in Ukraine and resulting sanctions in Russia;
- our ability to increase in-app purchases, respond to changes with respect to in-app purchases, and manage the economies in our AppLovin Apps;
- our reliance on certain key employees and our ability to attract, retain, and motivate key personnel;
- security breaches, system outages or other cyber incidents;
- our ability to achieve or maintain profitability with increasing operating expenses;
- our ability to address or mitigate technical limitations in our systems;
- our ability to maintain and scale our technical infrastructure;
- the impact of the COVID-19 pandemic and responsive measures;
- our ability to maintain company culture;

- our general lack of long-term agreements with our business clients;
- the ability of our AppLovin Apps to meet user expectations;
- our ability to maintain a customer support ecosystem amongst the proliferation of “cheating” programs and scam offers seeking to exploit our mobile games and users;
- natural disasters, economic downturns, public health crises, or political crises;

Legal and Regulatory Matters

- changes in laws and regulations concerning privacy, information security, data protection, consumer protection, advertising, tracking, targeting, and protection of minors;
- changes in U.S. and foreign laws, many of which are unsettled and still developing;
- compliance with the Foreign Corrupt Practices Act, and similar anti-corruption and anti-bribery laws;
- governmental export controls and economic sanctions laws;
- changes in tax laws or tax rulings;
- our exposure to greater than anticipated tax liabilities;
- assertions by taxing authorities that we should have collected or in the future should collect sales and use, value added, or similar taxes;
- liability for content that is distributed through or advertising that is served through our AppLovin Software Platform or Apps;
- increased costs and demands upon management as a result of complying with the laws and regulations affecting public companies;
- expenses related to legal or regulatory proceedings and settlements;

Intellectual Property Factors

- our ability to maintain and develop our Core Technologies, Software Platform, Apps and other technology and advancements related to or required for new initiatives we may pursue or markets we choose to enter;
- our ability to protect or enforce our proprietary and intellectual property rights or the costs involved in such enforcement;
- our involvement in intellectual property disputes;
- our ability to acquire and maintain licenses to intellectual property;
- our use of and compliance with open source software;

Financial and Accounting Matters

- our ability to maintain an effective system of disclosure controls and internal control over financial reporting;
- changes in financial accounting standards;
- our reliance on assumptions and estimates to calculate certain of our key metrics;
- conversion of key internal systems and processes and problems with the design, implementation, or operation of these systems and processes;
- the possibility that we may be required to record a significant charge to earnings if our goodwill becomes impaired;
- substantial indebtedness under our senior secured credit facilities;
- our ability to generate sufficient cash flow to satisfy our significant debt service obligations;
- the availability of additional capital on acceptable terms;
- changes with the London Interbank Offered Rate;

Ownership of our Class A common stock and Governance

- the multi-class structure of our common stock and the Voting Agreement among the Voting Agreement Parties;
- our status as a “controlled company” within the meaning of the Nasdaq corporate governance requirements;
- the effect our multi-class structure may have on the market price of our Class A common stock;

- volatility of the market price of our Class A common stock;
- our intention not to pay dividends for the foreseeable future;
- potential sales of substantial amounts of our Class A common stock;
- the issuance of additional stock in connection with financings, acquisitions, investments, our equity incentive plans, or otherwise;
- provisions of Delaware law, the Voting Agreement, our amended and restated certificate of incorporation, and our amended and restated bylaws could make a merger, tender offer, or proxy contest difficult; and
- exclusive forum provisions in our amended and restated bylaws.

Risks Related to Our Business and Industry

We have a limited operating history, especially with respect to our AppLovin Apps, which makes it difficult to evaluate our current business and future performance and the risks we may encounter.

Our limited operating history, especially with respect to our AppLovin Apps, which we launched in 2018, may make it difficult to evaluate our current business and our future performance. We have encountered and will continue to encounter risks and difficulties frequently experienced by growing companies in rapidly changing industries, such as the mobile app ecosystem, including our ability to:

- accurately forecast our revenue and plan our operating expenses;
- attract new and retain existing business clients using AppLovin Software Platform and users of our Apps;
- successfully compete with current and future competitors, some of whom are also our clients;
- successfully expand our business in existing markets and enter new markets and geographies;
- successfully execute strategic acquisitions and partnerships;
- develop a scalable, high-performance technology infrastructure that can efficiently and reliably handle increased usage, as well as the deployment of new features and services;
- comply with existing and new laws and regulations applicable to our business;
- anticipate and respond to macroeconomic changes and changes in the markets in which we operate;
- establish and maintain our brand and reputation;
- adapt to rapidly evolving trends in the ways businesses and consumers interact with technology;
- effectively manage our rapid growth;
- avoid interruptions or disruptions in our AppLovin Core Technologies, Software Platform, or Apps; and
- hire, integrate, and retain key personnel.

Further, because we have limited historical financial data, including limited data regarding the integration of our strategic acquisitions and partnerships, and operate in a rapidly evolving market, any financial planning and forecasting, including predictions about our future revenue and expenses, may not be as accurate as they would be if we had a longer operating history or operated in a more predictable market. If our assumptions regarding these risks and uncertainties, which we use to plan and operate our business, are incorrect or change, or if we do not address these risks successfully, our results of operations could differ materially from our expectations. If we fail to address the risks and uncertainties that we face, including those described elsewhere in this “Risk Factors” section, our business, financial condition, and results of operations could be adversely affected.

Our results of operations are likely to fluctuate from period-to-period, which could cause the market price of our Class A common stock to decline.

Our results of operations have fluctuated in the past and are likely to fluctuate significantly from quarter-to-quarter and year-to-year in the future for a variety of reasons, many of which are outside of our control and difficult to predict. As a result, you should not rely upon our historical results of operations as indicators of future performance. Numerous factors can influence our results of operations, including:

- our ability to maintain and grow our business client and user bases;
- changes to our Core Technologies, Software Platform, Apps, or other offerings, or the development and introduction of new software or development of new mobile apps by our studios or our competitors;

- changes to the policies or practices of companies or governmental agencies that determine access to third-party platforms, such as the Apple App Store and the Google Play Store, or to our Software Platform, Apps, website, or the internet generally;
- changes to the policies or practices of third-party platforms, such as the Apple App Store and the Google Play Store, including with respect to Apple's Identifier for Advertisers (IDFA), which helps advertisers assess the effectiveness of their advertising efforts, and with respect to transparency regarding data processing;
- the diversification and growth of revenue sources beyond our current Software Platform and Apps;
- our ability to achieve the anticipated synergies from our strategic acquisitions and effectively integrate new assets and businesses acquired by us;
- the actions of our competitors, both with respect to their own offerings and, to the extent such competitors are also our clients, with respect to their use of our Software Platform;
- costs and expenses related to the strategic acquisitions and partnerships, including costs related to integrating mobile gaming studios or other companies that we acquire, as well as costs and expenses related to the development of our Core Technologies, Software Platform, or Apps;
- our ability to achieve or maintain profitability;
- increases in and timing of operating expenses that we may incur to grow and expand our operations and to remain competitive;
- system failures or outages, or actual or perceived breaches of security or privacy, and the costs associated with preventing, responding to, or remediating any such outages or breaches;
- changes in the legislative or regulatory environment, including with respect to privacy and data protection, or actions by governments or regulators, including fines, orders, or consent decrees;
- charges associated with impairment of any assets on our balance sheet or changes in our expected estimated useful life of property and equipment and intangible assets;
- adverse litigation judgments, settlements, or other litigation-related costs and the fees associated with investigating and defending claims;
- the overall tax rate for our business, which may be affected by the mix of income we earn in the United States and in jurisdictions with comparatively lower tax rates;
- the impact of changes in tax laws or judicial or regulatory interpretations of tax laws, which are recorded in the period such laws are enacted or interpretations are issued and may significantly affect the effective tax rate of that period;
- the application of new or changing financial accounting standards or practices; and
- changes in regional or global business or macroeconomic conditions, including as a result of the COVID-19 pandemic, which may impact the other factors described above.

In particular, it is difficult to predict if, when, or how quickly newly-launched software may begin to generate revenue or decline in popularity. Further, we cannot be certain if a new App will become popular amongst users and generate revenue. The success of our business depends in part on our ability to develop and enhance our Core Technologies, Software Platform and consistently and timely launch new Apps. It is difficult for us to predict with certainty when we will expand our Software Platform suite or launch a new App as we may require longer development schedules or soft launch periods to meet our quality standards and expectations. If our business clients do not adopt our new Software Platform offerings, or develop or further invest in their own competing alternatives, or if we are unable to successfully launch or acquire new Apps or maintain or improve existing Apps, our business and results of operations could be adversely affected. Fluctuations in our results of operations may cause such results to fall below our financial guidance or the expectations of analysts or investors, which could cause the market price of our Class A common stock to decline.

The failure to attract new business clients, the loss of clients, or a reduction in spending by these clients could adversely affect our business, financial condition, and results of operations.

A significant portion of our revenue is Business Revenue. We collect Business Revenue from advertisers spending on our Software Platform and Apps. Business Revenue from our Software Platform, which is mostly from AppDiscovery, is generated from our advertisers, typically on a performance-based basis, then shared with our advertising publishers, typically on a cost per impression model. Business Revenue generated from our Apps comes from advertisers that purchase ad inventory from our diverse portfolio of mobile games. As is common in the mobile app ecosystem and in the advertising industry, our business clients do not have long-term advertising commitments with us. Our success depends in part on our ability to satisfy our advertising partners.

Business Revenue could also be impacted by a number of other factors, including:

- our ability to attract and retain business clients;
- our ability to improve the effectiveness and predictability of our advertising and maintain and improve our machine-learning (ML) engine AXON;
- our ability to maintain or increase advertiser demand and third-party publisher supply, the quantity, or quality of advertisements shown to users, or our pricing of advertisements;
- our ability to continue to increase user access to and engagement with our Apps;
- mobile app changes or inventory management decisions we may make that change the size, format, frequency, or relative prominence of advertisements displayed on our Apps;
- our ability to recruit, train, and retain personnel to support continued growth of our Core Technologies and Software Platform;
- our ability to establish and maintain our brand and reputation;
- loss of market share to our competitors, including if competitors offer lower priced, more integrated, or otherwise more effective products;
- the development and success of technologies designed to block the display of advertisements or block our ad measurement tools, which have in the past impacted and may in the future impact our business, or technologies that make it easier for users to opt out of behavioral targeting;
- the availability, accuracy, utility, and security of analytics and measurement solutions offered by us or third parties that demonstrate the value of our Software Platform to advertisers, developers and publishers, or our ability to further improve such tools;
- government actions or legislative, regulatory, or other legal developments relating to advertising, including developments that may impact our ability to deliver, target, or measure the effectiveness of advertising;
- changes that limit our ability to deliver, target, or measure the effectiveness of advertising, including changes to policies by mobile operating system and third-party platform providers, and the degree to which users opt out of certain types of ad targeting as a result of changes and controls implemented in connection with such policy changes and with the E.U. General Data Protection Regulation (the GDPR), ePrivacy Directive, the California Consumer Privacy Act (the CCPA), and the Children's Online Privacy Protection Act (the COPPA);
- decisions by business clients to reduce their advertising due to concerns about legal liability or uncertainty regarding their own legal and compliance obligations, or due to negative publicity, regardless of its accuracy, involving us, our user data practices, advertising metrics or tools, our Software Platform or Apps, or other companies in our industry; and
- the impact of macroeconomic conditions, including the impact of the COVID-19 pandemic and responses thereto, and seasonality, whether in the advertising industry in general, or among specific types of advertisers or within particular geographies.

From time to time, certain of these factors have adversely affected our revenue to varying degrees. The occurrence of any of these or other factors in the future could result in a reduction in demand for our Software Platform and use of our Apps, which may reduce the prices we receive for our advertisements or cause business clients to stop advertising with us altogether, either of which would adversely affect our business and results of operations. The failure to attract new business clients, loss of business clients, or reduction in spending by business clients could adversely affect our business, financial condition, and results of operations.

Security breaches, improper access to or disclosure of our data or user data, other hacking and phishing attacks on our systems, or other cyber incidents could harm our reputation and adversely affect our business.

The mobile app ecosystem is prone to cyberattacks by third parties seeking unauthorized access to our data or the data of our clients or users or to disrupt our ability to provide service. Our Core Technologies, Software Platform, Apps, and other offerings involve the collection, storage, processing, and transmission of a large amount of data, including personal information, and we and our third-party service providers otherwise store and process information, including our confidential and proprietary business information, and personal information and other information relating to our employees and business clients or other third parties. We also store and implement measures designed to secure the source code for our Core Technologies, Software Platform and Apps as they are created. Any failure to prevent or mitigate security breaches or incidents impacting our systems or other systems used in our business, or improper access to or disclosure of our data, including source code, or user data, including personal information, content, or payment information from users, or information from business clients or other third parties, that is stored or otherwise processed in our business, could result in the unauthorized loss, modification, disclosure, destruction, or other misuse of such data, or unavailability of data or of our Core Technologies, Software Platform, Apps, or other offerings. Any such event, or the perception it has occurred, could adversely affect our business and reputation, damage our operations, result in claims, litigation or regulatory investigations or enforcement actions, fines, penalties, or other liability or obligations, and diminish

our competitive position. In particular, a breach or incident, whether physical, electronic, or otherwise, impacting systems on which source code or other sensitive data are stored could lead to loss, disruption, unavailability, or piracy of, or damage to, our offerings, lost or reduced ability to protect our intellectual property, and diminished competitive position.

Computer malware (including ransomware), viruses, social engineering (predominantly spear phishing attacks or credential stuffing), and general hacking have become more prevalent in the mobile app ecosystem. Some of these have occurred on our systems and otherwise in our business in the past, and we expect will continue to occur in the future. We regularly encounter attempts to create false or undesirable user accounts or take other actions for purposes such as spamming or other objectionable ends. Any actual or attempted breaches, incidents, or attacks may cause disruptions or interruptions to our Core Technologies, Software Platform, Apps, or other offerings, degrade the user experience, impair, disrupt, or interrupt our internal systems and other systems and networks used in our business, or adversely affect our reputation, business, financial condition, and results of operations. Our efforts to protect our data, user data, and information from clients, partners, and other third parties, and to disable or otherwise respond to undesirable activities on our Core Technologies, Software Platform, Apps, or other offerings, may also be unsuccessful due to software bugs or other technical defects, errors, or malfunctions; employee, contractor, vendor, or partner error or malfeasance, including defects or vulnerabilities in information technology systems or offerings; cyberattacks, attacks designed to disrupt systems or facilities, or breaches of physical security of our facilities or technical infrastructure; or other threats that evolve. Additionally, any such breach, incident, attack, malfunction, defect, or vulnerability, or the perception that any of these has occurred, may cause clients or users to lose confidence and trust in our Software Platform or Apps and otherwise harm our reputation and market position.

In addition, some developers or other business partners, such as those that help us measure the effectiveness of advertisements, may receive or store information provided by us or by our users through mobile or web apps or other means. These third parties may misappropriate our information and engage in unauthorized use of it. If these third parties fail to adopt or adhere to adequate data security practices, or experience a breach of, or other security incident impacting, their networks or systems, our data or our users' data may be lost, destroyed, or improperly accessed, modified, disclosed, or otherwise misused. In such an event, or if such an event is perceived to have occurred, we may suffer damage to our reputation, may have increased costs arising from the restoration or implementation of additional security measures, and we may face claims, demands, investigations and other proceedings by private parties or governmental actors, and fines, penalties, and other liability or obligations, any of which could adversely affect our business, financial condition, and results of operations. Any theft or unauthorized use or publication of our trade secrets and other confidential business information as a result of such an event could also adversely affect our business, competitive position, and results of operations.

Cyberattacks continue to evolve in sophistication and volume, and inherently may be difficult to detect for long periods of time. Although we have developed systems and processes that are designed to protect our data, user data, and information from our partners; to prevent data loss, disable undesirable accounts and activities on our Core Technologies, Software Platform or Apps; and to prevent and detect security breaches; we cannot assure you that such measures will provide comprehensive security, that we will be able to identify breaches or other incidents or to react to them in a timely manner or that our remediation efforts will be successful. We experience cyberattacks and other security incidents of varying degrees from time to time, and we may incur significant costs in investigating, protecting against, litigating, or remediating such incidents. We may face increased risks of cyberattacks and other security incidents during the COVID-19 pandemic as a result of more employees working remotely, our use of third-party systems designed to enable the transition to a remote workforce introducing security risks and increased cyberattacks, such as phishing attacks by threat actors using the attention placed on the COVID-19 pandemic as a method for targeting personnel.

Additionally, our Core Technologies, Software Platform and other offerings operate in conjunction with, and we are in some cases dependent upon, third-party products, services, and components. Our ability to monitor our third-party service providers' data security is limited, and in any event, attackers may be able to circumvent our third-party service providers' data security measures. There have been and may continue to be significant attacks on certain third-party providers, and we cannot guarantee that our or our third-party providers' systems and networks have not been breached or that they do not contain exploitable defects or bugs that could result in a breach of or disruption to our systems and networks or the systems and networks of third parties that support us and our platform and service. If there is a security vulnerability, error, or other bug in one of these third-party products, services, and components and if there is a security exploit targeting them, we could face increased costs, claims, liability, and additional or new obligations, reduced revenue, and harm to our reputation or competitive position. We and our service providers may be unable to anticipate these techniques, react, remediate or otherwise address any security vulnerability, breach or other security incident in a timely manner, or implement adequate preventative measures.

In addition to our efforts to mitigate cybersecurity risks, we are making significant investments in privacy, safety, security, and content review efforts to combat misuse of our services and user data by third parties. As a result of these efforts, we anticipate that we will discover incidents of misuse of user data or other undesirable activity by third parties. We may not discover all such incidents or activity, whether as a result of our data limitations, the scale of activity on our Core Technologies and Software Platform, challenges related to our personnel working remotely during the COVID-19 pandemic, the re-allocation of resources to other projects, or other factors, and we may be notified of such incidents or activity by users, the media, or other third parties. Such incidents and activities have in the past, and may in the future, include the use or other processing of user data or our systems in a manner inconsistent with our terms, contracts or

policies, the existence of false or undesirable user accounts, improper advertising practices, activities that threaten people's safety on- or offline or instances of spamming, scraping, data harvesting, or unsecured datasets. We may also be unsuccessful in our efforts to enforce our policies or otherwise remediate or respond to any such incidents effectively or in a timely manner. Any of the foregoing developments, or any reports of them occurring or the perception that any of them has occurred, could adversely affect user trust and engagement, harm our brand and reputation, require us to change our business practices, result in claims, demands, investigations and other proceedings by private parties or governmental actors, and fines, penalties, and other liability or obligations, and adversely affect our business, financial condition, and results of operations.

We are subject to a variety of laws and regulations in the United States and abroad relating to cybersecurity and data protection, a number of which also provide a private right of action. Affected users or government authorities could initiate legal or regulatory actions against us in connection with any actual or perceived security breaches or improper access to or disclosure of data, which has occurred in the past and which could cause us to incur significant expense and liability, distract management and technical personnel, and result in orders or consent decrees forcing us to modify our business practices. Such actual or perceived incidents or our efforts to remediate such incidents may also result in a decline in our active user base or engagement levels. We are seeing an increase in inquiries from our partners regarding audit certifications, such as SOC 2, Type II, which we have not yet achieved. Any of these events could adversely affect our reputation, business, financial condition, or results of operations.

Our insurance coverage may not extend to all types of privacy and data security breaches or other incidents, and it may be insufficient to cover all costs and expenses associated with such incidents. Further, such insurance may not continue to be available to us in the future on economically reasonable terms, or at all, and insurers may deny us coverage as to any future claim. The successful assertion of one or more large claims against us that exceed 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 reputation, financial condition, or results of operations.

The mobile app ecosystem is intensely competitive. If business clients or users prefer our competitors' products or services over our own, our business, financial condition, and results of operations could be adversely affected.

We face significant competition in the mobile app ecosystem. We offer a suite of solutions for developers to get their mobile apps discovered and downloaded by the right users, optimize return on marketing spend, and maximize the monetization of their engagement. We collect revenue from business clients for fees paid by mobile app advertisers, including developers, that use our Software Platform and from the sale of advertising inventory of our Apps. Advertisers often engage with several advertising platforms and networks to purchase advertisements on mobile apps and developers often engage with multiple tools to market and monetize their apps. Accordingly, we face significant competition from traditional, online and mobile businesses that provide ad networks and platforms, mobile apps and games, media, and other services for advertisers to reach relevant audiences. We also face competition from providers of developer tools that enable developers to reach their audiences or manage or optimize their advertising campaigns. These companies vary in size and include Facebook, Google, and Unity Software as well as various private companies. Several of these companies, including Facebook, Google, and Unity Software, are also our partners and clients. Additionally, our studios build many of our Apps using the development kits offered by Unity Software. Clients who are also competitors may decide to invest in their own offerings rather than continue to use our Software Platform or advertise on our Apps.

Additionally, we also compete with businesses that develop online and mobile games and other mobile apps, which vary in size and include companies such as Activision Blizzard (expected to be acquired by Microsoft), Tencent, and Zynga (expected to be acquired by Take-Two Interactive), as well as other public and private companies. Many of these companies are also our partners and clients. As we expand our global operations and mobile app offerings, we increasingly face competition from high-profile companies with significant online presences that may introduce new or expanded offerings, such as Apple, Facebook, Google, Microsoft, and Snap. In addition, other large companies that to date have not actively focused on mobile apps or gaming may decide to develop mobile apps or gaming offerings, such as Amazon's recently introduced games platform, or partner with other developers. Some of these current and potential competitors have significantly greater resources that can be used to develop, acquire, or brand additional mobile apps or gaming alternatives, and may have more diversified revenue sources than we do and therefore may be less severely affected by changes in consumer preferences, regulations, or other developments that may impact our business or industry.

Further, as there are relatively low barriers to entry to develop and publish a mobile app, we expect new competitors to enter the market and existing competitors to allocate more resources towards developing and marketing competing games and apps. Because our mobile games are free to play, our Apps compete primarily on the basis of user experience rather than price. The proliferation of apps makes it difficult for us to differentiate ourselves from our competitors and compete for users and the success of our Apps will depend in part on our Software Platform continuing to provide effective marketing and monetization tools.

We also face competition for advertising spending and for the discretionary spending, leisure time, and attention of our users from game platforms such as personal computer and console games, and other leisure time activities, such as

television, movies, music, sports, and the internet. In addition, non-game applications for mobile devices, such as social media and messaging, television, movies, music, dating, and sports, have become increasingly popular, making the overall mobile app ecosystem highly fragmented and making it more difficult for any mobile app to differentiate itself. To the extent we explore new business opportunities in the mobile app ecosystem or otherwise, we may also compete with established businesses with more experience in such areas. Our future growth depends in part on the overall health of the mobile app ecosystem and in particular, mobile gaming. Increasing competition could result in decreases in our App users, increased user acquisition costs, lower engagement with our Apps, and loss of key personnel, all of which could adversely affect our business, financial condition, or results of operations.

Some of our current and potential competitors may be domiciled in different countries and subject to political, legal, and regulatory regimes that enable them to compete more effectively than us, particularly outside of the United States. Some of our current and potential competitors may have greater resources, more diversified revenue streams, better technological or data analytics capabilities, or stronger brands or competitive positions in certain product segments, geographic regions, or user demographics than we do. If business clients or users prefer our competitors' products or services over our own, or if our competitors are better able to adapt to changes in the preferences of advertisers or users, regulations, or other developments, our business, financial condition, and results of operations could be adversely affected.

The mobile app ecosystem is subject to rapid technological change, and if we do not adapt to, and appropriately allocate our resources among, emerging technologies and business models, our business, financial condition, and results of operations could be adversely affected.

Technology changes rapidly in the mobile app ecosystem. Our future success depends in part on our ability to adapt to trends and to innovate. To attract new business clients and users and increase revenue from our current business clients and users, we will need to enhance and improve our Core Technologies, Software Platform, and Apps. Enhancements of our existing technology and offerings, and new offerings, may not be introduced in a timely or cost-effective manner and may contain errors or defects.

Our business also currently depends in part on the growth and evolution of the internet, especially mobile internet-enabled devices. The number of people using mobile internet-enabled devices has increased rapidly over time, and we expect that this trend will continue. However, the mobile app ecosystem may not grow in the way we anticipate. We must continually anticipate and adapt to emerging technologies to stay competitive. As the technological infrastructure for internet access improves and evolves, consumers will be presented with more opportunities to access apps and play games on a variety of devices and platforms and to experience other leisure activities that may compete with mobile apps. Forecasting the financial impact of these emerging technologies and business models is inherently uncertain and volatile. If we decide to support a new technology or business model in the future, it may require partnering with a new platform, technology, or business partner, which may be on terms that are less favorable to us than those for traditional technologies or business models.

To invest in a new technology or expand our offerings, we must invest financial resources and management attention. We may invest significant resources in a new offering or in a strategic acquisition or partnership, which could prove unsuccessful or prevent us from directing these resources towards other opportunities. We may never recover the often-substantial up-front costs of developing and marketing emerging technologies or business models, or recover the opportunity cost of diverting management and financial resources. Further, our competitors may adopt an emerging technology or business model more quickly or effectively than we do, creating products that are technologically superior to ours or attract more users than ours.

If, on the other hand, we do not continue to enhance our Core Technologies, Software Platform, or Apps, or do not appropriately allocate our resources amongst opportunities, or we otherwise elect not to pursue new business models that achieve significant commercial success, we may face adverse consequences. For example, we do not currently offer our Apps on all devices or all gaming platforms. If the devices on which our Apps are available decline in popularity or become obsolete faster than anticipated, or if new platforms emerge other than those on which our games are offered, we could experience a decline in revenue and in our number of App users, and we may not achieve the anticipated return on our development efforts. It may take significant time and expenditures to shift product development resources to new technologies, and it may be more difficult to compete against existing products incorporating such technologies. If new technologies render mobile devices obsolete or we are unable to successfully adapt to and appropriately allocate our resources amongst current and new technologies, our business, financial condition, and results of operations could be adversely affected.

Our Core Technologies, Software Platform and Apps, as well as our internal systems, rely on software and hardware that is highly technical, and any errors, bugs, or vulnerabilities in these systems, or failures to address or mitigate technical limitations in our systems, could adversely affect our business, financial condition, and results of operations.

Our Core Technologies, Software Platform and Apps, as well as our internal systems, rely on software and hardware that is highly technical and complex. In addition, our Core Technologies, Software Platform and Apps, as well as our

internal systems, depend in part on the ability of such software and hardware to store, retrieve, process, and manage immense amounts of data. The software and hardware on which we rely has contained, and will in the future contain, errors, bugs, or vulnerabilities and our systems are subject to certain technical limitations that may compromise our ability to meet our objectives. Some errors, bugs, or vulnerabilities inherently may be difficult to detect and may only be discovered after the code has been released for external or internal use. Errors, bugs, vulnerabilities, design defects, or technical limitations within the software and hardware on which we rely have in the past led to, and may in the future lead to, outcomes including a negative experience for clients and users who use our offerings, compromised ability of our offerings to perform in a manner consistent with our terms, contracts, or policies, delayed product or App launches or enhancements, targeting, measurement, or billing errors, compromised ability to protect the data of our users and/or our intellectual property, or reductions in our ability to provide some or all of our services. To the extent such errors, bugs, vulnerabilities, or defects impact our Core Technologies or Software Platform or the accuracy of data in any such Core Technology or Software Platform, our clients may become dissatisfied with our offerings, our brand and reputation may be harmed, and we may make operational decisions, such as with respect to our Apps using such Software Platform or any future strategic acquisition, that are based on inaccurate data. Any errors, bugs, vulnerabilities, or defects in our systems or the software and hardware on which we rely, failures to properly address or mitigate the technical limitations in our systems, or associated degradations or interruptions of service or failures to fulfill our commitments to our clients may lead to outcomes including damage to our reputation, increased product engineering expenses, regulatory inquiries, litigation, or liability for fines, damages, or other remedies, any of which could adversely affect our business, financial condition, and results of operations.

Our business depends in part on our ability to maintain and scale our technical infrastructure, and any significant disruption to our Core Technologies, Software Platform or Apps could damage our reputation, result in a potential loss of engagement, and adversely affect our business, financial condition, and results of operations.

Our reputation and ability to attract and retain our business clients and users depends in part on the reliable performance of our Core Technologies, Software Platform and Apps. We have in the past experienced, and may in the future experience, interruptions in the availability or performance of our offerings from time to time. Our systems may not be adequately designed or may not operate with the reliability and redundancy necessary to avoid performance delays or outages that could be harmful to our business. If our offerings are unavailable when users attempt to access them, or if they do not load as quickly as expected, users may not use our offerings as often in the future, or at all, which could adversely affect our business and results of operations. As we continue to grow, we will need an increasing amount of technical infrastructure, including network capacity and computing power, to continue to satisfy our needs and the needs of our business clients and users. It is possible that we may fail to continue to effectively scale and grow our technical infrastructure to accommodate these increased demands, which may adversely affect our user engagement and revenue growth. Additionally, we rely in part on third-party data centers and cloud hosting infrastructure. Our business may be subject to interruptions, delays, or failures resulting from natural disasters and other events outside of our control that impact us or these third-party providers. If such an event were to occur, users may be subject to service disruptions or outages and we may not be able to recover our technical infrastructure and user data in a timely manner to restart or provide our services. If we fail to efficiently scale and manage our infrastructure, or if events disrupt our infrastructure or those of our third-party providers, our business, financial condition, and results of operations could be adversely affected.

If we are unable to launch or acquire new Apps and successfully monetize them, or continue to improve the experience and monetization of our existing Apps, our business, financial condition, and results of operations could be adversely affected.

Our business depends in part on launching or acquiring, and continuing to service, mobile apps that users will download and spend time and money using. We have devoted and we expect to continue to devote substantial resources to the research, development, analytics, and marketing of our Apps. Our development and marketing efforts are focused on improving the experience of our existing Apps, developing new Apps, and successfully monetizing our Apps. Our Apps generate revenue primarily through the sale of advertising, a substantial portion of which comes from other mobile gaming clients, and in-app purchases (IAPs). For Apps distributed through third-party platforms, we are required to share a portion of the proceeds from in-game sales with the platform providers, which share may be subject to changes or increases over time. In order to achieve and maintain our profitability, we need to generate sufficient revenue from our existing and new Apps to offset our ongoing development, marketing, and other operating expenses.

Successfully monetizing our Apps is difficult and requires that we deliver user experiences that a sufficient number of users will pay for through IAPs or we are able to otherwise sufficiently monetize our Apps, including by serving in-app advertising. The success of our Apps depends in part on unpredictable and volatile factors beyond our control including user preferences, competing apps, new third-party platforms, and the availability of other entertainment experiences. If our Apps do not meet user expectations or if they are not brought to market in a timely and effective manner, our business and results of operations could be adversely affected.

In addition, our ability to successfully launch or acquire Apps and their ability to achieve commercial success will depend in part on our ability to:

- effectively market our Apps to existing and new users;

- achieve a positive return on investment from our marketing and user acquisition costs or achieve organic user growth;
- adapt to changing trends, user preferences, new technologies, and new feature sets for mobile and other devices, including determining whether to invest in development for any new technologies, and achieve a positive return on the costs associated with such adaptation;
- continue to adapt mobile app feature sets for an increasingly diverse set of mobile devices, including various operating systems and specifications, limited bandwidth, and varying processing power and screen sizes;
- achieve and maintain successful user engagement and effectively monetize our Apps;
- develop mobile games that can build upon or become franchise games and expand and enhance our mobile games after their initial releases;
- develop Apps other than mobile games;
- identify and execute strategic acquisitions and partnerships;
- attract advertisers to advertise on our Apps;
- partner with third-party platforms and obtain featuring opportunities;
- compete successfully against a large and growing number of competitors;
- accurately forecast the timing and expense of our operations, including mobile app and feature development, marketing, and user acquisition;
- minimize and quickly resolve bugs or outages;
- acquire, or invest in, and successfully integrate high quality mobile app companies or technologies; and
- retain and motivate talented and experienced developers and other key personnel from such acquisitions and investments.

These and other uncertainties make it difficult to know whether we will succeed in continuing to develop and launch new Apps. Even if successful, certain genres of mobile apps, such as casual games, may have a relatively short lifespan. Further, as our Apps expand into additional genres of mobile games or additional categories of mobile apps, we will face risks as well as market, legal and regulatory challenges specific to those genres or categories. For example, in mid-core games, there is typically a higher upfront investment prior to the launch of a game compared to casual games, which means publishing a new game in that genre will expose us to greater risks as our financial condition and results of operations will be more significantly adversely affected to the extent such a game does not become popular and commercially successful. If we are not successful in launching new mobile games or expanding into other genres of mobile games or categories of mobile apps, our business, financial condition, and results of operations could be adversely affected.

If we fail to retain existing users or add new users cost-effectively, or if our users decrease their level of engagement with Apps, our business, financial condition, and results of operations could be adversely affected.

The size of our user base and the level of user engagement with our Apps are critical to our success. Our results of operations have been and will continue to be significantly determined by our success in acquiring and engaging App users. We expect that the number of our App users may fluctuate or decline in one or more markets from time to time, particularly in markets where we have achieved higher penetration rates. In addition, if people do not perceive our Apps as useful or entertaining, we may not be able to attract or retain users or otherwise maintain or increase the frequency and duration of their engagement, which could harm our revenue. A number of mobile apps that achieved early popularity have since seen their user bases or user engagement levels decline. There is no guarantee that we will not experience a similar erosion of our App users or user engagement levels. Our user engagement patterns have changed over time, and user engagement can be difficult to measure, particularly as we introduce new and different Apps. Any number of factors can adversely affect user growth and engagement, including if:

- users increasingly engage with mobile apps offered by competitors or mobile apps in categories other than those of our Apps;
- we fail to introduce new Apps or features that users find engaging or that achieve a high level of market acceptance or we introduce new Apps, or make changes to existing Apps that are not favorably received;
- users feel that their experience is diminished as a result of the decisions we make with respect to the frequency, prominence, format, size, and quality of advertisements that we display;
- users have difficulty installing, updating, or otherwise accessing our Apps as a result of actions by us or third parties;

- we are unable to continue to develop Apps that work with a variety of mobile operating systems and networks; and
- questions about the quality of our Apps, our data practices or concerns related to privacy and sharing of personal information and other user data, safety, security, or other factors.

Additionally, we expect it will become increasingly difficult and more expensive for us to acquire users for our Apps for a variety of reasons, including the increasingly competitive nature of the mobile app ecosystem and the significant amount of time and attention users are dedicating to competing entertainment options. Further, we believe that changes that Apple has implemented during the last several years to its platform, particularly the removal of the Top Grossing rankings and decreasing the prominence of the Top Free rankings as well as transparency and IDFA changes, may adversely affect the number of organic downloads of our Apps. If our competitors increase their user acquisition spending, we could experience higher costs per an install for our Apps, which would adversely affect our revenue and margins. Furthermore, our spending on user acquisition is based on certain assumptions about their projected behavior, particularly for new Apps for which we do not have similar Apps in our portfolio to aid us in our modeling efforts. If we are unable to grow our user base and increase our user engagement levels, or unable to do so cost effectively, our business, financial condition, and results of operations could be adversely affected.

We are highly dependent on our co-founder and chief executive officer, as well as our senior management team, and our business and growth may be adversely affected if we fail to attract, retain, and motivate key personnel.

Our future success depends in significant part on the continued service of our key management and engineering personnel, including our co-founder, CEO, and Chairperson, Adam Foroughi. Our ability to compete and grow depends in part on the efforts and talents of these employees and executives, who are important to our vision, strategic direction, culture, products, and technology. We do not have employment agreements, other than offer letters, with Mr. Foroughi or other members of our senior management team, and we do not maintain key-man insurance for members of our senior management team. The loss of Mr. Foroughi or any other member of our senior management team could cause disruption and adversely affect our business, financial condition, or results of operations.

In addition, our ability to execute our strategy depends in part on our continued ability and the continued ability of our Partner Studios to identify, hire, develop, motivate, and retain highly skilled employees, particularly in the competitive fields of game development, product management, engineering, and data science. We believe that our corporate culture has been an important factor in our ability to hire and retain key employees, and if we are unable to maintain our corporate culture as we grow, we may be unable to foster the innovation, creativity, and teamwork we believe we need to support our growth. While we believe we compete favorably, competition for highly skilled employees is intense, particularly in the San Francisco Bay Area, where our headquarters is located. Interviewing, hiring, and integrating new employees has been and will continue to be particularly challenging during the COVID-19 pandemic. As part of our global remote working plans, throughout the duration of the COVID-19 pandemic, we will devote increased efforts to maintaining our collaborative culture, including through the use of videoconferencing and other online communication and sharing tools, and to monitoring the health, safety, morale, and productivity of our employees, including new employees, as we evaluate the impacts of the COVID-19 pandemic on our business and employees. If we are unable to identify, hire, and retain highly skilled employees, our business, financial condition, and results of operations could be adversely affected.

We have historically hired a number of key personnel and added additional team members working on our Apps through strategic acquisitions and partnerships, and as competition within the mobile app ecosystem for attractive target companies with a skilled employee base persists and increases, we may incur significant expenses and difficulty in continuing this practice. The loss of talented employees with experience in the assets we acquire could result in significant disruptions to our business and the integration of acquired assets and businesses. If we do not succeed in recruiting, retaining, and motivating these key employees, we may not achieve the anticipated results of acquisitions.

We have experienced significant growth through strategic acquisitions and partnerships, and we face risks related to the integration of such acquisitions and the management of such growth.

As part of our growth strategy, we have frequently acquired companies, businesses, personnel, and technologies in the past, and we intend to continue to evaluate and pursue strategic acquisitions and partnerships. For example, we acquired PeopleFun, Inc. in the first quarter of 2018, MAXAdvertising Systems, Inc. in the third quarter of 2018, SafeDK Mobile Ltd. in July 2019, Machine Zone, Inc. (Machine Zone) in May 2020, adjust GmbH (Adjust) in April 2021, and the MoPub business in January 2022. In February 2022, we also entered into a definitive agreement to acquire Wurl, Inc. Each acquisition requires unique approaches to integration due to, among other reasons, the structure of the acquisition, the size, locations, and cultural differences among their team and ours, and has required, and will continue to require, attention from our management team. As we continue to grow, the size of our acquisitions and investments may increase. For instance, our acquisitions of Machine Zone, Adjust, and the MoPub business were our largest acquisitions to date. In addition to the larger purchase prices associated with such acquisitions and investments, larger acquisitions and investments may also require additional management resources to integrate more significant and often more complex businesses into our company. We will continue to explore and evaluate additional acquisitions, some of which may be the same size or even larger in scale and investment than the Machine Zone, Adjust, and the MoPub business acquisitions.

Our future success depends in part on our ability to integrate these acquisitions and manage these businesses, partnerships, and transactions effectively. If we are unable to obtain the anticipated benefits or synergies of such acquisitions, or we encounter difficulties integrating acquired businesses with ours, our business, financial condition, and results of operations could be adversely affected.

Challenges and risks from such strategic acquisitions and partnerships include:

- diversion of our management's attention in the acquisition and integration process, including oversight over acquired businesses which continue their operations under contingent consideration provisions in acquisition agreements;
- declining employee morale and retention issues resulting from changes in compensation, or changes in management, reporting relationships, or future performance;
- the need to integrate the operations, systems, technologies, products, and personnel of each acquired company, the inefficiencies and lack of control that may result if such integration is delayed or not implemented, and unforeseen difficulties and expenditures that may arise in connection with integration;
- costs associated with onboarding clients of an acquired business;
- the need to implement internal controls, procedures, and policies appropriate for a larger, U.S.-based public company at companies that prior to acquisition may not have as robust controls, procedures, and policies, in particular, with respect to the effectiveness of internal controls, cyber and information security practices and incident response plans, compliance with privacy, data protection, and other regulations protecting the rights of clients and users, and compliance with U.S.-based economic policies and sanctions which may not have previously been applicable to the acquired company's operations;
- the difficulty in accurately forecasting and accounting for the financial impact of an acquisition transaction, including accounting charges, write-offs of deferred revenue under purchase accounting, and integrating and reporting results for acquired companies that have not historically followed generally accepted accounting principles in the United States (GAAP);
- the implementation of restructuring actions and cost reduction initiatives to streamline operations and improve cost efficiencies;
- the fact that we may be required to pay contingent consideration in excess of the initial fair value, and contingent consideration may become payable at a time when we do not have sufficient cash available to pay such consideration;
- in the case of foreign acquisitions, the need to integrate operations across different cultures and languages and to address the particular economic, currency, political, and regulatory risks associated with specific countries as well as tax risks that may arise from the acquisition;
- increasing legal, regulatory, and compliance exposure, and the additional costs related to mitigate each of those, as a result of adding new offices, employees and other service providers, benefit plans, equity, job types, and lines of business globally; and
- liability for activities of the acquired company before the acquisition, including intellectual property, commercial, and other litigation claims or disputes, cyber and information security vulnerabilities, violations of laws, rules and regulations, including with respect to employee classification, tax liabilities, and other known and unknown liabilities.

If we are unable to successfully integrate and manage our acquisitions and strategic partnerships, we may not realize the expected benefits of such transactions or become exposed to additional liabilities, and our business, financial condition, and results of operations could be adversely affected.

We plan to continue to expand and diversify our operations through strategic acquisitions and partnerships. We face a number of risks related to these transactions.

We plan to continue to expand and diversify our operations with additional strategic acquisitions or partnerships, strategic collaborations, joint ventures, or licensing arrangements. As we continue to grow, these transactions may be larger and require significant investments, such as our acquisitions of Machine Zone, Adjust, and MoPub, and our pending acquisition of Wurl. We may be unable to identify or complete prospective acquisitions or partnerships for many reasons, including our ability to identify suitable targets, increasing competition from other potential acquirers, the effects of consolidation in our industries, potentially high valuations of acquisition candidates, and the availability of financing to complete larger acquisitions. Even if we do complete any such transactions, we may incur significant costs, such as professional service fees or customer acquisition bonuses. In addition, applicable antitrust laws and other regulations may limit our ability to acquire targets, particularly larger targets, or force us to divest an acquired business. If we are unable to identify suitable targets or complete acquisitions, our growth prospects could be adversely affected, and we may not be able to realize sufficient scale and technological advantages to compete effectively in all markets.

Further, completing larger acquisitions or other strategic transactions is significantly riskier in that such transactions require additional consideration and management attention to complete, and could introduce additional exposure to regulatory and compliance risk. To complete these transactions, we may need to spend large amounts of cash, which may not be available to us on acceptable terms, if at all, or issue equity or equity-linked consideration, which may dilute our current stockholders. For example, in connection with our acquisition of Adjust in April 2021, we issued convertible securities that converted into an aggregate of 6,320,688 shares of our Class A common stock. Further, we generally devote more time and resources towards performing diligence on larger transactions and may be required to devote more resources towards regulatory requirements in connection with such transactions. To the extent that we do not perform sufficient diligence on a larger acquisition or such a transaction does not generate the expected benefits, our business, financial condition, and results of operations will be harmed, and to a greater extent than would occur with a smaller transaction.

Absent such strategic transactions, we would need to undertake additional development or commercialization activities at our own expense. If we elect to fund and undertake such additional efforts on our own, we may need to obtain additional expertise and additional capital, which may not be available to our company on acceptable terms, if at all. If we are unable to do any of the foregoing, we may not be able to develop our Core Technologies, Software Platform, and Apps effectively or achieve our expected product roadmap on a timely basis, which could adversely affect our business, financial condition, and results of operations.

The benefits of a strategic acquisition or partnership may also take considerable time to develop, and we cannot be certain that any particular strategic acquisition or partnership will produce the intended benefits. Further, acquisitions could result in potential dilutive issuances of equity securities, use of significant cash balances or incurrence of debt (and increased interest expense), contingent liabilities or amortization expenses related to intangible assets, or write-offs of goodwill and intangible assets. If we are unable to identify and complete strategic acquisitions or partnerships, our business, financial condition, and results of operations could be adversely affected.

Our strategic acquisitions and partnerships may expose us to tax risks.

From time to time, we have acquired and may acquire companies, assets, businesses, and technologies and we have entered into and may enter into other strategic partnerships and transactions. We face a variety of tax risks related to such transactions, including that we may be required to make tax withholdings in various jurisdictions in connection with such transactions or as part of our continuing operations following a transaction, and that the companies or businesses we acquire may cause us to alter our international tax structure or otherwise create more complexity with respect to tax matters. Additionally, while we typically include indemnification provisions in our definitive agreements related to strategic acquisitions and partnerships, these indemnification provisions may be insufficient in the event that tax liabilities are greater than expected or in areas that are not fully covered by indemnification. If we are unable to adequately predict and address such tax issues as they arise, our business, financial condition, and results of operations could be adversely affected.

We have entered into strategic partnerships with mobile gaming studios, and a failure to maintain such relationships may harm our ability to launch new Apps as well as our brand and reputation.

From time to time, we have entered into strategic partnerships with mobile gaming studios (our Partner Studios). We have historically allowed these Partner Studios to continue their operations with a degree of autonomy. In certain of these transactions, we have bought games from such Partner Studios and entered into development agreements whereby such Partner Studios provide us support in developing and improving games and grant us a right of first refusal with respect to future games. These agreements typically have a fixed term, after which our Partner Studios may choose not to continue working with us. Any deterioration in our relationship with these Partner Studios may harm our ability to monetize the games we purchase and launch future mobile games developed by these Partner Studios and may lead to such Partner Studios choosing not to renew their partnerships with us. Further, if a Partner Studio becomes dissatisfied with us, our brand and reputation may be harmed and we may have more difficulty entering into similar partnerships in the future. Additionally, our international Partner Studios may be located in areas with less certain legal and regulatory regimes or more potential risks, which may increase our costs to maintain such strategic partnership. If we are unable to maintain any of these partnerships, we may be required to invest significant resources in expanding our other studios or entering into agreements with additional mobile gaming studios in order to continue producing the same volume and quality of Apps, and our business, financial condition, and results of operations could be adversely affected.

We rely on third-party platforms to distribute our Apps and collect revenue, and if our ability to do so is harmed, or such third-party platforms change their policies in such a way that restricts our business, increases our expenses, or limits the information we derive from our Apps, our business, financial condition, and results of operations could be adversely affected.

The mobile app ecosystem depends in part on a relatively small number of third-party distribution platforms, such as the Apple App Store, the Google Play Store, and Facebook, some of which are direct competitors. We derive significant revenue from the distribution of our Apps through these third-party platforms and almost all of our IAPs are made through the payment processing systems of these third-party platforms. We are subject to the standard policies and terms of

service of such third-party platforms, which generally govern the promotion, distribution, content, and operation of applications on such platforms. Each platform provider has broad discretion to change and interpret its terms of service and other policies with respect to us and other mobile app companies, and those changes may be unfavorable to us. A platform provider may also change its fee structure, add fees associated with access to and use of its platform, alter how mobile apps are labeled or are able to advertise on its platform, change how the personal information of its users is made available to developers on its platform, limit the use of personal information for advertising purposes, restrict how users can share information on its platform or across platforms, or significantly increase the level of compliance or requirements necessary to use its platform. For example, in April 2021, Apple started implementing its application tracking transparency framework that, among other things, requires users' opt-in consent for certain types of tracking. While this transparency framework has not had a significant impact on our overall business, it may in the future continue to have an impact on it, including the effectiveness of our advertising practices and/or our ability to efficiently generate revenue for our Apps. We rely in part on IDFA to provide us with data that helps our Software Platform better market and monetize Apps. The IDFA and transparency changes may require us to engage in significant changes to our data collection practices, which may require our expenditure of substantial costs and resources, and to the extent we are unable to utilize IDFA or a similar offering, or if the transparency changes and any related opt-in or other requirements result in decreases in the availability or utility of data relating to Apps, our Software Platform may not be as effective, we may not be able to continue to efficiently generate revenue for our Apps, and our revenue and results of operations may be harmed. Additionally, Apple implemented new requirements for consumer disclosures regarding privacy and data processing practices in December 2020, which has resulted in increased compliance requirements and could result in decreased usage of our Apps. These or any similar changes to the policies of Apple or Google may materially and adversely affect our business, financial condition, and results of operations.

If we violate, or a distribution platform provider believes we have violated, a distribution platform's terms of service, or if there is any change or deterioration in our relationship with such distribution provider, that platform provider could limit or discontinue our access to its platform. For example, in August 2020, Apple and Google removed a mobile game developed by one of our competitors from their platforms for violating their standard policies and terms of service. If one of our distribution platform partners were to limit or discontinue the distribution of our Apps on their platform, it could adversely affect our business, financial condition, and results of operations.

We also rely on the continued popularity, user adoption, and functionality of third-party platforms. In the past, some of these platform providers have been unavailable for short periods of time or experienced issues with their in-app purchasing functionality. In addition, third-party platforms also impose certain file size limitations, which may limit the ability of users to download some of our larger Apps in over-the-air updates. Aside from these over-the-air file size limitations, a larger game file size could cause users to delete our mobile games once the file size grows beyond the capacity of their devices' storage limitations or could reduce the number of downloads of these mobile games.

If issues arise with third-party platforms that impact the visibility or availability of our Apps, our users' ability to access our Apps or our ability to monetize our Apps, or otherwise impact the design or effectiveness of our Software Platform, our business, financial condition, and results of operations could be adversely affected.

If we are unable to launch or acquire new Apps and successfully monetize them, or continue to improve the experience and monetization of our existing Apps, our business, financial condition, and results of operations could be adversely affected.

Our business depends in part on launching or acquiring, and continuing to service, mobile apps that users will download and spend time and money using. We have devoted and we expect to continue to devote substantial resources to the research, development, analytics, and marketing of our Apps. Our development and marketing efforts are focused on improving the experience of our existing Apps, developing new Apps, and successfully monetizing our Apps. Our Apps generate revenue primarily through the sale of advertising, a substantial portion of which comes from other mobile gaming clients, and in-app purchases (IAPs). For Apps distributed through third-party platforms, we are required to share a portion of the proceeds from in-game sales with the platform providers, which share may be subject to changes or increases over time. In order to achieve and maintain our profitability, we need to generate sufficient revenue from our existing and new Apps to offset our ongoing development, marketing, and other operating expenses.

Successfully monetizing our Apps is difficult and requires that we deliver user experiences that a sufficient number of users will pay for through IAPs or we are able to otherwise sufficiently monetize our Apps, including by serving in-app advertising. The success of our Apps depends in part on unpredictable and volatile factors beyond our control including user preferences, competing apps, new third-party platforms, and the availability of other entertainment experiences. If our Apps do not meet user expectations or if they are not brought to market in a timely and effective manner, our business and results of operations could be adversely affected.

In addition, our ability to successfully launch or acquire Apps and their ability to achieve commercial success will depend in part on our ability to:

- effectively market our Apps to existing and new users;

- achieve a positive return on investment from our marketing and user acquisition costs or achieve organic user growth;
- adapt to changing trends, user preferences, new technologies, and new feature sets for mobile and other devices, including determining whether to invest in development for any new technologies, and achieve a positive return on the costs associated with such adaptation;
- continue to adapt mobile app feature sets for an increasingly diverse set of mobile devices, including various operating systems and specifications, limited bandwidth, and varying processing power and screen sizes;
- achieve and maintain successful user engagement and effectively monetize our Apps;
- develop mobile games that can build upon or become franchise games and expand and enhance our mobile games after their initial releases;
- develop Apps other than mobile games;
- identify and execute strategic acquisitions and partnerships;
- attract advertisers to advertise on our Apps;
- partner with third-party platforms and obtain featuring opportunities;
- compete successfully against a large and growing number of competitors;
- accurately forecast the timing and expense of our operations, including mobile app and feature development, marketing, and user acquisition;
- minimize and quickly resolve bugs or outages;
- acquire, or invest in, and successfully integrate high quality mobile app companies or technologies; and
- retain and motivate talented and experienced developers and other key personnel from such acquisitions and investments.

These and other uncertainties make it difficult to know whether we will succeed in continuing to develop and launch new Apps. Even if successful, certain genres of mobile apps, such as casual games, may have a relatively short lifespan. Further, as our Apps expand into additional genres of mobile games or additional categories of mobile apps, we will face risks as well as market, legal and regulatory challenges specific to those genres or categories. For example, in mid-core games, there is typically a higher upfront investment prior to the launch of a game compared to casual games, which means publishing a new game in that genre will expose us to greater risks as our financial condition and results of operations will be more significantly adversely affected to the extent such a game does not become popular and commercially successful. If we are not successful in launching new mobile games or expanding into other genres of mobile games or categories of mobile apps, our business, financial condition, and results of operations could be adversely affected.

If we fail to retain existing users or add new users cost-effectively, or if our users decrease their level of engagement with Apps, our business, financial condition, and results of operations could be adversely affected.

The size of our user base and the level of user engagement with our Apps are critical to our success. Our results of operations have been and will continue to be significantly determined by our success in acquiring and engaging App users. We expect that the number of our App users may fluctuate or decline in one or more markets from time to time, particularly in markets where we have achieved higher penetration rates. In addition, if people do not perceive our Apps as useful or entertaining, we may not be able to attract or retain users or otherwise maintain or increase the frequency and duration of their engagement, which could harm our revenue. A number of mobile apps that achieved early popularity have since seen their user bases or user engagement levels decline. There is no guarantee that we will not experience a similar erosion of our App users or user engagement levels. Our user engagement patterns have changed over time, and user engagement can be difficult to measure, particularly as we introduce new and different Apps. Any number of factors can adversely affect user growth and engagement, including if:

- users increasingly engage with mobile apps offered by competitors or mobile apps in categories other than those of our Apps;
- we fail to introduce new Apps or features that users find engaging or that achieve a high level of market acceptance or we introduce new Apps, or make changes to existing Apps that are not favorably received;
- users feel that their experience is diminished as a result of the decisions we make with respect to the frequency, prominence, format, size, and quality of advertisements that we display;
- users have difficulty installing, updating, or otherwise accessing our Apps as a result of actions by us or third parties;

- we are unable to continue to develop Apps that work with a variety of mobile operating systems and networks; and
- questions about the quality of our Apps, our data practices or concerns related to privacy and sharing of personal information and other user data, safety, security, or other factors.

Additionally, we expect it will become increasingly difficult and more expensive for us to acquire users for our Apps for a variety of reasons, including the increasingly competitive nature of the mobile app ecosystem and the significant amount of time and attention users are dedicating to competing entertainment options. Further, we believe that changes that Apple has implemented during the last several years to its platform, particularly the removal of the Top Grossing rankings and decreasing the prominence of the Top Free rankings as well as transparency and IDFA changes, may adversely affect the number of organic downloads of our Apps. If our competitors increase their user acquisition spending, we could experience higher costs per an install for our Apps, which would adversely affect our revenue and margins. Furthermore, our spending on user acquisition is based on certain assumptions about their projected behavior, particularly for new Apps for which we do not have similar Apps in our portfolio to aid us in our modeling efforts. If we are unable to grow our user base and increase our user engagement levels, or unable to do so cost effectively, our business, financial condition, and results of operations could be adversely affected.

Our revenue has been concentrated in various ways and the loss of, or a significant reduction in, any such revenue source, or our failure to successfully expand and diversify our revenue sources could adversely affect our business, financial condition, and results of operations.

We have historically experienced revenue concentration with respect to certain Apps as well as other facets of our business. Our future success depends, in part, on launching or acquiring and successfully monetizing additional Apps and on establishing and maintaining successful relationships with a diverse set of business clients. While our Apps consist of over 350 mobile games, currently a limited number of those are responsible for a significant portion of our revenue. In the twelve months ended December 31, 2021, three games, Project Makeover, Matchington Mansion, and Wordscapes, collectively represented approximately 29% of our revenue. The loss or failure to successfully monetize one of these Apps could have a significant impact on our results of operations. Similarly, our future success depends, in part, on the ability of our Owned Studios and Partner Studios to launch and monetize additional mobile games and other mobile apps, as well as, on our ability to successfully acquire and monetize additional mobile games and other mobile apps, and these Apps may not successfully diversify our revenue concentration. If we are unable to successfully launch or acquire new Apps, our reliance on a limited number of Apps may increase. Additionally, certain genres of games typically rely on only a small portion of their total users for a significant amount of their revenue, and as we expand our number of Apps in these genres, such as mid-core, we may experience these effects and need to attract, engage, and increase the spending levels of these particular users to achieve success.

More generally, we face concentration risk in that our Software Platform and Apps operate in the mobile app ecosystem and specifically mobile gaming. As such, our business depends, in part, on the continued health and growth of these app ecosystems. Further, a significant amount of our total revenue is derived through a limited number of third-party distribution platforms, such as the Apple App Store, the Google Play Store, and Facebook. Because Facebook and Google are also significant partners of Adjust, a deterioration in our or Adjust's relationship with such companies would have a greater impact on our business, financial condition, and results of operations. If any of these concentrated portions of our revenue are harmed or are lost, our business, financial condition, and results of operations could be adversely affected.

We have experienced recent rapid growth, which may not be indicative of our future growth. We may be unable to effectively manage the growth of our business, which could adversely affect our business, financial condition, and results of operations.

We have experienced rapid growth in the scale, scope, and complexity of our business. For example, while we only launched our Apps in 2018, today, our Apps consist of a globally diversified portfolio of over 350 free-to-play mobile games across five genres, run by nineteen studios. Further, our Software Platform revenue has also expanded rapidly, in particular since the launch of our ML-engine AXON. Our growth in any prior period should not be relied upon as an indication of our future performance, as we may not be able to sustain our growth rate in the future. Even if our revenue continues to increase, we expect that our revenue growth rate may decline in the future as a result of a variety of factors, including because of more difficult comparisons to prior periods and the saturation of the market. The overall growth of our revenue depends in part on our ability to execute on our growth strategies.

Additionally, the growth and expansion of our business has placed and continues to place a significant strain on our management, operations, financial infrastructure, and corporate culture. Our future success depends in part on our ability to manage this expanded business and to continue to grow both our Software Platform and Apps. If not managed effectively, this growth could result in the over-extension of our management systems and information technology systems and our internal controls and procedures may not be adequate to support this growth. Failure to adequately manage our growth in any of these ways may cause damage to our brand and reputation and adversely affect our business, financial condition, and results of operations.

Our future growth may involve expansion into new business opportunities, and any efforts to do so that are unsuccessful or are not cost-effective could adversely affect our business, financial condition, and results of operations.

In the past, we have grown by expanding our offerings into new business opportunities and we expect to continue to do so. We have dedicated resources to expanding into adjacent business opportunities in which large competitors have an established presence, as was the case with our Apps. Additionally, our future growth may include expansion into additional genres of mobile games, other mobile app sectors, connected TV markets, blockchain-related markets or other opportunities which may require significant investment in order to launch and which may not be prove successful. Further, any such expansion may subject us to new or additional laws and regulations, compliance with which may be burdensome and costly. Our future growth depends in part on our ability to correctly identify areas of investment and to cost-effectively execute on our plans. We have in the past and may in the future expend significant resources in connection with strategic acquisitions and partnerships to expand into new business opportunities. Even if successful, the growth of any new business opportunity could create significant challenges for our management and operational resources and could require considerable investment. The deployment of significant resources towards a new opportunity that proves unsuccessful, or our inability to choose the correct investment opportunities for our future, could adversely affect our business, financial condition, and results of operations.

Our international operations are subject to increased challenges and risks.

We expect to continue to expand our international operations in the future by opening new offices, entering into strategic partnerships with new international game studios, acquiring companies that may have international operations, and providing our Apps in additional countries and languages. For example, our Owned Studios and Partner Studios are located throughout the world, including in areas with less certain legal and regulatory regimes or more potential risks, such as Belarus, China and Vietnam and with operations in Russia and Ukraine. Expanding our international operations may subject us to risks associated with:

- recruiting and retaining talented and capable management and employees in foreign countries;
- the diversion of senior management attention;
- challenges caused by distance, language, and cultural differences;
- developing and customizing Software Platform and Apps that appeal to the tastes and preferences of users in international markets;
- the inability to offer certain Software Platform or Apps in certain foreign countries;
- competition from local mobile app developers with intellectual property rights and significant market share in those markets and with a better understanding of user preferences;
- utilizing, protecting, defending, and enforcing our intellectual property rights;
- negotiating agreements with local distribution platforms that are sufficiently economically beneficial to us and protective of our rights;
- the inability to extend proprietary rights in our brand, content, or technology into new jurisdictions;
- implementing alternative payment methods for features and virtual goods in a manner that complies with local laws and practices and protects us from fraud;
- compliance with applicable foreign laws and regulations, including anti-bribery laws, privacy laws, and laws relating to content and consumer protection (for example, the United Kingdom's Office of Fair Trading's 2014 principles relating to IAPs in free-to-play games that are directed toward children 16 and under);
- credit risk and higher levels of payment fraud;
- currency exchange rate fluctuations;
- protectionist laws and business practices that favor local businesses in certain countries;
- double taxation of our international earnings and potentially adverse tax consequences due to changes in the tax laws in the United States or the foreign jurisdictions in which we operate;
- political, economic, and social instability, such as the conflict in Ukraine and its impacts on the region and the regional and global economy;
- public health crises, such as the COVID-19 pandemic, which can result in varying impacts to our employees, clients, users, advertisers, app developers, and business partners internationally;
- higher costs associated with doing business internationally, including costs related to local advisors;
- export or import regulations; and

- trade and tariff restrictions.

Our ability to successfully gain market acceptance in any particular international market is uncertain and, in the past, we have experienced difficulties and have not been successful in all the countries we have entered. If we are unable to continue to expand internationally or manage the complexity of our global operations successfully, our business, financial condition, and results of operations could be adversely affected.

Our business is subject to economic, market, public health, and geopolitical conditions as well as to natural disasters beyond our control.

Our business is subject to economic, market, public health, and geopolitical conditions, as well as natural disasters beyond our control. For example, we have a partner studio located in Belarus with additional operations in Ukraine. The impact of the current geopolitical environment in those regions on their operations is unknown at this time. However, we may experience interruptions or delays in the services they provide to us as a result of such geopolitical volatilities.

Further, our revenue is driven in part by discretionary consumer spending habits and preferences, and by advertising spending patterns. Historically, consumer purchasing and advertising spending have each declined during economic downturns and periods of uncertainty regarding future economic prospects or when disposable income or consumer lending is lower. General macro-economic conditions, such as a recession or economic slowdown in the United States or internationally, including those resulting from the COVID-19 pandemic and geopolitical issues, could create uncertainty and adversely affect discretionary consumer spending habits and preferences as well as advertising spending. Uncertain economic conditions may also adversely affect our business clients. As a result, we may be unable to continue to grow in the event of future economic slowdowns. We are particularly susceptible to market conditions and risks associated with the mobile app ecosystem, which also include the popularity, price, and timing of our Apps, changes in user demographics, the availability and popularity of other forms of entertainment, and critical reviews and public tastes and preferences, which may change rapidly and cannot necessarily be predicted.

Additionally, our principal offices are located in the San Francisco Bay Area, an area known for earthquakes and susceptible to fires, and are thus vulnerable to damage. All of our facilities are also vulnerable to damage from natural or man made disasters, including power loss, earthquakes, fires, explosions, floods, communications failures, terrorist attacks, contagious disease outbreak (such as the COVID-19 pandemic), and similar events. If any disaster were to occur, our ability to operate our business at our facilities could be impaired and we could incur significant losses, recovery from which may require substantial time and expense.

Our business depends in part on our ability to increase in-app purchases, manage the economies in our Apps and respond to changes with respect to in-app purchases, and any failure to do so could adversely affect our business, financial condition, and results of operations.

Our business and future growth depend in part on our ability to increase the amount of IAPs in our Apps, which requires our studios to effectively design mobile games and other apps that create features and virtual goods for which users will pay. Users make IAPs because of the perceived in-app value of virtual goods, which is dependent on the relative ease of obtaining an equivalent good by playing our mobile games. The perceived in-app value of these virtual goods can be impacted by various actions that we take in the mobile games including offering discounts for virtual goods, giving away virtual goods in promotions, or providing easier non-paid means to secure these goods. Managing virtual economies is difficult and relies on our assumptions and judgement. Further, changes in user preferences, including with respect to how they interact with mobile apps and general views towards IAPs, could decrease levels of spending on IAPs on our Apps and in the mobile app ecosystem generally. If we fail to manage our virtual economies properly or fail to promptly and successfully respond to any disruption in such economies, our reputation may be harmed and our users may be less likely to play our mobile games and to purchase virtual goods from us in the future, which could adversely affect our business, financial condition, and results of operations.

In addition, changes in the policies of Apple, Google, or other third-party platforms, or changes in accounting policies promulgated by the Securities and Exchange Commission (SEC), and national accounting standards bodies affecting software and virtual goods revenue recognition, could further significantly affect the way we report revenue related to IAPs, which could adversely affect our results of operations. Any changes in user, third-party platform, or regulator views towards IAPs, or any inability by us to respond to changing trends with respect to IAPs, could adversely affect our business, financial condition, and results of operations.

We anticipate increasing our operating expenses in the future, and we may not be able to achieve or maintain our profitability in any given period. If we cannot achieve or maintain our profitability, our business could be adversely affected.

Although we have been profitable on a GAAP basis and had positive cash flow from operations in certain prior periods, we may not always achieve sufficient revenue or manage our expenses in order to achieve positive cash flow from operations or profitability in any given period. Our operating expenses may continue to rise as we implement additional initiatives designed to increase revenue, potentially including: developing our Core Technologies, Software Platform and technology stack, launching Apps, strategic acquisitions and partnerships, business client and user

acquisition spending, international expansion, hiring additional employees, and taking other steps to strengthen and grow our company. We are likely to recognize costs associated with these investments earlier than some of the anticipated benefits, and the return on these investments may be lower, or may develop more slowly, than we expect. We also anticipate that the costs of acquiring new business clients and mobile app users, and otherwise marketing our Software Platform and Apps, will continue to rise. Further, we may continue to incur significant costs in connection with strategic acquisitions and partnerships, which costs may increase or become more concentrated to the extent we enter into larger transactions. If we are not able to maintain positive cash flow in the long term, we may require additional financing, which may not be available on favorable terms or at all, and which may be dilutive to our stockholders. If we are unable to generate adequate revenue growth and manage our expenses, we may incur significant losses in the future and may not be able to maintain positive cash flow from operations or profitability.

The COVID-19 pandemic and responses thereto across the globe have altered how individuals interact with each other and affected how we and our business partners are operating, and the extent to which this situation will impact our future results of operations remains uncertain.

The ongoing COVID-19 pandemic and resulting social distancing and shelter-in-place orders put in place around the world have caused widespread disruption in global economies, productivity, and financial markets and have altered the way in which we conduct our day-to-day business.

The full extent to which the COVID-19 pandemic and the various responses thereto impact our business, operations, and results of operations will depend on numerous evolving factors that we may not be able to accurately predict, including: the duration and scope of the pandemic, including any potential future waves of the pandemic; governmental, business, and individual actions that have been and continue to be taken in response to the pandemic; the effect on our clients; disruptions or restrictions on our employees' ability to work and travel; the availability and cost to access the capital markets; and interruptions related to our cloud networking and mobile app infrastructure and that impact our business partners, platform providers, clients, and customer service and support providers. As a result of the COVID-19 pandemic, we have temporarily closed some of our offices around the world and implemented travel restrictions. While substantially all of our business operations can be performed remotely and we are planning reopening for certain offices, many of our employees are juggling additional work-related and personal challenges. With the general shift to remote work, we are able to tap into candidate pools previously unavailable to us, but candidates have also sought increased flexibility and may have more options available to them. We will continue to actively monitor the issues raised by the COVID-19 pandemic and may take further actions that alter our business operations, including as may be required by federal, state, local, or foreign authorities or that we determine are in the best interests of our employees, users, business partners, and stockholders.

In addition to the potential direct impacts to our business, the global economy has been, and is likely to continue to be, significantly weakened as a result of the actions taken in response to the COVID-19 pandemic, and future government intervention remains uncertain. A weakened global economy may negatively impact our business partners as well as our users' in-app purchasing decisions and users' buying decisions across the globe generally, which could adversely affect advertiser activity. We may experience heightened levels of variability in the pricing of advertising both in terms of user acquisition and as it relates to our Software Platform and Apps. If these conditions result in significant decreased pricing of advertising, the revenue we make from our Software Platform and advertisers paying to display advertisements in our Apps could be adversely affected, particularly if the levels of user engagement in our Apps are not sufficient to offset these declines, and we may experience increased pressure on our overall margins. If we are not able to respond to and manage the direct and indirect impact of the COVID-19 pandemic on our business, then our business, financial condition, and results of operations could be adversely affected.

Our company culture has contributed to our success and if we cannot maintain this culture as we grow, our business could be harmed.

We believe that our company culture has been critical to our success and will be important for our continued growth. We face a number of challenges that may affect our ability to sustain our corporate culture, including: failure to identify, attract, reward, and retain people in leadership positions in our organization who share and further our culture and values; the increasing size and geographic diversity of our workforce; competitive pressures to move in directions that may divert us from our culture and values; the continued challenges of a rapidly-evolving industry; the increasing need to develop expertise in new areas of business that affect us; a negative perception of our treatment of employees or our response to employee sentiment related to political or social causes or actions of management; and the integration of new personnel and businesses from acquisitions. If we are not able to maintain our culture, we could lose the innovation, passion, and dedication of our team and as a result, our business, financial condition, and results of operations could be adversely affected.

If we do not successfully or cost-effectively invest in, establish, and maintain awareness of the AppLovin brand, our business, financial condition, and results of operations could be adversely affected.

We believe that establishing and maintaining the AppLovin brand is critical to maintaining and creating favorable relationships with, and our ability to attract, new business clients, particularly Enterprise Clients, and key personnel.

Increasing awareness of the AppLovin brand will depend largely upon our marketing efforts and our ability to successfully differentiate our Software Platform from the offerings of our competitors. In addition, successfully globalizing and extending our brand requires significant investment and extensive management time. If we fail to maintain and increase brand awareness and recognition of our Software Platform, our business, financial condition, and results of operations could be adversely affected.

We generally do not have long-term agreements with our business clients.

Our business clients are not required to enter into long-term agreements with us and may choose to stop using our Software Platform at any time. For example, our advertising agreements can be executed in as little as one day and can be terminated for convenience on two days' notice. In order to continue to grow our Software Platform, we must consistently provide offerings that clients see as valuable and choose to use. If we fail to maintain our relationships with our clients, or if the terms of these relationships become less favorable to us, our results of operations would be harmed. Additionally, as certain of our clients are also our competitors, these clients may choose to invest in their own offerings rather than continue to use our Software Platform. Any failure to maintain our relationships with business clients could adversely affect our business, financial condition, and results of operations.

If our Apps do not meet user expectations, or contain objectionable content, our reputation, business, financial condition, and results of operations could be adversely affected.

Expectations regarding the quality, performance, and integrity of our Apps are high. We must continually adapt to changing user preferences including the popularity of various game categories, style of play, and IAP options. Users may be critical of our Apps, business models, or business practices for a wide variety of reasons, including perceptions about gameplay, fairness, game content, features, or services. Independent industry analysts may publish reviews of our Apps from time to time, as well as those of our competitors, and perception of our Apps in the marketplace may be significantly influenced by these reviews. We have no control over what users or these industry analysts report. If users and industry analysts negatively respond to our Apps or changes that we make to our Apps, or provide negative reviews of our Apps, our reputation, business, financial condition, and results of operations could be adversely affected.

Further, despite reasonable precautions, some users may be offended by certain mobile app content, advertisements displayed in our Apps or by the treatment of other users. For example, if users believe that an advertisement displayed in an App contains objectionable content, we could experience damage to our brand and reputation and users could refuse to play such game and pressure platform providers to remove the App from their platforms. While such content may violate our terms and we may subsequently remove it, our brand and reputation may nonetheless be harmed and our clients may become dissatisfied with our services. Furthermore, steps that we may take in response to such instances, such as temporarily or permanently shutting off access of a user to our Apps, could adversely affect our business and results of operations. Any failure to meet user expectations or provide our Apps without objectionable content could adversely affect our reputation, business, financial condition, and results of operations.

The proliferation of "cheating" programs and scam offers that seek to exploit our mobile games and users may adversely affect game-playing experiences and lead users to stop playing our mobile games. Our failure to maintain a customer support ecosystem may enhance these risks.

Our users rely on our customer support organization to resolve any issues relating to our mobile games. Customer support is important for satisfying user expectations regarding the quality, performance, and integrity of our mobile games. We currently have limited customer support operations. If we do not effectively train, supplement, and manage our customer support organization to assist our users, and if that support organization does not succeed in helping users quickly resolve issues or provide effective ongoing support, we could experience decreased user engagement and harm to our reputation with potential new users.

Additionally, unrelated third parties have developed, and may continue to develop, "cheating" programs that enable users to exploit vulnerabilities in our mobile games, play them in an automated way, collude to alter the intended game play, or obtain unfair advantages over other users who do play fairly. These programs harm the experience of users who play fairly and may disrupt the virtual economies of our mobile games and reduce the demand for certain IAPs. In addition, unrelated third parties have attempted to scam our users with fake offers for virtual goods or other game benefits. These unauthorized or fraudulent transactions are usually arranged on third-party websites and the virtual goods offered may have been obtained through unauthorized means, such as exploiting vulnerabilities in our mobile games, or may be fraudulent offers. We do not generate any revenue from these transactions. These unauthorized purchases and sales from third-party sellers have in the past and could in the future impede our revenue and profit growth.

There can be no assurance that our customer support and other efforts to detect, prevent, or minimize these unauthorized or fraudulent transactions will be successful, that these actions will not increase over time or that our customer support efforts will be successful in resolving user issues. Any failure to maintain adequate customer support or success of third-party cheating programs or scams may negatively affect game-playing experiences and lead users to stop playing our mobile games, which could adversely affect our business, financial condition, and results of operations.

Risks Related to Legal and Regulatory Matters

We are subject to laws and regulations concerning privacy, information security, data protection, consumer protection, advertising, tracking, targeting, and protection of minors, and these laws and regulations are continually evolving. Our actual or perceived failure to comply with these laws and regulations could adversely affect our business, financial condition, and results of operations.

We receive, store, and process personal information and other data, including data relating to individuals and households, and we enable our users to share their personal information with each other and with third parties, including within our Apps. There are numerous federal, state, and local laws around the world regarding privacy and the collection, storing, sharing, use, processing, disclosure, deletion, and protection of personal information and other data, including data relating to individuals and households, the scope of which are changing, subject to differing interpretations, and may be inconsistent between countries or conflict with other rules.

Various government and consumer agencies have called for new regulation and changes in industry practices and are continuing to review the need for greater regulation for the collection of information concerning consumer behavior on the internet, including regulation aimed at restricting certain targeted advertising practices. For example, the GDPR, which became effective in May 2018, created new individual privacy rights and imposed worldwide obligations on companies processing personal data of European Union (EU) users, which has created a greater compliance burden for us and other companies with European users, and subjects violators to substantial monetary penalties. The United Kingdom has implemented legislation that substantially implements the GDPR and which also provides for substantial monetary penalties. In June 2021, the European Commission announced a decision of “adequacy” concluding that the United Kingdom ensures an equivalent level of data protection to the GDPR, which provides some relief regarding the legality of continued personal data flows from the European Economic Area to the United Kingdom. Such adequacy decision must, however, be renewed after four years and may be modified or revoked in the interim. We cannot fully predict how United Kingdom data protection laws or regulations may develop in the medium to longer term, nor the effects of divergent laws and guidance regarding how data transfers to and from the United Kingdom will be regulated.

With regard to transfers to the United States of personal data (as such term is used in the GDPR and applicable EU member state legislation) from our employees and European users and other third parties, we have relied upon the EU-U.S. and Swiss-U.S. Privacy Shield as well as certain standard contractual clauses approved by the EU Commission (the SCCs); however, both the EU-U.S. Privacy Shield and the SCCs have been subject to legal challenge, and on July 16, 2020, the Court of Justice of the EU, Europe’s highest court, held in the *Schrems II* case that the E.U.-U.S. Privacy Shield was invalid, and imposed additional obligations in connection with the use of the SCCs. This decision imposes restrictions on the ability to transfer personal data from the EU and Switzerland to the United States, and with the exit of the United Kingdom from the EU, we and other companies face additional restrictions on transfers of personal data from the United Kingdom. EU regulators since have issued additional guidance regarding these additional requirements that we and other companies must consider and undertake when using the SCCs. On June 4, 2021, the European Commission adopted new SCCs taking into account the *Schrems II* case and reflecting requirements under the GDPR. The decision foresees an 18-month grace period for companies to adopt the new SCCs, subject to obligations to use the SCCs for new contracts and data processing operations as of September 27, 2021. We are in the process of assessing these developments and their impact on our data transfer mechanisms. The SCCs and other cross-border data transfer mechanisms may face additional legal challenges or be the subject of additional legislative activity and regulatory guidance. We and many other companies may need to implement different or additional measures to establish or maintain legitimate means for the transfer and receipt of personal data from the European Economic Area, Switzerland and the United Kingdom to the United States, and we may, in addition to other impacts, experience additional costs associated with increased compliance burdens, and we and our clients face the potential for regulators to apply different standards to the transfer of personal data from the European Economic Area, Switzerland and the United Kingdom to the United States, and to block, or require ad hoc verification of measures taken with respect to, certain data flows from the European Economic Area, Switzerland and the United Kingdom to the United States. We also may be required to engage in contract negotiations with third parties that aid in processing data on our behalf, to the extent that any of our service providers, or consultants have been relying on invalidated or insufficient contractual protections for compliance with evolving interpretations of and guidance for cross-border data transfers pursuant to the GDPR, Swiss privacy laws, and UK privacy laws. In such cases, we may not be able to find alternative service providers which could limit our ability to process personal data from the European Economic Area, Switzerland, or the United Kingdom and increase our costs and/or impact our Core Technologies, Software Platform, Apps, or other offerings. We and our clients may face a risk of enforcement actions by data protection authorities in the European Economic Area, Switzerland and the United Kingdom relating to personal data transfers. Any such enforcement actions could result in substantial costs and diversion of resources, distract management and technical personnel, and adversely affect our business, financial condition, and results of operations. Similar to GDPR, in September 2020, Brazil enacted the Brazilian General Data Protection Law (LGPD). In August 2021, China passed a new data privacy law known as “PIPL”, effective November 1, 2021, which adopts a stringent data transfer regime requiring, among other things, data subject consent for certain data transfers. Any of these developments may have an adverse effect on our business.

Moreover, the GDPR and other similar regulations require companies to give specific types of notice and in some cases seek consent from consumers and other data subjects before collecting or using their data for certain purposes, including some marketing activities. In addition to the GDPR, the European Commission has another draft regulation in the

approval process that focuses on a person's right to conduct a private life. The proposed legislation, known as the Regulation of Privacy and Electronic Communications (ePrivacy Regulation), would replace the current ePrivacy Directive. Originally planned to be adopted and implemented at the same time as the GDPR, the ePrivacy Regulation is still being negotiated. On February 10, 2021, the Council of the EU agreed on its version of the draft ePrivacy Regulation. If adopted, the earliest date for entry into force is in 2023, with broad potential impacts on the use of internet-based services and tracking technologies, such as cookies. Aspects of the ePrivacy Regulation remain for negotiation between the European Commission and the Council.

Another example is the State of California's passage of the CCPA, which went into effect on January 1, 2020, with implementing regulations taking effect August 14, 2020, and which created new privacy rights for users residing in the state, including a private right of action for data breaches. The California Privacy Rights Act (CPRA) was approved by California voters in November 2020, goes into effect on January 1, 2023, and will significantly modify the CCPA, potentially resulting in further uncertainty and requiring us to incur additional costs and expenses in an effort to comply. Additionally, other states appear to be following California's lead and are considering new, comprehensive privacy legislation, some of which contemplate private rights of action, which may increase the likelihood of class action litigation, that could also adversely affect our reputation, business, financial condition, and results of operations. For example, Nevada, Virginia, and Colorado have similarly enacted comprehensive privacy laws - The Nevada Privacy Law taking effect October 1, 2019, the Consumer Data Protection Act taking effect on January 1, 2023 and Colorado Privacy Act taking effect on July 1, 2023, respectively - all of which emulate the CCPA and CPRA in many respects. Our efforts to comply with the GDPR, CCPA, COPPA, and similar legal requirements, such as Brazil's LGPD and China's PIPL, has required us and will continue to require us to devote significant operational resources and incur significant expenses. Our privacy and data protection compliance and oversight efforts will require significant time and attention from our management and board of directors.

Further, children's privacy has been a focus of recent enforcement activities and subjects our business to potential liability that could adversely affect our business, financial condition, or operating results. Enforcement of COPPA, which requires companies to obtain parental consent before collecting personal information from children known to be under the age of thirteen or from child-directed websites or online services, has increased in recent years. In addition, the GDPR prohibits certain processing of the personal information of children under the age of thirteen to sixteen (depending on jurisdiction) without parental consent where consent is used as the lawful basis for processing that personal information. The CCPA requires companies to obtain the consent of children in California under the age of sixteen (or parental consent for children under the age of thirteen) before selling their personal information. Although we take reasonable efforts to comply with these laws and regulations, we may in the future face claims under COPPA, the GDPR, the CCPA, or other laws relating to children's privacy.

All of our mobile games are subject to privacy policies and terms of service located in application storefronts, within our mobile games, and on our respective websites. We endeavor to comply with industry standards and are subject to the terms of our privacy-related obligations and commitments to users and third parties. We strive to comply with all applicable laws, policies, legal obligations, and certain industry codes of conduct relating to privacy and data protection, to the extent reasonably attainable. However, it is possible that these obligations may be interpreted and applied in a manner that is inconsistent from one jurisdiction to another and may conflict with other rules or our practices. It is also possible that new laws, policies, legal obligations, or industry codes of conduct may be passed, or existing laws, policies, legal obligations, or industry codes of conduct may be interpreted in such a way that could prevent us from being able to offer services to citizens of a certain jurisdiction or may make it costlier or more difficult for us to do so. Any failure or perceived failure by us to comply with our terms of service or privacy policy, or with applicable laws, regulations, or legal, contractual, or other actual or asserted obligations to users or third parties, concerning privacy, information security, data protection, consumer protection, or protection of minors, or our privacy-related legal obligations, or any compromise of security that results in the unauthorized release or transfer of personally identifiable information or other user data, may result in governmental enforcement actions or other proceedings, claims, demands, and litigation by private parties, or public statements against us by consumer advocacy groups or others and could cause our users to lose trust in us, which could adversely affect our business, financial condition, or results of operations. Additionally, if third parties we work with, such as users, developers, vendors, service providers, or other business partners violate applicable laws or our policies, such violations may also put our users' information at risk and could in turn adversely affect our reputation, business, financial condition, and results of operations.

Our business is subject to a variety of U.S. and foreign laws, many of which are unsettled and still developing, which could subject us to claims or otherwise adversely affect our business, financial condition, and results of operations.

We are subject to a variety of laws in the United States and abroad that affect our business, including state and federal laws regarding consumer protection, electronic marketing, protection of minors, data protection, and privacy, competition, taxation, intellectual property, money transmission, money laundering, investment screening, export, and national security, which are continuously evolving and developing. The scope and interpretation of the laws that are or may be applicable to us are often uncertain and may be conflicting, particularly laws outside the United States. There is a risk that existing or future laws may be interpreted in a manner that is not consistent with our current practices and which could adversely affect our business. As our Software Platform grows and evolves and our Software Platform and our Apps are

used in a greater number of countries, we may also become subject to laws and regulations in additional jurisdictions or other jurisdictions may claim that we are required to comply with their laws and regulations.

With respect to our Apps, we are potentially subject to a number of foreign and domestic laws and regulations that affect the offering of certain types of content, such as content that depicts violence, the social casino game genre, or loot boxes, many of which are ambiguous or still evolving and could be interpreted in ways that could adversely affect our business or expose us to liability. Some state attorney generals as well as other international regulatory bodies have brought and may continue to bring legal actions against social casino app developers and the third-party distribution platforms for such apps. Further, several jurisdictions have been regulating and continue to regulate the use of loot boxes in mobile games. Loot boxes are a commonly used monetization technique in free-to-play mobile games in which a user can acquire a virtual loot box, typically through mobile game play or by using virtual goods, but the user does not know which virtual good(s) he or she will receive (which may be a common, rare, or extremely rare item, and may be a duplicate of an item the user already has in his or her inventory) until the loot box is opened. The user will always receive one or more virtual goods when he or she opens the loot box, but the user does not know exactly which item(s) until the loot box is opened. In April 2018, each of the Belgian Gaming Commission and the Dutch Gambling Authority declared that loot boxes as implemented in certain games by other companies that they reviewed constituted illegal gambling under each country's laws. Further, the Federal Trade Commission (the FTC) has examined consumer protection issues related to loot boxes and various other jurisdictions, including certain U.S. states, Australia, Brazil, and the United Kingdom are reviewing or have indicated that they intend to review the legality of loot boxes and whether they constitute gambling. Additionally, in 2021, Germany approved a new Youth Protection Act, that came into effect on May 1, 2021, which makes it unlawful to sell video games that contain loot boxes to minors. In some of our mobile games, certain mechanics may be deemed as "loot boxes". New regulation by the FTC, U.S. states, or other international jurisdictions could require that these game mechanics be modified or removed from games or that such apps be changed entirely, both of which could increase the costs of operating our mobile games, impact user engagement and monetization, or otherwise adversely affect our business. In addition, the increased attention focused upon liability issues as a result of lawsuits and legislative proposals could harm our reputation or otherwise impact the growth of our business. It is difficult to predict how existing or new laws may be applied to these or similar game mechanics or genres. Further, laws or regulations may vary significantly across jurisdictions.

It is possible that a number of laws and regulations may be adopted or construed to apply to us in the United States and elsewhere that could restrict the mobile app ecosystem, including user privacy, data protection, advertising, communications, taxation, content suitability, copyright, distribution, and antitrust. Furthermore, the growth and development of electronic commerce and virtual goods may prompt calls for more stringent consumer protection laws that may impose additional burdens on companies such as ours conducting business through the internet and mobile devices. For example, China implemented a new policy in September 2021 that restricts online gaming for those under age 18 to one hour in the evening on Fridays, weekends, and public holidays. We anticipate that scrutiny and regulation of our industry will increase and we will be required to devote legal and other resources to addressing such regulation. For example, existing laws or new laws regarding the marketing of IAPs, labeling of free-to-play mobile games, or regulation of currency, banking institutions, unclaimed property or money transmission may be interpreted to cover our mobile games and the virtual currency, goods, or payments that we receive. We may also expand into new business opportunities that subject us to additional laws and regulations. As such, we may be required to seek licenses, authorizations, or approvals from relevant regulators, the granting of which may be dependent on us meeting certain capital and other requirements and we may be subject to additional regulation and oversight, all of which could significantly increase our operating costs. Changes in current laws or regulations or the imposition of new laws and regulations in the United States or elsewhere regarding these activities may lessen the growth of the mobile app ecosystem. Any costs incurred as a result of adapting to laws and regulations, or as a result of liability in connection therewith, could adversely affect our business, financial condition, and results of operations.

We are subject to the Foreign Corrupt Practices Act, and similar anti-corruption and anti-bribery laws, and non-compliance with such laws could subject us to criminal penalties or significant fines and adversely affect our business and reputation.

We are subject to the Foreign Corrupt Practices Act (the FCPA), the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, and similar anti-corruption and anti-bribery laws applicable in the jurisdictions in which we conduct business. Anti-corruption and anti-bribery laws have been enforced aggressively in recent years, are interpreted broadly and prohibit companies, their employees, and third party business partners, representatives, and agents from promising, authorizing, making or offering improper payments or other benefits, directly or indirectly, to government officials and others in the private sector in order to influence official action, direct business to any person, gain any improper advantage, or obtain or retain business. As we continue to expand our business internationally, our risks under these laws increase.

We and our third-party business partners, representatives, and agents may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities and we may be held liable for the corrupt or other illegal activities of our employees, third-party business partners, representatives, and agents, even if we do not explicitly authorize such activities. These laws also require that we keep accurate books and records and maintain internal controls and compliance procedures designed to prevent any such actions. While we have policies and

procedures to address compliance with such laws, we cannot assure you that our employees, third-party business partners, representatives, and agents will not take actions in violation of our policies or applicable law, for which we may be ultimately held responsible and our exposure for violating these laws increases as our international presence expands and as we increase sales and operations in foreign jurisdictions.

Any violation of the FCPA or other applicable anti-corruption laws could result in whistleblower complaints, adverse media coverage, investigations, loss of export privileges, severe criminal or civil sanctions, suspension or disbarment from U.S. government contracts, substantial diversion of management's attention, significant legal fees and fines, severe criminal or civil sanctions against us, our officers, or our employees, disgorgement of profits, other sanctions and remedial measures, and prohibitions on the conduct of our business, any of which could adversely affect our reputation, business, financial condition, and results of operations.

We are subject to governmental export controls and economic sanctions laws that could impair our ability to compete in global markets or subject us to liability if we violate the controls.

Our Core Technologies, Software Platform, and Apps may be subject to U.S. export controls. Exports of our products and the underlying technology may require export authorizations, including by license, a license exception, or other appropriate government authorizations, including the filing of an encryption classification request or self-classification report, as applicable.

Furthermore, our activities are subject to U.S. economic sanctions laws and regulations administered by the U.S. Department of Treasury's Office of Foreign Assets Control that prohibit the shipment of most technologies to embargoed jurisdictions or sanctioned parties without the required export authorizations. If we need to obtain any necessary export license or other authorization for a particular sale, the process may be time-consuming and may result in the delay or loss of opportunities to sell our products.

We take precautions to prevent our products and the underlying technology from being provided, deployed or used in violation of export control and sanctions laws, including implementation of IP address blocking and sanctioned person screening, and are in the process of further enhancing our policies and procedures relating to export control and sanctions compliance. However, we cannot assure you that our policies and procedures relating to export control and sanctions compliance will prevent violations in the future by us or our partners or agents. If we are found to be in violation of U.S. sanctions or export control regulations, including failure to obtain appropriate import, export, or re-export licenses or permits, it can result in significant penalties and government investigations, as well as reputational harm and loss of business. Knowing and willful violations can result in possible incarcerations for responsible employees and managers.

In addition to the United States, various other countries regulate the import and export of certain encryption and other technology, including import and export licensing requirements, and have enacted laws that could limit our ability to distribute our products or could limit our clients' ability to implement our products in those countries. Changes in our Core Technologies, Software Platform, or Apps, or future changes in export and import regulations may create delays in the introduction of our products and the underlying technology in international markets, prevent our clients with global operations from deploying our products globally, or, in some cases, prevent the export or import of our products to certain countries, governments, or persons altogether. From time to time, various governmental agencies have proposed additional regulation of encryption technology.

Our growth strategy includes further expanding our operations and client and user base in international markets and acquiring companies that may operate in countries where we do not already do business. Such acquisitions may subject us to additional or expanded export regulations. Further, any change in export or import regulations or controls, economic sanctions or related legislation, or change in the countries, governments, persons, or technologies targeted by such regulations, could result in decreased use of our products by, or in our decreased ability to export or sell our products to, existing or potential clients with global operations. Any decreased use of our products or limitation on our ability to export or sell our products in major international markets could adversely affect our business, financial condition, and results of operations.

Changes in tax laws or tax rulings could adversely affect our effective tax rates, business, financial condition, and results of operations.

The tax regimes we are subject to or operate under are unsettled and may be subject to significant change. Changes in tax laws (including in response to the COVID-19 pandemic) or tax rulings, or changes in interpretations of existing laws, could cause us to be subject to additional income-based taxes and non-income taxes (such as payroll, sales, use, value added, digital, net worth, property, and goods and services taxes), which in turn could adversely affect our financial condition and results of operations. For example, in December 2017, the U.S. federal government enacted the tax reform legislation known as the Tax Cuts and Jobs Act (the 2017 Tax Act). The 2017 Tax Act significantly changed the existing U.S. corporate income tax laws by, among other things, lowering the U.S. corporate tax rate, implementing a partially territorial tax system, and imposing a one-time deemed repatriation tax on certain post-1986 foreign earnings. There is currently significant tax legislation pending before Congress which, among other tax provisions, repeals and/or modifies key provisions of the 2017 Tax Act. If passed, this legislation could materially impact our tax obligations, including by

increasing our effective tax rate. In addition, beginning in 2022, the Tax Act will require U.S. research and experimental expenditures to be capitalized and amortized ratably over a five-year period. Any such expenditures attributable to research conducted outside the U.S. must be capitalized and amortized over a 15-year period. Furthermore, many countries in the European Union, as well as a number of other countries and organizations such as the Organisation for Economic Cooperation and Development, have recently proposed or recommended changes to existing tax laws or have enacted new laws that could impact our tax obligations. Some of these or other new rules could result in double taxation of our international earnings. Any significant changes to our future effective tax rate could adversely affect our business, financial condition, and results of operations.

We may have exposure to greater than anticipated tax liabilities.

Our income tax obligations are based in part on our corporate operating structure and intercompany arrangements, including the manner in which we develop, value, manage, and use our intellectual property and the valuation of our intercompany transactions. The tax laws applicable to our business, including the laws of the United States and other jurisdictions, are subject to interpretation and certain jurisdictions are aggressively interpreting their laws in new ways in an effort to raise additional tax revenue. Our existing corporate structure and intercompany arrangements have been implemented in a manner we believe is in compliance with current prevailing tax laws. However, the taxing authorities of the jurisdictions in which we operate may challenge our methodologies for valuing developed technology or intercompany arrangements, which could impact our worldwide effective tax rate and adversely affect our financial condition and results of operations. Moreover, changes to our corporate structure and intercompany agreements, including through acquisitions, could impact our worldwide effective tax rate and adversely affect our business, financial condition, and results of operations.

In addition, we are subject to federal, state, and local taxes in the United States and numerous foreign jurisdictions. Significant judgment is required in evaluating our tax positions and our worldwide provision for (benefit from) taxes. During the ordinary course of business, there are many activities and transactions for which the ultimate tax determination is uncertain. Our tax obligations and effective tax rates could be adversely affected by changes in the relevant tax, accounting, and other laws, regulations, principles, and interpretations, including those relating to income tax nexus, by our earnings being lower than anticipated in jurisdictions where we have lower statutory rates and higher than anticipated in jurisdictions where we have higher statutory rates, by challenges to our intercompany relationships and transfer pricing arrangements. The relevant taxing authorities may disagree with our determinations as to the income and expenses attributable to specific jurisdictions. If such a disagreement were to occur, and our position were not sustained, we could be required to pay additional taxes, interest, and penalties, which could result in one-time tax charges, higher effective tax rates, reduced cash flows and lower overall profitability of our business, with some changes possibly affecting our tax obligations in future or past years. We believe that our financial statements reflect adequate reserves to cover such a contingency, but there can be no assurances in that regard.

Taxing authorities may successfully assert that we should have collected or in the future should collect sales and use, value added or similar taxes, and any such assessments could adversely affect our business, financial condition, and results of operations.

We do not collect sales and use, value added, and similar taxes in all jurisdictions in which we have sales, based on our belief that such taxes are not applicable in certain jurisdictions. Sales and use, value added, and similar tax laws and rates vary greatly by jurisdiction. Certain jurisdictions in which we do not collect such taxes may assert that such taxes are applicable or that our presence in such jurisdictions is sufficient to require us to collect taxes, which could result in tax assessments, penalties, and interest, and we may be required to collect such taxes in the future. Such tax assessments, penalties, and interest or future requirements may adversely affect our financial condition and results of operations. Further, in June 2018, the Supreme Court held in *South Dakota v. Wayfair, Inc.* that states could impose sales tax collection obligations on out-of-state sellers even if those sellers lack any physical presence within the states imposing the sales taxes. Under the *Wayfair* decision, a person requires only a “substantial nexus” with the taxing state before the state may subject the person to sales tax collection obligations therein. An increasing number of states (both before and after the publication of the *Wayfair* decision) have considered or adopted laws that attempt to impose sales tax collection obligations on out-of-state sellers. The Supreme Court’s *Wayfair* decision has removed a significant impediment to the enactment and enforcement of these laws, and it is possible that states may seek to tax out-of-state sellers on sales that occurred in prior tax years, which could create additional administrative burdens for us, put us at a competitive disadvantage if such states do not impose similar obligations on our competitors, and decrease our future sales, which could adversely affect our business, financial condition, and results of operations.

If we are found liable for content that is distributed through or advertising that is served through our Software Platform or Apps, our business could be adversely affected.

As a distributor of content, we face potential liability for negligence, copyright, patent or trademark infringement, public performance royalties, or other claims based on the nature and content of materials that we distribute. The Digital Millennium Copyright Act (the DMCA) is intended, in part, to limit the liability of eligible service providers for caching, hosting, or linking to user content that includes materials that infringe copyrights or other rights. We rely on the protections provided by the DMCA in conducting our business. Similarly, Section 230 of the Communications Decency Act (Section

230) protects online distribution platforms, such as ours, from actions taken under various laws that might otherwise impose liability on the platform provider for what content creators develop or the actions they take or inspire.

However, the DMCA Section 230, and similar statutes and doctrines that we may rely on in the future are subject to uncertain judicial interpretation and regulatory and legislative amendments. Future regulatory or legislative changes may ultimately require us to take a more active approach towards content moderation, which could diminish the depth, breadth, and variety of content we offer and, in so doing, reduce our revenue. Moreover, the DMCA and Section 230 provide protections primarily in the United States. If the rules around these statutes and doctrines change, if international jurisdictions refuse to apply similar protections, or if a court were to disagree with our application of those rules to our business, we could incur liability and our business could be adversely affected. If we become liable for these types of claims as a result of the content that is included in our Apps or the advertisements that are served through our Software Platform, then our business may be adversely affected. Litigation to defend these claims could be costly and the expenses and damages arising from any liability could adversely affect our business. Our insurance may not be adequate to cover these types of claims or any liability that may be imposed on us.

In addition, regardless of any legal protections that may limit our liability for the actions of third parties, we may incur significant legal expenses and other costs if copyright holders assert claims, or commence litigation, alleging copyright infringement against our third-party developers. While we prohibit mobile apps without distribution rights from the copyright holder, and we maintain processes and systems for the reporting and removal of infringing mobile apps, such prohibitions, processes, and systems may not always be successful. If other developers, licensees, platform providers, business partners, and personnel are influenced by the existence of types of claims or proceedings and are deterred from working with us as a consequence, our ability to maintain or expand our business, including through international expansion plans, could be adversely affected.

We have incurred, and will continue to incur, increased costs and demands upon management as a result of complying with the laws and regulations affecting public companies, which could adversely affect our business, financial condition, and results of operations.

We are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended (the Exchange Act), the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the Dodd-Frank Act), and the rules and regulations of the SEC and the Nasdaq listing standards. The Exchange Act requires, among other things, that we file annual, quarterly, and current reports with respect to our business and results of operations. Compliance with these requirements has increased and will continue to increase our legal, accounting, and financial compliance costs and increase demand on our systems, making some activities more time-consuming and costly. We expect these rules and regulations to make it more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to maintain the same or similar coverage. As a result, it may be more difficult for us to attract and retain qualified individuals to serve on our board of directors or as our executive officers. As a public company, we have incurred and expect to incur significant expenses and devote substantial management effort toward ensuring compliance with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act. In that regard, we will need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge. In addition, as a public company, we may be subject to shareholder activism, which can lead to substantial costs, distract management, and impact the manner in which we operate our business in ways we cannot currently anticipate.

As a result of disclosure of information in our public filings with the SEC as required of a public company, our business and financial condition will become more visible, which we believe may result in threatened or actual litigation, including by competitors and other third parties. If such claims are successful, our business, financial condition, and results of operations could be adversely affected, and even if the claims do not result in litigation or are resolved in our favor, these claims, and the time and resources necessary to resolve them, could divert the resources of our management and our board of directors and adversely affect our business, financial condition, and results of operations.

Legal or regulatory proceedings and settlements could cause us to incur additional expenses or otherwise adversely affect our business, financial condition, and results of operations.

We are involved in or may become involved in claims, suits, government investigations, including formal and informal inquiries from government authorities and regulators, and proceedings arising in the ordinary course of our business, including actions with respect to intellectual property claims, securities claims, privacy, data protection, or law enforcement matters, tax matters, labor and employment claims, commercial and acquisition-related claims, and other matters. We may become the subject of investigations, inquiries, data requests, requests for information, actions, and audits in the United States, Europe, and around the world, particularly in the areas of privacy, data protection, law enforcement, consumer protection, and competition, as we continue to grow and expand our operations. In addition, we are currently, and may in the future be, subject to regulatory orders or consent decrees. For example, data protection, competition, and consumer protection authorities in the European Union have initiated actions, investigations, or administrative orders seeking to restrict the ways in which we collect and use information, or impose sanctions, and other authorities may do the same.

Any such claims, suits, government investigations, and proceedings are inherently uncertain and their results cannot be predicted with certainty. Regardless of their outcomes, such legal or regulatory proceedings can have an adverse impact on us because of legal costs, diversion of management and other personnel attention, and other factors. In addition, it is possible that a resolution of one or more such proceedings could result in substantial costs, civil and criminal liability, penalties, or sanctions, as well as judgments, consent decrees, or orders preventing us from offering certain features, functionalities, products or services, or requiring a change in our business practices, products or technologies, which could adversely affect our reputation, business, financial condition, and results of operations.

Risks Related to Our Intellectual Property

Failure to protect or enforce our proprietary and intellectual property rights or the costs involved in such enforcement could adversely affect our business, financial condition, and results of operations.

We regard our Core Technologies, Software Platform, and Apps and related source code as proprietary and rely on a variety of methods, including a combination of copyright, patent, trademark, and trade secret laws and employee and third-party non-disclosure agreements, to protect our proprietary rights. We view the protection of our trade secrets, copyrights, trademarks, service marks, trade dress, domain names, patents, and other product rights as critical to our success. We strive to protect our intellectual property rights by relying on federal, state, and common law rights, as well as contractual restrictions and business practices. We also enter into confidentiality and invention assignment agreements with our employees and contractors and confidentiality agreements with parties with whom we conduct business in order to limit access to, and disclosure and use of, our proprietary information. However, these contractual arrangements and business practices may not prevent the misappropriation of our proprietary information or deter independent development of similar technologies by others.

We own or license, and pursue the registration of, copyrights, trademarks, service marks, domain names, and patents in the United States and in certain locations outside the United States. This process can be expensive and time-consuming, may not always be successful depending on local laws or other circumstances, and we also may choose not to pursue registrations in every location depending on the nature of the project to which the intellectual property rights pertain. We may, over time, increase our investments in protecting our creative works.

We are aware that some unauthorized copying of our Apps occurs, and if a significantly greater amount of unauthorized copying of our Apps were to occur, it could adversely affect our business. In addition, even if authorized copying of our Apps occurs, third-party platforms may not remove infringing material. We also cannot be certain that existing intellectual property laws will provide adequate protection for our products in connection with emerging technologies. Litigation may be necessary to enforce our intellectual property rights, protect our trade secrets, or determine the validity and scope of proprietary rights claimed by others. Any litigation of this nature, regardless of outcome or merit, could result in substantial costs, adverse publicity, and diversion of management and technical resources. If we fail to maintain, protect, and enhance our intellectual property rights, our business, financial condition, and results of operations could be adversely affected.

We are, and may in the future be, subject to intellectual property disputes, which are costly to defend and could require us to pay significant damages and could limit our ability to use certain technologies in the future.

From time to time, we have faced, and we may face in the future, allegations that we have infringed the trademarks, copyrights, patents, and other intellectual property rights of third parties, including from our competitors, non-practicing entities and former employers of our personnel. Intellectual property litigation may be protracted and expensive, and the results are difficult to predict. As the result of any court judgment or settlement, we may be obligated to alter our Software Platform or Apps, in a particular geographic region or worldwide, pay royalties or significant settlement costs, purchase licenses, or develop substitutes.

In certain of our agreements, we also indemnify our licensees and other business partners. We may incur significant expenses defending these business partners if they are sued for intellectual property infringement based on allegations related to our technology. If a business partner were to lose a lawsuit and in turn seek indemnification from us, we also could be subject to significant monetary liabilities. In addition, because our Core Technologies, Software Platform, and Apps often involve the use of third-party technology, this increases our exposure to litigation in circumstances where there is a claim of infringement asserted against one of our mobile games or other products and services in question, even if the claim does not pertain to our technology.

Many of our products and services contain open source software, and we license some of our software through open source projects, which may pose particular risks to our proprietary software, products, and services in a manner that could adversely affect our business, financial condition, and results of operations.

We use open source software in our Core Technologies, Software Platform, and Apps and expect to continue to use open source software in the future. In addition, we contribute software source code to open source projects under open source licenses or release internal software projects under open source licenses, and anticipate continuing to do so in the future. The terms of many open source licenses to which we are subject have not been interpreted by U.S. or foreign

courts, and there is a risk that open source software licenses could be construed in a manner that imposes unanticipated conditions or restrictions on our ability to provide or distribute our products or services. Additionally, under some open source licenses, if we combine our proprietary software with open source software in a certain manner, third parties may claim ownership of, a license to, or demand release of, the open source software or derivative works that we developed using such software, which could include our proprietary source code. Such third parties may also seek to enforce the terms of the applicable open source license through litigation which, if successful, could require us to make our proprietary software source code freely available, purchase a costly license, or cease offering the implicated products or services unless and until we can re-engineer them to avoid infringement. This re-engineering process could require significant additional research and development resources, and we may not be able to complete it successfully. In addition to risks related to open source license requirements, use of certain open source software may pose greater risks than use of third-party commercial software, since open source licensors generally do not provide warranties or controls on the origin of software. Any of these risks could be difficult to eliminate or manage, and, if not addressed, could adversely affect our business, financial condition, and results of operations.

Our ability to acquire and maintain licenses to intellectual property may affect our business, financial condition, and results of operations. Competition for these licenses may make them more expensive and increase our costs.

While most of the intellectual property we use in our Core Technologies, Software Platform, and Apps is created by us, from time to time, we also acquire rights to third-party intellectual property. Proprietary licenses may limit our use of intellectual property to specific uses and for specific time periods, require time and attention of licensors in providing guidance and related approvals, and include other contractual obligations with which we must comply. Additionally, competition for these licenses is intense and often results in increased advances, minimum payment guarantees, and royalties to the licensor, and as such we may be unable to identify suitable licensing targets or complete licensing arrangements. If we are unable to obtain and remain in compliance with the terms of these licenses or obtain additional licenses on reasonable economic terms, our business and results of operations could be adversely affected. Further, if the mix of IAPs shifts toward mobile games in which we use licensed intellectual property or if we develop additional Apps that require licensing of third-party intellectual property, our overall margins may be reduced due to royalty obligations.

In addition, many of our Apps are built on proprietary source code of third parties, such as Unity Software. Unity Software offers certain solutions that may compete with our offerings. If we are unable to renew licenses to proprietary source code underlying our mobile games, or the terms and conditions of these licenses change at the time of renewal, our business, financial condition, and results of operations could be adversely affected. We rely on third parties, including Unity Software, to maintain versions of their proprietary engines that allow us to distribute our mobile games on multiple platforms. If a third party from whom we license source code discontinues support for one or more of these platforms, our business, financial condition, and results of operations could be adversely affected.

Risks Related to Financial and Accounting Matters

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

As a public company, we are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act, and the rules and regulations of the applicable Nasdaq listing standards. We expect that the requirements of these rules and regulations will continue to increase our legal, accounting, and financial compliance costs, make some activities more difficult, time-consuming and costly, and place significant strain on our personnel, systems, and resources.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. We are continuing to develop and refine our disclosure controls and other procedures that are designed to ensure that information required to be disclosed by us in the reports that we will file with the SEC is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms and that information required to be disclosed in reports under the Exchange Act is accumulated and communicated to our principal executive and financial officers. We are also continuing to improve our internal control over financial reporting, which includes hiring additional accounting and financial personnel to implement such processes and controls.

In order to maintain and improve the effectiveness of our disclosure controls and procedures and internal control over financial reporting, we have expended, and anticipate that we will continue to expend, significant resources, including accounting-related costs and significant management oversight. If any of these new or improved controls and systems do not perform as expected, we may experience further deficiencies in our controls.

Our current controls and any new controls that we develop may become inadequate because of changes in conditions in our business. Further, to the extent we acquire other businesses, the acquired company may not have a sufficiently robust system of controls and we may discover deficiencies. Any failure to develop or maintain effective controls or any difficulties encountered in their implementation or improvement could adversely affect our results of operations or cause us to fail to meet our reporting obligations and may result in a restatement of our financial statements for prior periods. Any failure to implement and maintain effective internal control over financial reporting also could

adversely affect the results of periodic management evaluations and annual independent registered public accounting firm attestation reports regarding the effectiveness of our internal control over financial reporting that we will eventually be required to include in our periodic reports that will be filed with the SEC. Ineffective disclosure controls and procedures and internal control over financial reporting could also cause investors to lose confidence in our reported financial and other information, which would likely cause the market price of our Class A common stock to decline. In addition, if we are unable to continue to meet these requirements, we may not be able to remain listed on the Nasdaq Global Select Market. Prior to our initial public offering, we were not required to comply with the SEC rules that implement Section 404 of the Sarbanes-Oxley Act and were therefore not required to make a formal assessment of the effectiveness of our internal control over financial reporting for that purpose. As a public company, we are required to provide an annual management report on the effectiveness of our internal control over financial reporting commencing with our second annual report on Form 10-K.

Our independent registered public accounting firm will be required to formally attest to the effectiveness of our internal control over financial reporting commencing with our second annual report on Form 10-K. At such time, our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our internal control over financial reporting is documented, designed, or operating. Any failure to maintain effective disclosure controls and internal control over financial reporting could adversely affect our business, financial condition, and results of operations and could cause the market price of our Class A common stock to decline.

Our results of operations could be adversely affected by changes in financial accounting standards or by the application of existing or future accounting standards to our business as it evolves.

Our reported results of operations are impacted by the accounting standards promulgated by the SEC and accounting standards bodies and the methods, estimates, and judgments that we use in applying our accounting policies. A change in accounting standards could have a significant effect on our reported financial results, and may even affect the reporting of transactions completed before the announcement or effectiveness of a change. The frequency of accounting standards changes could accelerate, including conversion to unified international accounting standards. Accounting standards affecting revenue recognition have affected, and could further significantly affect, the way we account for revenue. Any future changes to accounting standards may cause our results of operations to fluctuate. For example, if the accounting standards for revenue derived from free-to-play mobile games were to change, particularly with respect to revenue generated from digital storefronts, our results of operations could be adversely affected.

Further, although we believe our estimates are reasonable based on available user information, we may revise such estimates in the future in the event our users' average playing period changes. Any adjustments arising from changes in the estimates of the lives of these virtual goods would be applied to the current quarter and prospectively on the basis that such changes are caused by new information indicating a change in the user behavior patterns of our users. As we enhance, expand and diversify our business and product offerings, the application of existing or future financial accounting standards could adversely affect our results of operations.

We rely on assumptions and estimates to calculate certain of our key metrics, and real or perceived inaccuracies in such metrics could adversely affect our reputation and our business.

Certain of the metrics that we disclose are calculated using internal company data that has not been independently verified or data from third-party attribution partners. While these metrics and figures are based on what we believe to be reasonable calculations for the applicable period of measurement, there are inherent challenges in measuring these metrics and figures across our worldwide client base and user base. We regularly review and may adjust our processes for calculating our metrics and other figures to improve their accuracy, but these efforts may not prove successful and we may discover material inaccuracies. In addition, our methodology for calculating these metrics may differ from the methodology used by other companies to calculate similar metrics and figures. We may also discover unexpected errors in the data that we are using that resulted from technical or other errors. If we determine that any of our metrics or figures are not accurate, we may be required to revise or cease reporting such metrics or figures. Any real or perceived inaccuracies in our metrics and other figures could harm our reputation and adversely affect our business.

Conversion of key internal systems and processes, particularly our enterprise resource planning system, and problems with the design, implementation, or operation of these systems and processes could interfere with, and therefore adversely affect, our business and operations.

We converted certain key internal business systems and processes, including our enterprise resource planning system, to a cloud-based system. We have invested, and will continue to invest, significant capital and human resources in the design, implementation, and operation of these business systems and processes. Any problems in the functioning of these systems or processes, particularly any that impact our operations, could adversely affect our ability to process payments, record and transfer information in a timely and accurate manner, recognize revenue, file SEC reports in a timely manner, or otherwise run our business and could adversely affect our business, financial condition, and results of operations.

We may be required to record a significant charge to earnings if our goodwill becomes impaired.

We are required under GAAP to review our goodwill for impairment at least annually or more frequently when events or changes in circumstances indicate the carrying value may not be recoverable. Factors that may be considered a change in circumstances, indicating a requirement to reevaluate whether our goodwill continues to be recoverable, include a significant decline in the market price of our Class A common stock and our market capitalization, slower growth rates in our industry, underperformance of certain assets, or other materially adverse events. We may be required to record a significant charge to earnings in our financial statements during the period in which any impairment of our goodwill is determined.

We have substantial indebtedness under our senior secured credit facilities and our obligations thereunder may limit our operational flexibility or otherwise adversely affect our business, financial condition, and results of operations.

We are party to a credit agreement that provides for senior secured credit consisting of term loans and a revolving credit facility, with varying maturity dates through 2028. As of December 31, 2021, the aggregate principal amount of our outstanding indebtedness under our credit facilities was \$3.27 billion. There can be no assurance that we will be able to repay this indebtedness when due, or that we will be able to refinance this indebtedness on acceptable terms or at all.

Our indebtedness could adversely impact us. For example, these obligations could among other things:

- make it difficult for us to pay other obligations;
- increase our cost of borrowing;
- make it difficult to obtain favorable terms for any necessary future financing for working capital, capital expenditures, strategic acquisitions and partnerships, debt service requirements, or other purposes;
- restrict us from making strategic acquisitions and partnerships or cause us to make divestitures or similar transactions;
- adversely affect our liquidity and result in a material adverse effect on our financial condition upon repayment of the indebtedness;
- require us to dedicate a substantial portion of our cash flow from operations to service and repay the indebtedness, reducing the amount of cash flow available for other purposes;
- increase our vulnerability to adverse and economic conditions;
- increase our exposure to interest rate risk from variable rate indebtedness;
- place us at a competitive disadvantage compared to our less leveraged competitors; and
- limit our flexibility in planning for and reacting to changes in our business.

In addition, from time to time we have entered into interest rate swap instruments to limit our exposure to changes in variable interest rates. While our hedging strategy is designed to minimize the impact of increases in interest rates applicable to our variable rate debt, including our credit facility, there can be no guarantee that our hedging strategy will be effective, and we may experience credit-related losses in some circumstances.

Our credit agreement also imposes restrictions on us and requires us to maintain compliance with specified covenants. Our ability to comply with these covenants may be affected by market, economic, financial, competitive, legislative, and regulatory factors, as well as other factors that are beyond our control. A breach of any of the covenants in the credit agreement governing our credit facilities could result in an event of default, which, if not cured or waived, could trigger acceleration of our indebtedness and an increase in the interest rates applicable to such indebtedness, and may result in the acceleration of or default under any other debt we may incur in the future to which a cross-acceleration or cross-default provision applies. In addition, we have granted a security interest in a significant portion of our assets to secure our obligations under our credit facility. During the existence of an event of default under our credit agreement, the applicable lenders could exercise their rights and remedies thereunder, including by way of initiating foreclosure proceedings against any assets constituting collateral for our obligations under the credit facility. The acceleration of the indebtedness under our credit agreement or under any other indebtedness could have a material and adverse effect on our business, financial condition, and results of operations.

We may be unable to generate sufficient cash flow to satisfy our significant debt service obligations, which could have a material adverse effect on our business, financial condition, results of operations, and cash flows.

Our ability to make scheduled payments on or to refinance our debt obligations depends on our financial condition and results of operations, which are subject to prevailing economic and competitive conditions and to certain financial, business, legislative, regulatory, and other factors beyond our control. We may not be able to maintain a level of cash flows from operating activities sufficient to permit us to pay the principal, premium, if any, or interest on our indebtedness. If our

cash flows and capital resources are insufficient to fund our debt service obligations, we may be forced to reduce or delay strategic acquisitions and partnerships, capital expenditures, and payments on account of other obligations, seek additional capital, restructure or refinance our indebtedness, or sell assets. These alternative measures may not be successful and may not permit us to meet our scheduled debt service obligations. Our ability to restructure or refinance our debt will depend on the condition of the capital markets and our financial condition at such time. Any refinancing of our debt could be at higher interest rates and could require us to comply with more onerous covenants, which could further restrict our business operations. In addition, we cannot assure you that we will be able to refinance any of our indebtedness on commercially reasonable terms, or at all.

If we are unable to repay or otherwise refinance our indebtedness when due, or if any other event of default is not cured or waived, the applicable lenders could accelerate our outstanding obligations or proceed against the collateral granted to them to secure that indebtedness, which could force us into bankruptcy or liquidation. In the event the applicable lenders accelerate the repayment of our borrowings, we and our subsidiaries may not have sufficient assets to repay that indebtedness. Any acceleration of amounts due under the agreements governing our credit facility or the exercise by the applicable lenders of their rights under the security documents could have a material and adverse effect on our business.

We may require additional capital to meet our financial obligations and support business growth, and this capital may not be available on acceptable terms or at all.

We intend to continue to make significant investments to support our business growth and may require additional funds to respond to business challenges, including the need to continue to develop our Core Technologies and Software Platform, enhance our existing Apps and develop new Apps and features, improve our operating infrastructure, or enter into strategic acquisitions and partnerships. 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 convertible debt securities, our existing stockholders could experience significant dilution, and any new equity securities we issue could have rights, preferences, and privileges superior to those of holders of our Class A common stock. Any debt financing that we secure in the future could involve offering additional security interests and undertaking restrictive covenants relating to our capital raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions. Our credit agreement, which provides for a term loan and revolving credit facility, contains financial covenants with which we must comply. We may not be able to obtain additional financing on terms favorable to us, if at all. Additionally, if we seek to access additional capital or increase our borrowing, there can be no assurance that financing and credit may be available on favorable terms, if at all. 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 and to respond to business challenges could be significantly impaired, and our business, financial condition, or results of operations could be adversely affected.

The London Interbank Offered Rate calculation method may change and LIBOR is expected to be phased out after 2023.

Interest on our term loan and revolving credit facility, which are scheduled to mature in 2028, may be calculated based on the London Interbank Offered Rate (LIBOR). LIBOR is the subject of national, international and other regulatory guidance and proposals for reform. On July 27, 2017, the U.K.'s Financial Conduct Authority (the authority that administers LIBOR) announced that it intends to phase out LIBOR by June of 2023. The United States Federal Reserve has also advised banks to cease entering into new contracts that use USD LIBOR as a reference rate. It is unclear whether new methods of calculating LIBOR will be established such that it continues to exist after June of 2023, or if alternative rates or benchmarks will be adopted. The Alternative Reference Rate Committee, a committee convened by the Federal Reserve Board and the Federal Reserve Bank of New York has identified the Secured Overnight Financing Rate (SOFR), a new index calculated by short-term repurchase agreements, backed by Treasury securities, as its preferred alternative rate for LIBOR. At this time, it is not possible to predict how markets will respond to SOFR or other alternative reference rates as the transition away from the LIBOR benchmarks is anticipated in coming years. Accordingly, the outcome of these reforms is uncertain and any changes in the methods by which LIBOR is determined or regulatory activity related to LIBOR's phaseout could cause LIBOR to perform differently than in the past or cease to exist. This could materially and adversely affect our results of operations, cash flows, and liquidity. We cannot predict the effect of the potential changes to LIBOR or the establishment and use of alternative rates or benchmarks, including SOFR. We may need to renegotiate our credit facility or incur other indebtedness, and changes in the method of calculating LIBOR, or the use of an alternative rate or benchmark, including SOFR, may negatively impact the terms of such renegotiated credit facility or such other indebtedness. If changes are made to the method of calculating LIBOR or LIBOR ceases to exist, we may need to amend certain contracts and cannot predict what alternative rate or benchmark would be negotiated. This may result in an increase to our interest expense.

Risks Related to Ownership of Our Class A Common Stock and Governance

The multi-class structure of our common stock and the Voting Agreement among the Voting Agreement Parties have the effect of concentrating voting power with the Voting Agreement Parties, which will limit your ability to influence the outcome of matters submitted to our stockholders for approval, including the election of our board

of directors, the adoption of amendments to our certificate of incorporation and bylaws, and the approval of any merger, consolidation, sale of all or substantially all of our assets, or other major corporate transaction.

We have three classes of common stock. Our Class A common stock has one vote per share, our Class B common stock has 20 votes per share, and our Class C common stock has no voting rights, except as otherwise required by law. Adam Foroughi, our co-founder, CEO, and Chairperson; Herald Chen, our President and Chief Financial Officer, and a member of our board of directors; and KKR Denali Holdings L.P. (collectively with certain affiliates, the Voting Agreement Parties) together hold all of the issued and outstanding shares of our Class B common stock. As of December 31, 2021, the Voting Agreement Parties collectively held approximately 84% of the voting power of our outstanding capital stock in the aggregate. This voting power includes shares of Class A common stock deemed beneficially owned in accordance with Rule 13d-3(d)(1) under the Exchange Act. The Voting Agreement Parties have entered into a voting agreement (the Voting Agreement) whereby all Class B common stock held by the Voting Agreement Parties and their respective permitted entities and permitted transferees will be voted as determined by two of Mr. Foroughi, Mr. Chen, and KKR Denali Holdings L.P. (one of which must be Mr. Foroughi). As a result, the Voting Agreement Parties will collectively be able to determine or significantly influence any action requiring the approval of our stockholders, including the election of our board of directors, the adoption of amendments to our certificate of incorporation and bylaws, and the approval of any merger, consolidation, sale of all or substantially all of our assets, or other major corporate transaction. The Voting Agreement Parties may have interests that differ from yours and may vote in a way with which you disagree, and which may be adverse to your interests. This concentrated control may have the effect of delaying, preventing, or deterring a change in control of our company, could deprive our stockholders of an opportunity to receive a premium for their capital stock as part of a sale of our company, and might ultimately affect the market price of our Class A common stock.

Future transfers by the holders of Class B common stock will generally result in those shares automatically converting into shares of Class A common stock, subject to limited exceptions, such as certain transfers effected for estate planning, transfers among affiliates of KKR Denali Holdings L.P., or other transfers among the Voting Agreement Parties. In addition, each share of Class B common stock will convert automatically into one share of Class A common stock upon certain events specified in our amended and restated certificate of incorporation.

In addition, because our Class C common stock carries no voting rights (except as otherwise required by law), if we issue Class C common stock in the future, the holders of Class B common stock may be able to elect all of our directors and to determine the outcome of most matters submitted to a vote of our stockholders for a longer period of time than would be the case if we issued Class A common stock rather than Class C common stock in such transactions.

We are considered a “controlled company” within the meaning of the Nasdaq corporate governance requirements, and, as a result, we qualify for, and currently rely on, exemptions from certain corporate governance requirements.

As a result of our multi-class common stock structure and the Voting Agreement, the Voting Agreement Parties collectively hold greater than a majority of the voting power of our outstanding capital stock and the Voting Agreement Parties have the authority to vote the shares of all Class B common stock, subject to the terms of the Voting Agreement, at their discretion on all matters to be voted upon by stockholders. Therefore, we are considered a “controlled company” as that term is set forth in the Nasdaq corporate governance requirements. Under these corporate governance requirements, a company in which over 50% of the voting power for the election of directors is held by an individual, a group, or another company is a “controlled company” and may elect not to comply with certain corporate governance requirements, including:

- the requirement that a majority of its board of directors consist of independent directors;
- the requirement that we have a nominating/corporate governance committee that is comprised entirely of independent directors with a written charter addressing the committee’s purpose and responsibilities;
- the requirement that we have a compensation committee that is comprised entirely of independent directors with a written charter addressing the committee’s purpose and responsibilities; and
- the requirement for an annual performance evaluation of the nominating and corporate governance and compensation committees.

We currently utilize, and intend to continue to utilize, certain of these exemptions. As a result, our compensation committee does not consist entirely of independent directors. Accordingly, you will not have the same protections afforded to stockholders of companies that are subject to all of the corporate governance requirements. In the event that we cease to be a “controlled company” and our Class A common stock continues to be listed on Nasdaq, we will be required to comply with these provisions within the applicable transaction periods.

We cannot predict the effect our multi-class structure may have on the market price of our Class A common stock.

We cannot predict whether our multi-class structure will result in a lower or more volatile market price of our Class A common stock, in adverse publicity, or other adverse consequences. For example, certain index providers have

announced restrictions on including companies with multi-class share structures in certain of their indices. In July 2017, FTSE Russell announced that it plans to require new constituents of its indices to have greater than 5% of the company's voting rights in the hands of public stockholders, and S&P Dow Jones announced that it will no longer admit companies with multi-class share structures to certain of its indices. Affected indices include the Russell 2000 and the S&P 500, S&P MidCap 400, and S&P SmallCap 600, which together make up the S&P Composite 1500. Also in 2017, MSCI, a leading stock index provider, opened public consultations on their treatment of no-vote and multi-class structures and temporarily barred new multi-class listings from certain of its indices and in October 2018, MSCI announced its decision to include equity securities "with unequal voting structures" in its indices and to launch a new index that specifically includes voting rights in its eligibility criteria. Under such announced policies, the multi-class structure of our common stock would make us ineligible for inclusion in certain indices and, as a result, mutual funds, exchange-traded funds, and other investment vehicles that attempt to track those indices would not invest in our Class A common stock. These policies are relatively new and it is unclear what effect, if any, they will have on the valuations of publicly-traded companies excluded from such indices, but it is possible that they may depress valuations, as compared to similar companies that are included. Given the sustained flow of investment funds into passive strategies that seek to track certain indices, exclusion from certain stock indices would likely preclude investment by many of these funds and could make our Class A common stock less attractive to other investors. As a result, the market price of our Class A common stock could be adversely affected.

The market price of our Class A common stock could be volatile, and you could lose all or part of your investment.

The market price of our Class A common stock has, and may continue to, fluctuate substantially depending on a number of factors, including those described in this "Risk Factors" section, many of which are beyond our control and may not be related to our operating performance. These fluctuations could cause you to lose all or part of your investment in our Class A common stock. Factors that could cause fluctuations in the market price of our Class A common stock include the following:

- price and volume fluctuations in the overall stock market from time to time, including fluctuations due to general economic uncertainty or negative market sentiment, in particular related to the COVID-19 pandemic;
- volatility in the market and trading volumes of technology stocks;
- changes in operating performance and stock market valuations of other technology companies generally, or those in our industry in particular;
- sales of shares of our Class A common stock by us or our stockholders;
- rumors and market speculation involving us or other companies in our industry;
- failure of securities analysts to maintain coverage of us, changes in financial estimates by securities analysts who follow our company, or our failure to meet these estimates or the expectations of investors;
- actual or perceived significant data breaches involving our Core Technologies, Software Platform or Apps;
- the financial or non-financial metric projections we may provide to the public, any changes in those projections or our failure to meet those projections;
- third-party data published about us or other mobile gaming companies, whether or not such data accurately reflects actual levels of usage;
- announcements by us or our competitors of new products or services;
- the public's reaction to our press releases, other public announcements, and filings with the SEC;
- fluctuations in the trading volume of shares of our Class A common stock or the size of our public float;
- short selling of our Class A common stock or related derivative securities;
- actual or anticipated changes or fluctuations in our results of operations;
- actual or anticipated developments in our business, our competitors' businesses, or the competitive landscape generally;
- our issuance of shares of our Class A common stock;
- litigation or regulatory action involving us, our industry or both, or investigations by regulators into our operations or those of our competitors;
- developments or disputes concerning our intellectual property or other proprietary rights;
- announced or completed acquisitions of businesses or technologies by us or our competitors;
- new laws or regulations or new interpretations of existing laws or regulations applicable to our business;
- changes in accounting standards, policies, guidelines, interpretations, or principles;

- major catastrophic events in our domestic and foreign markets;
- any significant change in our management; and
- general economic conditions and slow or negative growth of our markets.

In addition, if the market for technology stocks or the stock market in general experiences a loss of investor confidence, the market price of our Class A common stock could decline for reasons unrelated to our business, financial condition, or results of operations. The market price of our Class A common stock might also decline in reaction to events that affect other companies in our industry even if these events do not directly affect us. Accordingly, we cannot assure you of the liquidity of any trading market, your ability to sell your shares of our Class A common stock when desired, or the prices that you may obtain for your shares of our Class A common stock.

In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been brought against that company. If the market price of our Class A common stock is volatile, we may become the target of securities litigation. Securities litigation could result in substantial costs and divert our management's attention and resources from our business. Such litigation could adversely affect our business, financial condition, and results of operations.

We may not realize the anticipated long-term stockholder value of our share repurchase programs and any failure to repurchase our Class A common stock after we have announced our intention to do so may negatively impact our stock price.

In February 2022, we announced that our board of directors authorized the repurchase of up to \$750.0 million of our Class A common stock over time. Under this or any other future share repurchase programs, we may make share repurchases through a variety of methods, including open share market purchases, block transactions or privately negotiated transactions, in accordance with applicable federal securities laws. Our share repurchase program has no time limit, does not obligate us to repurchase any specific number of shares and may be suspended at any time at our discretion and without prior notice. The timing and amount of any repurchases, if any, will be subject to liquidity, stock price, market and economic conditions, compliance with applicable legal requirements such as Delaware surplus and solvency tests, compliance with our credit agreement, and other relevant factors. Any failure to repurchase stock after we have announced our intention to do so may negatively impact our reputation and investor confidence in us and may negatively impact our stock price.

The existence of this share repurchase program could cause our stock price to be higher than it otherwise would be and could potentially reduce the market liquidity for our stock. Although this program is intended to enhance long-term stockholder value, there is no assurance it will do so because the market price of our Class A common stock may decline below the levels at which we repurchased shares and short-term stock price fluctuations could reduce the effectiveness of the program.

Repurchasing our Class A common stock will reduce the amount of cash we have available to fund working capital, capital expenditures, strategic acquisitions or business opportunities, and other general corporate requirements, and we may fail to realize the anticipated long-term stockholder value of any share repurchase programs.

Future sales of our Class A common stock could depress the market price of our Class A common stock.

The market price of our Class A common stock could decline as a result of sales of a large number of shares of our Class A common stock in the market, and the perception that these sales could occur may also depress the market price of our Class A common stock.

Certain stockholders are entitled, under our investors' rights agreement (our IRA), to certain demand registration rights. In addition, we filed a registration statement to register shares reserved for future issuance under our equity compensation plans and a registration statement to register shares of Class A common stock issued pursuant to our 2011 Equity Incentive Plan for resale. As a result, subject to the satisfaction of applicable exercise periods, the registered shares, including those issued upon exercise of outstanding stock options, will be available for immediate resale in the United States in the open market.

Sales of our Class A common stock as restrictions end or pursuant to registration rights may make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate. These sales also could cause the market price of our Class A common stock to fall and make it more difficult for you to sell shares of our Class A common stock.

The issuance of additional stock in connection with financings, acquisitions, investments, our equity incentive plans, or otherwise will dilute all other stockholders.

Our amended and restated certificate of incorporation authorizes us to issue up to 1,500,000,000 shares of Class A common stock, up to 150,000,000 shares of Class C common stock, and up to 100,000,000 shares of preferred stock with such rights and preferences as may be determined by our board of directors. Subject to compliance with applicable rules

and regulations, we may issue shares of Class A common stock or securities convertible into shares of our Class A common stock from time to time in connection with a financing, acquisition, investment, our equity incentive plans, or otherwise. For example, in connection with our acquisition of Adjust in April 2021, we issued convertible securities that converted into an aggregate of 6,320,688 shares of our Class A common stock. Any such issuance could result in substantial dilution to our existing stockholders and cause the market price of our Class A common stock to decline.

Our multi-class stock structure, the Voting Agreement, and other provisions in our amended and restated certificate of incorporation and amended and restated bylaws could make a merger, tender offer, or proxy contest difficult, thereby depressing the market price of our Class A common stock.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that may make the acquisition of our company more difficult, including the following:

- our multi-class common stock structure and the Voting Agreement, which provide the Voting Agreement Parties with the ability to determine or significantly influence the outcome of matters requiring stockholder approval, even if they own significantly less than a majority of the shares of our outstanding common stock;
- vacancies on our board of directors may be filled only by our board of directors and not by stockholders;
- a special meeting of our stockholders may only be called by a majority of our board of directors, the chairperson of our board of directors, our Chief Executive Officer, or our President;
- advance notice procedures apply for stockholders to nominate candidates for election as directors or to bring matters before an annual meeting of stockholders;
- our amended and restated certificate of incorporation does not provide for cumulative voting;
- our amended and restated certificate of incorporation authorizes undesignated preferred stock, the terms of which may be established and shares of which may be issued by our board of directors, without further action by our stockholders;
- after the first date on which the outstanding shares of our Class B common stock represent less than a majority of the total combined voting power of our Class A common stock and our Class B common stock (the Voting Threshold Date), our stockholders will only be able to take action at a meeting of stockholders and will not be able to take action by written consent for any matter; and
- certain litigation against us may only be brought in Delaware.

These provisions, alone or together, could discourage, delay, or prevent a transaction involving a change in control of our company. These provisions could also discourage proxy contests and make it more difficult for stockholders to elect directors of their choosing and to cause us to take other corporate actions they desire, any of which, under certain circumstances, could limit the opportunity for our stockholders to receive a premium for their shares of our Class A common stock, and could also affect the market price of our Class A common stock.

Our amended and restated bylaws designate a state or federal court located within the State of Delaware and the federal district courts of the United States as the exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to choose the judicial forum for disputes with us or our directors, officers, or employees.

Our amended and restated bylaws provide that, unless we consent in writing to the selection of an alternative forum, to the fullest extent permitted by law, the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) 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, (iii) any action 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 (iv) any other action asserting a claim that is governed by the internal affairs doctrine shall be the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, the federal district court for the District of Delaware), in all cases subject to the court having jurisdiction over indispensable parties named as defendants, and provided that this exclusive forum provision will not apply to suits brought to enforce any liability or duty created by the Exchange Act.

Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all such Securities Act actions. Accordingly, both state and federal courts have jurisdiction to entertain such claims. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our amended and restated bylaws also provide that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. However, while the Delaware Supreme Court ruled in March 2020 that federal forum selection provisions purporting to require claims under the Securities Act be brought in federal court are "facially valid" under Delaware law, there is uncertainty as to whether other courts will enforce our federal forum provision. If the federal forum provision is found to be unenforceable, we may incur additional costs associated with resolving such matters.

Any person or entity purchasing or otherwise acquiring or holding or owning (or continuing to hold or own) any interest in any of our securities shall be deemed to have notice of and consented to the foregoing bylaw provisions. Although we believe these exclusive forum provisions benefit us by providing increased consistency in the application of Delaware law and federal securities laws in the types of lawsuits to which each applies, the exclusive forum provisions may limit a stockholder's ability to bring a claim in a judicial forum of its choosing for disputes with us or any of our directors, officers, stockholders, or other employees, which may discourage lawsuits with respect to such claims against us and our current and former directors, officers, stockholders, or other employees. Our stockholders will not be deemed to have waived our compliance with the federal securities laws and the rules and regulations thereunder as a result of our exclusive forum provisions. Further, in the event a court finds either exclusive forum provision contained in our amended and restated bylaws to be unenforceable or inapplicable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our results of operations.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties

Our corporate headquarters is in Palo Alto, California, where we currently lease approximately 72,812 square feet under a lease agreement that expires in March 2027. We also lease and license additional facilities in the United States in Carlsbad, Palo Alto, San Francisco, San Jose, and Santa Clara, California; Las Vegas, Nevada; Secaucus, New Jersey; New York, New York; Raleigh, North Carolina; and Richardson, Texas; and internationally in San Paulo, Brazil; Toronto, Canada; Beijing, Hangzhou and Shanghai, China; Limassol, Cyprus; Prague, Czech Republic; London, England; Paris, France; Berlin, Germany; Jakarta, Indonesia; Dublin, Ireland; Herzliya and Tel Aviv, Israel; Tokyo, Japan; Seoul, South Korea; Singapore; Madrid, Spain; Istanbul, Turkey; and Dubai, United Arab Emirates.

We believe that our facilities are suitable to meet our current needs. However, we intend to expand our facilities and add new facilities as we add employees and enter new geographic markets, and we believe that suitable additional or alternative space will be available as needed to accommodate any such growth. We expect to incur additional expenses in connection with such new or expanded facilities.

Item 3. Legal Proceedings

From time to time, we may be subject to legal proceedings and claims that arise in the ordinary course of business, as well as governmental and other regulatory investigations and proceedings. In addition, third parties may from time to time assert claims against us in the form of letters and other communications. We are not currently a party to any legal proceedings that, if determined adversely to us, would, in our opinion, have a material adverse effect on our business, financial condition, results of operations, or cash flows. Future litigation may be necessary to defend ourselves and our business partners and to determine the scope, enforceability, and validity of third-party proprietary rights, or to establish our proprietary rights. The results of any current or future litigation cannot be predicted with certainty, and regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources, and other factors.

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 for Common Stock

Our Class A common stock is traded on the Nasdaq Global Select Market under the symbol "APP." Our Class B and Class C common stock are neither listed nor traded.

Holders of Record

As of December 31, 2021, there were approximately 42 stockholders of record of our Class A common stock, 10 stockholders of records of our Class B common stock and no holders of record of our Class C common stock. Because many of our shares of Class A common stock 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. All shares of Class B common stock are beneficially held by Adam Foroughi, Herald Chen, and KKR Denali Holdings L.P., collectively with certain affiliated trusts.

Dividend Policy

We have never paid cash dividends on our capital stock and we do not anticipate paying any cash dividends in the foreseeable future.


Stock Performance Graph

This performance graph shall not be deemed "soliciting material" or to be "filed" with the SEC for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities under that Section, and shall not be deemed to be incorporated by reference into any filing of AppLovin Corporation under the Securities Act of 1933, as amended (the "Securities Act").

The graph below compares the cumulative total stockholder return on our Class A common stock with the cumulative total return on the Standard & Poor's 500 Stock Index (S&P 500) and the S&P 500 Information Technology Index (S&P IT) through December 31, 2021. The graph assumes \$100 was invested at the market close on April 15, 2021, which was the first day our Class A common stock began trading. Data for the S&P and S&P IT assumes reinvestment of dividends. The offering price of our Class A common stock in our initial public offering on April 15, 2021 was \$80.00 per share. The graph uses the closing market price on April 15, 2021 of \$65.20 per share as the initial value of our Class A common stock.

The comparisons in the graph below are based upon historical data and are not indicative of, nor intended to forecast, future performance of our Class A common stock.

app-20211231_g6.jpg



Recent Sale of Unregistered Securities and Use of Proceeds

Recent Sale of Unregistered Securities

During the three months ended December 31, 2021, we issued 44,539 shares of our Class A common stock upon the vesting of RSUs under our 2021 Partner Studio Incentive Plan.

The foregoing transactions did not involve any underwriters, any underwriting discounts or commissions, or any public offering. We believe the offer, sale, and issuance of the above securities was exempt from registration under the Securities Act by virtue of Section 4(a)(2) of the Securities Act and Regulation S promulgated under the Securities Act, because the issuance of securities to the recipients did not involve a public offering. The recipients of the securities in the transaction represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were placed upon the stock certificates issued in the transaction. All recipients had adequate access, through their relationships with us or otherwise, to information about us. The issuance of these securities was made without any general solicitation or advertising.

Use of Proceeds

On April 19, 2021, we completed our initial public offering (IPO), in which we sold 22,500,000 shares of our Class A common stock and KKR Denali Holdings L.P. sold 2,500,000 shares of Class A common stock at a price to the public of \$80.00 per share. We received aggregate net proceeds of \$1.75 billion, net of underwriting discounts and commissions of \$47.2 million and offering expenses of \$7.9 million subject to certain cost reimbursements.

We utilized approximately \$400.0 million of the net proceeds from our IPO to repay the entire outstanding amount under our revolving credit facility. We intend to use the net proceeds we received from our IPO for general corporate purposes, including working capital, operating expenses and capital expenditures. Additionally, we may use a portion of the net proceeds we received from our IPO to enter into strategic acquisitions and partnerships. The representatives of the underwriters of our IPO were Morgan Stanley & Co. LLC and J.P. Morgan Securities LLC. No payments were made by us to directors, officers or persons owning ten percent or more of our common stock or to their associates, or to our affiliates, other than payments in the ordinary course of business to officers for salaries and to non-employee directors pursuant to our director compensation policy.

There has been no material change in the planned use of the IPO proceeds as described in our final prospectus filed with the SEC on April 15, 2021, pursuant to Rule 424(b) of the Securities Act.

Issuer Purchases of Equity Securities

None.

Item 6. [Reserved]

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the section titled "Selected Consolidated Financial and Other Data" and the consolidated financial statements and the related notes, included elsewhere in this Annual Report on Form 10-K. This discussion contains forward-looking statements that involve risks and uncertainties. Factors that could cause or contribute to such differences include those identified below and those discussed in the section titled "Risk Factors" and other parts of this Annual Report on Form 10-K. Our historical results are not necessarily indicative of the results that may be expected for any period in the future. A discussion of the year ended December 31, 2020 compared to the year ended December 31, 2019 has been reported previously in our final prospectus dated April 14, 2021 filed with the SEC on April 15, 2021 pursuant to Rule 424(b)(4) (File No. 333-253800) of the Securities Act, under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Overview

Our mission is to grow the mobile app ecosystem by enabling the success of mobile app developers. Our software solutions provide advanced tools for mobile app developers to grow their businesses by automating and optimizing the marketing and monetization of their apps. Our software, coupled with our deep industry knowledge and expertise, has allowed us to rapidly scale a successful and diversified portfolio of owned mobile apps. We have also accelerated our market penetration through an active acquisition and partnership strategy. Our scaled and integrated business model sits at the nexus of the mobile app ecosystem, which creates a durable competitive advantage that has fueled our clients' success and our strong growth.

Since our founding in 2011, we have been focused on building a software-based platform for mobile app developers to improve the marketing and monetization of their apps. Our founders, who are mobile app developers themselves, quickly realized the real impediment to success and growth in the mobile app ecosystem was a discovery and monetization problem—breaking through the congested app stores to efficiently find users and successfully grow their business. Their first-hand experience with these developer challenges led to the development of our infrastructure and software—AppLovin Core Technologies and AppLovin Software Platform. We capitalized on our success and understanding of the mobile app ecosystem by launching AppLovin Apps in 2018. Our Apps now consist of a globally diversified portfolio of over 350 free-to-play mobile games across five genres, run by nineteen studios.

Our focus on building a market-leading software platform, coupled with our unique approach to developing and growing our Apps portfolio, as well as our strategic investments to date, has produced a business model characterized by rapid growth and strong cash flow generation. For 2021, our revenue grew 92% year-over-year from 2020, from \$1.45 billion in 2020 to \$2.79 billion in 2021. For 2020, our revenue grew 46% year-over-year from 2019, from \$994.1 million in 2019 to \$1.45 billion in 2020. We generated net income of \$35.3 million in 2021, net loss of \$125.9 million in 2020, and net income of \$119.0 million in 2019. We generated Adjusted EBITDA of \$726.8 million, \$345.5 million, and 301.2 million in 2021, 2020, and 2019, respectively. Additionally, we have generated strong cash flows, with net cash provided by operating activities of \$361.9 million, \$222.9 million, and \$198.5 million in 2021, 2020, and 2019, respectively. Given our strong financial position, we have been able to reinvest in our expansion and growth and consummate strategic acquisitions and partnerships. See the section titled "—Non-GAAP Financial Measures" for a definition of Adjusted EBITDA and a reconciliation of Adjusted EBITDA to net income (loss), the most directly comparable financial measure calculated in accordance with GAAP.

In February 2022, our board of directors authorized a share repurchase program to repurchase \$750.0 million of our Class A common stock over time. The program is effective immediately. We will continuously evaluate efficient alternatives to using cash on hand to fund the program, including accessing the capital markets, subject to market conditions.

Our Business Model

We collect revenue from business clients, comprised of Business—Software Platform and Business—Apps revenue (collectively, "Business Revenue") and consumers. In 2021, Business Revenue represented 48% of total revenue and Consumer Revenue represented 52% of total revenue.

Business Revenue

We generate Business—Software Platform revenue from fees paid by mobile app advertisers, or business clients, that use our Software Platform to grow and monetize their apps. We also collect Business—Apps revenue from business clients that purchase the digital advertising inventory of our portfolio of Apps. We are able to grow our Business Revenue by improving our Software Platform, adding more apps to our Apps portfolio and increasing engagement on our existing Apps. While we have thousands of business clients as of December 31, 2021, the vast majority of our revenue is derived from our Enterprise Clients. See "—Key Metrics" below for additional information on how we calculate Enterprise Clients. Approximately 96% of our Business Revenue for the twelve months ended December 31, 2021 came from our 407

Enterprise Clients as of December 31, 2021. Our Enterprise Clients had a Net Dollar-Based Retention Rate of approximately 176% for the twelve months ended December 31, 2021.¹

Business—Software Platform clients include a wide variety of advertisers and publishers, from indie developer studios to some of the largest global internet platforms, such as Facebook and Google. We have rapidly grown the number of Software Platform Enterprise Clients from 158 as of December 31, 2020 to 461 as of December 31, 2021, which generated approximately 94% of our Business Revenue from our Software Platform for the three months ended December 31, 2021. Our Net Dollar-Based Retention Rate from existing Software Platform Enterprise Clients (SPECs) was 204% for SPECs as of December 31, 2021.² We see multiple opportunities to gain new business clients, and to increase spend from existing business clients, as we help them grow their businesses and make them more successful. Business Software Platform represented 51% of total Business Revenue in the twelve months ended December 31, 2021.

Our Software Platform includes AppDiscovery, Adjust, and MAX. Business clients use AppDiscovery to automate, optimize, and manage their user acquisition investments. They set marketing and user growth goals, and AppDiscovery optimizes their ad spend in an effort to achieve their return on advertising spend targets and other marketing objectives. AppDiscovery comprises the vast majority of revenue from our Software Platform. Revenue is generated from our advertisers, typically on a performance-based, and shared with our advertising publishers, typically on a cost per impression model.

Business clients use Adjust's SaaS mobile marketing platform to better understand their users' journey while allowing marketers to make smarter decisions through measurement, attribution, and fraud prevention. Revenue from Adjust is primarily generated from an annual software subscription fee.

Business clients use MAX to optimize purchases of app ad inventory. Revenue from MAX is generated based on a percentage of client spend. As more developers move to in-app bidding monetization, we expect growth in the adoption of, and revenue from, MAX.

Our Business—Apps revenue clients purchase advertising inventory from our Apps and are able to target highly relevant users from our diverse and global portfolio of over 350 mobile games. Our clients leverage a broad set of high-performing mobile ad formats, including playable and rewarded video, and are able to match these ads with relevant users resulting in a better return on their advertising spend. By increasing the number of users and their engagement, as well as better matching ads with the appropriate target audience, we are able to increase our revenue from business clients that purchase advertising inventory from our Apps. Revenue from business clients related to our Apps is generated from ads purchased by advertisers, as well as from revenue-sharing agreements between some of our studios and a selection of third-party studios for which they publish and monetize games.

Consumer Revenue

Consumer Revenue is generated when a user of one of our Apps makes an in-app purchase (IAP). Our Apps are generally free-to-play mobile games and generate Consumer Revenue through IAPs. IAPs consist of virtual goods used to enhance gameplay, accelerate access to certain features or levels, and augment other mobile game progression opportunities for the user. IAPs drive more engagement and better economics from our Apps. The vast majority of our IAP revenue flows through two app stores, Apple App Store and Google Play, which charge us a standard commission on IAPs.

During the twelve months ended December 31, 2021, we had an average of 3.0 million Monthly Active Payers (MAPs) across our portfolio of Apps. Over that period, we had an Average Revenue Per Monthly Active Payer (ARPMAP) of \$43. Leveraging the benefit of our integrated Core Technologies, Software Platform, and Apps, we see opportunities to grow our App-related revenue streams by increasing MAPs and expanding ARPMAP within existing games and through new game development, acquisitions and partnerships. See "Key Metrics" below for additional information on how we calculate MAPs and ARPMAP.

Key Metrics

We review the following key metrics on a regular basis in order to evaluate the health of our business, identify trends affecting our performance, prepare financial projections, and make strategic decisions. As a result of our continued focus on our Software Platform, we plan to phase out several metrics including Enterprise Clients, Revenue Per Enterprise

¹ We measure Net Dollar-Based Retention Rate for the twelve months ended December 31, 2021 for our Enterprise Clients as current period revenue divided by prior period revenue. Prior period revenue is measured as revenue for the twelve months ended December 31, 2020 from our Enterprise Clients as of December 31, 2020. Current period revenue is revenue for the twelve months ended December 31, 2021 from our Enterprise Clients as of December 31, 2021, and excludes revenue from any new Enterprise Clients during the twelve months ended December 31, 2021.

² We measure Net Dollar-Based Retention Rate for the three months ended December 31, 2021 for our Software Platform Enterprise Clients (SPECs) as current period revenue divided by prior period revenue. Prior period revenue is measured as revenue for the three months ended December 31, 2020 from our Software Platform Enterprise Clients as of December 31, 2020. Current period revenue is revenue for the three months ended December 31, 2021 from Software Platform Enterprise Clients as of December 31, 2020.

Client and Net Dollar-Based Retention Rate for Enterprise Clients beginning with the quarter ended March 31, 2022 in favor of similar software-focused Key Metrics. See “Update to our Key Metrics” below for further details.

Our key metrics are not based on any standardized industry methodology and are not necessarily calculated in the same manner or comparable to similarly titled measures presented by other companies. Similarly, our key metrics may differ from estimates published by third parties or from similarly titled metrics of our competitors due to differences in methodology. The numbers that we use to calculate TSTV, MAP, and ARPMAP are based on internal data. While these numbers are based on what we believe to be reasonable judgments and estimates for the applicable period of measurement, there are inherent challenges in measuring usage and engagement. We regularly review and may adjust our processes for calculating our internal metrics to improve their accuracy.

Annual Key Metrics

Enterprise Clients. We focus on the number of Enterprise Clients, which are third-party business clients from whom we have collected greater than \$125,000 of revenue in the trailing 12 months to a given date. Enterprise Clients generate the vast majority of our Business Revenue and Business Revenue growth. We expect to increase the revenue from Enterprise Clients over time.

Revenue Per Enterprise Client (RPEC). We define RPEC as (i) the total revenue derived from our Enterprise Clients in a twelve-month period, divided by (ii) Enterprise Clients as of the end of that same period. RPEC shows how efficiently we are monetizing each Enterprise Client. We expect to increase RPEC over time as we enhance our Software Platform and Apps.

The following table shows our Enterprise Clients as of December 31, 2021, 2020 and 2019, and our RPEC for 2021, 2020 and 2019.

	Year Ended December 31,		
	2021	2020	2019
Enterprise Clients	407	172	167
Revenue Per Enterprise Client (in thousands)	\$ 3,146	\$ 4,081	\$ 3,515

Quarterly Key Metrics

Software Platform Enterprise Clients (SPECs). We focus on the number of SPECs, which are third-party business clients from whom we have collected greater than \$31,250 of Software Platform revenue in the three months to a given date, equating to an annual run-rate of \$125,000 in revenue. SPECs generate the vast majority of our Business Revenue—Software Platform and Business Revenue—Software Platform growth.

Revenue Per Software Platform Enterprise Client (Revenue per SPEC). We define Revenue per SPEC as (i) the total revenue derived from our Software Platform Enterprise Clients in a three- month period, divided by (ii) Software Platform Enterprise Clients as of the end of that same period. Revenue per SPEC shows how efficiently we are monetizing each SPEC. We expect to increase Revenue per SPEC over time as we enhance our Software Platform and Apps.

The following table shows our SPECs and Revenue per SPEC as of the three-months ended December 31, 2021, 2020 and 2019.

	Three Months Ended December 31,		
	2021	2020	2019
SPEC	461	158	133
Revenue per SPEC (in thousands)	\$ 503	\$ 500	\$ 338

Update to our Key Metrics

Beginning with the three months ended June 30, 2022, the revenue measurement period used to determine the number of SPECs in a period will be updated to include clients from whom we have collected greater than \$125,000 in Software Platform revenue over the trailing 12 months. The current definition of SPEC includes third-party clients who had more than \$31,250 in Software Platform revenue for the prior three months. We believe this change in revenue measurement period will provide additional information regarding the scale and growth of our more-mature clients. Going forward, when Net Dollar-Based Revenue Retention (NDBRR) measures are provided, we will also calculate such measures using the updated definition of SPECs.

The table below shows our SPEC and Revenue per SPEC as of December 31, 2021, 2020 and 2019 under the updated calculations.

	Year Ended December 31,		
	2021	2020	2019
SPEC (trailing 12 months)	380	142	146
Revenue per SPEC (trailing 12 months) (in thousands)	\$ 1,634	\$ 1,404	\$ 1,300

Total Software Transaction Value (TSTV). Business Software Platform revenue is from third-party clients using our software platform to find new customers. We do not recognize revenue from our own spend on our software platform. Therefore, we use TSTV to measure the scale and growth rates of our software platform, as it reflects the total value on our software platform including our first-party studios as though they were stand-alone businesses.

The following table shows our TSTV for the years ended December 31, 2021, 2020 and 2019.

	Year Ended December 31,		
	2021	2020	2019
Total Software Transaction Value	\$ 982,248	\$ 295,698	\$ 281,079

Monthly Active Payers (MAPs). We define a MAP as a unique mobile device active on one of our Apps in a month that completed at least one IAP during that time period. A consumer who makes IAPs within two separate Apps on the same mobile device in a monthly period will be counted as two MAPs. MAPs for a particular time period longer than one month are the average MAPs for each month during that period. We estimate the number of MAPs by aggregating certain data from third-party attribution partners. Some of our Apps do not utilize such third-party attribution partners, and therefore our MAPs figure for any period does not capture every user that completed an IAP on our Apps. We estimate that our counted MAPs generated approximately 97% of our Consumer Revenue during the year ended December 31, 2021, and as such, management believes that MAPs are still a useful metric to measure the engagement and monetization potential of our games. We expect to increase our MAPs over time as we increase the number of our Apps and enhance the engagement and monetization of our Apps.

Average Revenue Per Monthly Active Payer (ARPMAP). We define ARPMAP as (i) the total Consumer Revenue derived from our Apps in a monthly period, divided by (ii) MAPs in that same period. ARPMAP for a particular time period longer than one month is the average ARPMAP for each month during that period. ARPMAP shows how efficiently we are monetizing each MAP. We expect to increase ARPMAP over time as we enhance the monetization of our Apps.

The following table shows our Monthly Active Payers and Average Revenue Per Monthly Active Payer for the years ended December 31, 2021, 2020 and 2019.

	Year Ended December 31,		
	2021	2020	2019
Monthly Active Payers (millions)	3.0	1.5	1.0
Average Revenue Per Monthly Active Payer	\$ 43	\$ 41	\$ 32

Non-GAAP Financial Metrics

Adjusted EBITDA and Adjusted EBITDA Margin

We define Adjusted EBITDA for a particular period as net income (loss) before interest expense and loss on settlement of debt, other (income) expense, net, provision for (benefit from) income taxes, amortization, depreciation and write-offs and as further adjusted for stock-based compensation expense, acquisition-related expense and transaction bonus, customer acquisition bonuses, loss (gain) on extinguishments of acquisition related contingent consideration, non-operating foreign exchange losses, lease modification and abandonment of leasehold improvements, and change in the fair value of contingent consideration. We define Adjusted EBITDA margin as Adjusted EBITDA divided by revenue for the same period.

Adjusted EBITDA and Adjusted EBITDA margin are key measures we use to assess our financial performance and are also used for internal planning and forecasting purposes. We believe Adjusted EBITDA and Adjusted EBITDA margin are helpful to investors, analysts, and other interested parties because they can assist in providing a more consistent and comparable overview of our operations across our historical financial periods. In addition, these measures are frequently used by analysts, investors, and other interested parties to evaluate and assess performance. We use Adjusted EBITDA and Adjusted EBITDA margin in conjunction with GAAP measures as part of our overall assessment of our performance.

including the preparation of our annual operating budget and quarterly forecasts, to evaluate the effectiveness of our business strategies, and to communicate with our board of directors concerning our financial performance.

Adjusted EBITDA and Adjusted EBITDA margin are non-GAAP financial measures and are presented for supplemental informational purposes only and should not be considered as alternatives or substitutes to financial information presented in accordance with GAAP. These measures have certain limitations in that they do not include the impact of certain expenses that are reflected in our consolidated statement of operations that are necessary to run our business. Our definitions may differ from the definitions used by other companies and therefore comparability may be limited. In addition, other companies may not publish these or similar metrics. Furthermore, these metrics have certain limitations in that they do not include the impact of certain expenses that are reflected in our consolidated statement of operations that are necessary to run our business. Thus, our Adjusted EBITDA and Adjusted EBITDA margin should be considered in addition to, not as substitutes for, or in isolation from, measures prepared in accordance with GAAP.

The following table provides our Adjusted EBITDA and Adjusted EBITDA margin for 2021, 2020 and 2019, and a reconciliation of net income (loss) to Adjusted EBITDA:

	Year Ended December 31,		
	2021	2020	2019
	(in thousands, except percentages)		
Net income (loss)	\$ 35,338	\$ (125,934)	\$ 119,040
Adjusted as follows:			
Interest expense and loss on settlement of debt	103,170	77,873	73,955
Other (income) expense, net ³	(7,545)	(6,183)	(5,818)
Provision for (benefit from) income taxes	10,973	(9,772)	7,194
Amortization, depreciation and write-offs	431,063	254,951	92,806
Non-operating foreign exchange losses	(1,537)	1,210	—
Stock-based compensation ⁴	135,469	62,387	10,222
Acquisition-related expense and transaction bonus	16,887	7,850	3,798
Customer acquisition bonuses ⁵	3,227	—	—
Loss on extinguishments of acquisition related contingent consideration	—	74,820	—
Lease modification and abandonment of leasehold improvements	—	7,851	—
Change in the fair value of contingent consideration	(230)	442	—
Adjusted EBITDA	\$ 726,815	\$ 345,495	\$ 301,197
Net income (loss) margin	1.3 %	(8.7)%	12.0 %
Adjusted EBITDA margin	26.0 %	23.8 %	30.3 %

In 2021, 2020, and 2019, our net income (loss) and Adjusted EBITDA included \$1.8 million, \$62.0 million, and \$0.2 million related to the fair value adjustment of the deferred revenue balance assumed as a result of the acquisitions of Adjust in 2021, Machine Zone in 2020, and SafeDK in 2019.

Factors Affecting Our Performance

We believe that the future success of our business depends on many factors, including the factors described below. While each of these factors presents significant opportunities for our business, they also pose important challenges that we must successfully address in order to continue to grow profitably while maintaining strong cash flow.

Continue to invest in innovation

We have made, and intend to continue to make, significant investments in our Core Technologies and Software Platform to enhance their effectiveness and value proposition for our business clients. We expect that these investments will require spending on research and development, and acquisitions and partnerships related to technology components and products. We believe investments in our software, including AXON, AppDiscovery, Adjust, and MAX, will further improve their effectiveness for developers. Our investments will also allow us to enter new mobile app sectors outside of

³ Excludes recurring operational foreign exchange gains and losses and write-off of an investment that is included in Amortization, depreciation and write-offs line item above

⁴ The twelve months ended December 31, 2021 includes \$2.3 million of bonus compensation settled in stock outside of the scope of ASC 718.

⁵ In association with the MbPub acquisition, we incurred certain costs to incentivize publishers to migrate to our MAX mediation solution, including existing publishers of MbPub as well as publishers on other competitor offerings. We have not historically incurred significant publisher migration costs, nor do we currently intend to incur significant publisher migration costs in the future. As such, we have removed the impact of these costs from Adjusted EBITDA.

gaming. While our investments in research and development and acquisitions and partnerships may not result in revenue in the near term, we believe these investments position us to increase our revenue over time.

Retain and grow existing business clients

We rely on existing business clients for a significant portion of our revenue. As we improve our Software Platform and Apps, we can attract additional spend from these business clients. Our business clients include indie studio developers and some of the largest mobile advertising platforms in the world. We believe there is significant room for us to further expand our relationships with these clients and increase their usage of our Software Platform. We have invested in targeted sales and account-based marketing efforts, including through Adjust's sales and marketing teams, to identify and showcase opportunities to business clients and plan to continue to do so in the future.

In the past, our business clients have generally increased their usage of our Software Platform and Apps, and as a result, growth from existing business clients has been a primary driver of our revenue growth. We must continue to retain our existing business clients and expand their spend with us over time to continue to grow our revenue, increase profitability and drive greater cash flow.

Add new business clients globally

Our future success depends in part on our ability to acquire new business clients. We recently increased our focus on markets outside the United States to serve the needs of business clients globally. In 2021, only 42% of our revenue from business clients was generated from outside of the United States. We believe that the global opportunity is significant and will continue to expand as developers and advertisers outside the United States adopt our Software Platform and advertise on our Apps. We also see opportunities to acquire new business clients outside of mobile gaming, as the capabilities of our Core Technologies and Software Platform are relevant to the broader mobile app ecosystem. We are investing in direct sales, product development, education, and other capabilities to drive increased awareness and adoption of our Software Platform and Apps, which investments may impact our profitability in the near term as we seek further scale. We must continue to acquire new business clients to grow our revenue, increase profitability, and drive greater cash flow.

Optimization, growth, and expansion of our AppLovin Apps

We plan to continue to invest in developing new Apps and enhancing existing Apps. Because our Apps are typically free to download and use, economically acquiring users and monetizing through advertising and IAPs is critical to the future success of our Apps. We plan to launch several new Apps per year, as well as continue to evaluate investments in mobile gaming and other mobile app sectors.

Given our expertise in app marketing, we are able to pursue a highly-optimized and scaled user acquisition investment playbook. For the twelve months ended December 31, 2021, we invested \$1.13 billion in sales and marketing, a large percentage of which was invested in user acquisition to grow the number of users engaging with our Apps. We believe the scale, insights, and effective monetization strategies provided through our Core Technologies and Software Platform, and our integrated business model allow us to optimize ad spend across our portfolio of Apps. We also invest in the growth of our Apps by improving in-game monetization, optimizing game economies and in-game conversion, and opt-in business services, such as creative services and localization. We must continue to optimize, grow, and expand our Apps portfolio to grow our revenue, increase profitability, and drive greater cash flow.

Continued execution of strategic acquisitions and partnerships

We intend to continue to make strategic acquisitions and add complementary software and tools to our Software Platform and enter into strategic partnerships to grow our portfolio of Apps. From the beginning of 2018 through December 31, 2021, we have invested over \$2.5 billion in 27 strategic acquisitions and partnerships with mobile app developers and for technologies to enhance our Software Platform. We have been very successful in growing mobile apps that we have added to our Apps portfolio. We have also invested strategically to enhance our Software Platform. For example, in 2022 we acquired MoPub, a monetization platform for mobile apps from Twitter, Inc. in 2021 we acquired Adjust GmbH, a leading app attribution, measurement, and analytics company and in 2018 we acquired MAX, an in-app bidding platform, which improves monetization on apps. On February 23, 2022, we also entered into a definitive agreement to acquire Wurl, a high-growth software platform in the Connected TV (CTV) market.

While we have a strong pipeline of strategic acquisition and partnership opportunities, we believe our future results of operations will be affected by our ability to continue to identify and execute such transactions that are accretive to our growth and profitability.

Growth and structure of the mobile app ecosystem

Our business and results of operations will be impacted by industry factors that drive overall performance of the mobile app ecosystem. The mobile app ecosystem has grown rapidly in recent years. We expect that any acceleration, or slowing, of this growth would affect our business and results of operations. In addition, even if the mobile app ecosystem

continues to grow at its current rate, our ability to position ourselves within the market will impact our business and results of operations.

Mobile app developers, including AppLovin, rely on third-party platforms, such as the Apple App Store and Google Play Store, among others, to distribute games, collect payments made for IAPs, and target users with relevant advertising. We expect this to continue for the foreseeable future. These third-party platforms have significant market power and discretion to set platform fees, select which apps to promote, and decide how much consumer information to provide to advertising networks that enable our Core Technologies and Software Platform to target users with personalized and relevant advertising and allocate marketing campaigns in an efficient and cost-effective manner. Any changes made in the policies of third-party platforms could drive rapid change across the mobile app ecosystem. For example, in April 2021, Apple started implementing its application tracking transparency framework that, among other things, requires users' opt-in consent for certain types of tracking. While this transparency framework has not had a significant impact on our overall business, it may in the future continue to have an impact on it, including the effectiveness of our advertising practices and/or our ability to efficiently generate revenue for our Apps. We rely in part on IDFA to provide us with data that helps our Software Platform better market and monetize Apps. The IDFA and transparency changes may require us to engage in significant changes to our data collection practices, which may require our expenditure of substantial costs and resources, and to the extent we are unable to utilize IDFA or a similar offering, or if the transparency changes and any related opt-in or other requirements result in decreases in the availability or utility of data relating to Apps, our Software Platform may not be as effective, we may not be able to continue to efficiently generate revenue for our Apps, and our revenue and results of operations may be harmed. Additionally, Apple implemented new requirements for consumer disclosures regarding privacy and data processing practices in December 2020, which has resulted in increased compliance requirements and could result in decreased usage of our Apps. These or any similar changes to the policies of Apple or Google may materially and adversely affect our business, financial condition, and results of operations. To date, these data privacy changes have had a relatively muted aggregate impact on our overall results of operations.

New tools for developers, industry standards, and platforms may emerge in the future. We believe our focus on the mobile app ecosystem has allowed us to understand the needs of our business clients and our relentless innovation has enabled us to quickly adapt to changes in the industry and pioneer new solutions. We must continue to innovate and stay ahead of developments in the mobile app ecosystem in order for our business to succeed and our results of operations to continue to improve.

Acquisition of MoPub

On October 6, 2021, we entered into a definitive agreement to acquire from Twitter, Inc. the MoPub business for approximately \$1.0 billion and the acquisition closed in January 2022. We plan to integrate MoPub's reach and product features into our existing Software Platform to better maximize revenue growth and improve efficiencies for our combined customers. We expect to see strong growth in our unified MAX solution and to facilitate successful migration to our MAX platform, we expect to pay approximately \$200 million in migration fees to publishers.

Definitive Agreement to Acquire Wurl

On February 23, 2022 we entered into a definitive agreement to acquire Wurl, Inc., a software platform company in the Connected TV (CTV) market, for approximately \$430 million in cash and Class A common stock. Concurrent with entering into the definitive agreement, we also adopted a multi-year performance-based incentive plan for certain key employees of Wurl, under which such employees may earn up to a total of \$600.0 million in additional shares of the Company's Class A common stock through 2025, subject to the achievement of certain revenue and other performance targets by the acquired business. Such plan will become effective at the closing of the transaction. The transaction is subject to customary closing conditions and expected to close in the first half of 2022. We believe our software marketing expertise will further optimize the experience for our advertisers and consumers while enabling content companies to expand their audiences and increase monetization.

Term Loans and Amendment to Credit Agreement

On October 25, 2021, we entered into Amendment No. 6 (Amendment No. 6), to that certain Credit Agreement, dated as of August 15, 2018, by and among us, as borrower, Bank of America, N.A., as administrative agent and collateral agent, and the other parties thereto, as amended by Amendment No. 1 to the Credit Agreement, dated as of April 23, 2019, Amendment No. 2 to the Credit Agreement, dated as of April 27, 2020, Amendment No. 3 to the Credit Agreement, dated as of May 6, 2020, Amendment No. 4 to the Credit Agreement, dated as of October 27, 2020 and Amendment No. 5 to the Credit Agreement, dated as of February 12, 2021 (the Credit Agreement; and as amended by Amendment No. 6, the Amended Credit Agreement).

Pursuant to Amendment No. 6 and the Amended Credit Agreement, certain additional lenders agreed to provide incremental loans in an aggregate amount of \$1.50 billion (such incremental loans, the Amendment No. 6 New Term Loans). The Amendment No. 6 New Term Loans have (a) a maturity date of October 25, 2028 (or if not a business day, the immediately preceding business day), (b) a floor on LIBOR Loans of 50 basis points, and (c) an applicable margin for LIBOR Loans equal to 3.00% (or 2.00% for ABR Loans), in each case, subject to and in accordance with the terms and

conditions of the Amended Credit Agreement. Except as set forth in Amendment No. 6 and the Amended Credit Agreement, the other terms and conditions of the Amendment No. 6 New Term Loans are consistent with the term loans outstanding immediately prior to the effectiveness of Amendment No. 6.

Impact of COVID-19

The COVID-19 pandemic and resulting social distancing and shelter-in-place orders put in place around the world have caused widespread disruption in global economies, productivity, and financial markets and have altered the way in which we conduct our day-to-day business. As a result of the COVID-19 pandemic we have temporarily closed our offices around the world, including our corporate headquarters in Palo Alto, California, and implemented travel restrictions. Our Software Platform and Apps do not require physical interaction, thus, our ability to meet the needs of our clients and users has not been materially affected. The full impact of the COVID-19 pandemic on the global economy and the extent to which the pandemic may impact our business, financial condition, and results of operations in the future remains uncertain. See the section titled "Risk Factors—The COVID-19 pandemic and responses thereto across the globe have altered how individuals interact with each other and affected how we and our business partners are operating, and the extent to which this situation will impact our future results of operations remains uncertain" for additional information.

Components of Results of Operations

Revenue

We collect Business Revenue from advertisers spending on our Software Platform and Apps. The majority of our Business Revenue comes from our Software Platform and is generated from our advertisers, typically on a performance-based, then shared with our advertising publishers, typically on a cost per impression model. Business Revenue generated from our Apps comes from advertisers that purchase ad inventory from our diverse portfolio of Apps. Business Revenue from our Software Platform was 51%, 29%, and 33% of total Business Revenue in 2021, 2020 and 2019, respectively.

We generate Consumer Revenue from IAPs made by users within our Apps.

Cost of Revenue and Operating Expenses

Cost of revenue. Cost of revenue consists primarily of third-party payment processing fees for distribution partners, amortization of acquired technology-related intangible assets, and expenses associated with operating our network infrastructure. Third-party payment processing fees relate to Consumer Revenue. The fees for IAPs are processed and collected by third-party distribution partners.

Network operating costs include bandwidth, energy, other equipment costs related to our co-located data centers, and costs for third-party cloud service providers. We expect our cost of revenue to increase in absolute dollars over the long term as our business and revenue continue to grow. We also expect our cost of revenue as a percentage of revenue to fluctuate period-over-period.

Sales and marketing. Sales and marketing expenses consist primarily of user acquisition costs, other advertising expenses, personnel-related expenses for salaries, employee benefits, and stock-based compensation for employees engaged in sales and marketing, and amortization of acquired user-related intangible assets, marketing programs, travel, customer service costs, and allocated facilities and information technology costs.

We plan to continue to invest in sales and marketing to grow our customer base and increase brand awareness. As a result, we expect sales and marketing expenses to increase in absolute dollars. We also expect our sales and marketing expenses as a percentage of revenue to fluctuate period-over-period in the near term as we invest to grow our customer base and increase brand awareness, and to decrease over the long term as we benefit from greater scale.

Research and development. Research and development expenses consist primarily of product development costs, including personnel-related expenses for salaries, employee benefits, and stock-based compensation for employees engaged in research and development, professional services costs related to development of new apps by third parties, consulting costs, regulatory compliance costs, and allocated facilities and information technology costs.

We plan to continue to invest in research and development to continue to enhance our Core Technologies and Software Platform, and to improve existing games and develop new apps. As a result, we expect research and development expenses to increase in absolute dollars. We also expect our research and development expenses as a percentage of revenue to fluctuate period-over-period in the near term as we invest to enhance our Core Technologies and Software Platform and improve our existing Apps and develop new Apps, and to decrease over the long term as we benefit from greater scale.

General and administrative. General and administrative expenses consist primarily of costs incurred to support our business, including personnel-related expenses for salaries, employee benefits, and stock-based compensation for employees engaged in finance, accounting, legal, human resources and administration, professional services fees for

legal, accounting, recruiting, and administrative services (including acquisition-related expenses), insurance, travel, and allocated facilities and information technology costs.

We plan to continue to invest in our general and administrative function to support the growth of our business. In addition, we expect to incur additional general and administrative expenses as a result of operating as a public company, including expenses related to compliance and reporting obligations of a public company, increased insurance and investor relations expenses, and increased professional services fees (including acquisition-related expenses). As a result, we expect general and administrative expenses to increase in absolute dollars. We also expect our general and administrative expenses as a percentage of revenue to fluctuate period-over-period in the near term as we invest to support the growth of our business, and to decrease over the long term as we benefit from greater scale.

Interest expense and loss on settlement of debt. Interest expense and loss on settlement of debt consists primarily of loss related to debt extinguishment, interest expense associated with our outstanding debt, including accretion of debt discount, and changes in fair value of interest rate swap accounted for as a cash flow hedge related to the stream of variable interest payments associated with a portion of our outstanding debt.

Other income (expense), net. Other income (expense), net, includes interest earned on our cash and cash equivalents, gains and losses related to embedded derivatives and other financial instruments accounted for at fair value, and foreign currency exchange gains (losses), which consist primarily of remeasurement of transactions and monetary assets and liabilities denominated in currencies other than the functional currency at the end of the period.

Provision for (benefit from) income taxes. We are subject to income taxes in the United States and foreign jurisdictions in which we do business. These foreign jurisdictions have different statutory tax rates than those in the United States. Additionally, certain of our foreign earnings may also be taxable in the United States. Accordingly, our effective tax rate will vary depending on the relative proportion of foreign to domestic income, impacts from acquisition restructuring, deduction benefits related to foreign-derived intangible income, future changes in the valuation of our deferred tax assets and liabilities, and changes in tax laws. Additionally, our effective tax rate can vary based on the amount of pre-tax income or loss.

Results of Operations

The following tables summarize our consolidated statement of operations in dollar amounts. The period to period comparisons of results is not necessarily indicative of results for future periods.

	Years Ended December 31,		
	2021	2020	2019
	(in thousands)		
Revenue	\$ 2,793,104	\$ 1,451,086	\$ 994,104
Costs and expenses			
Cost of revenue(1)(2)	988,095	555,578	241,274
Sales and marketing(1)(2)	1,129,892	627,796	481,781
Research and development(1)	366,402	180,652	44,966
General and administrative(1)	158,699	66,431	31,712
Extinguishments of acquisition-related contingent consideration	—	74,820	—
Lease modification and abandonment of leasehold improvements	—	7,851	—
Total costs and expenses	2,643,088	1,513,128	799,733
Income (loss) from operations	150,016	(62,042)	194,371
Other income (expense):			
Interest expense and loss on settlement of debt	(103,170)	(77,873)	(73,955)
Other income (expense), net	(535)	4,209	5,818
Total other expense	(103,705)	(73,664)	(68,137)
Income (loss) before income taxes	46,311	(135,706)	126,234
Provision for (benefit from) income taxes	10,973	(9,772)	7,194
Net income (loss)	\$ 35,338	\$ (125,934)	\$ 119,040

(1) Includes stock-based compensation expense as follows:

	Years Ended December 31,		
	2021	2020	2019
	(in thousands)		
Cost of revenue	\$ 2,335	\$ 982	\$ 124
Sales and marketing	15,224	10,668	1,922
Research and development	63,344	36,852	5,009
General and administrative	52,274	13,885	3,167
Total stock-based compensation	\$ 133,177	\$ 62,387	\$ 10,222

(2) Includes amortization expense related to acquired intangibles as follows:

	Years Ended December 31,		
	2021	2020	2019
	(in thousands)		
Cost of revenue	\$ 373,726	\$ 228,339	\$ 74,787
Sales and marketing	22,661	11,587	7,641
Total amortization expense related to acquired intangibles	\$ 396,387	\$ 239,926	\$ 82,428

The following table sets forth the components of our consolidated statements of operations for each of the periods presented as a percentage of revenue⁽¹⁾:

	Years Ended December 31,		
	2021	2020	2019
	(in thousands)		
Revenue	100 %	100 %	100 %
Costs and expenses:			
Cost of revenue	35 %	38 %	24 %
Sales and marketing	40 %	43 %	48 %
Research and development	13 %	12 %	5 %
General and administrative	6 %	5 %	3 %
Extinguishments of acquisition-related contingent consideration	— %	5 %	— %
Lease modification and abandonment of leasehold improvements	— %	1 %	— %
Total costs and expenses	95 %	104 %	80 %
Income (loss) from operations	5 %	(4) %	20 %
Other income (expense):			
Interest expense and loss on settlement of debt	(4) %	(5) %	(7) %
Other income (expense), net	0 %	— %	1 %
Total other expense	(4) %	(5) %	(7) %
Income (loss) before income taxes	2 %	(9) %	13 %
Provision for (benefit from) income taxes	— %	(1) %	1 %
Net income (loss)	1 %	(9) %	12 %

(1) Totals of percentages of revenue may not foot due to rounding.

Comparison of Our Results of Operations for the Twelve Months Ended December 31, 2021, 2020 and 2019

Revenue

	Years Ended December 31,			2020 to 2021 % change	2019 to 2020 % change
	2021	2020	2019		
	(in thousands, except percentages)				
Business Revenue – Software Platform	\$ 673,952	\$ 207,285	\$ 198,305	225 %	5 %
Business Revenue – Apps	660,557	503,867	397,643	31 %	27 %
Total Business Revenue	1,334,509	711,152	595,948	88 %	19 %
Consumer Revenue	1,458,595	739,934	398,156	97 %	86 %
Total Revenue	\$ 2,793,104	\$ 1,451,086	\$ 994,104	92 %	46 %

Total revenue increased by \$1,342.0 million, or 92%, for 2021 compared to 2020 due to increases in Business Revenue from our Software Platform of 225%, Business Revenue from our Apps of 31% and Consumer Revenue of 97%.

In 2021, our Business Revenue increased by \$623.4 million from 2020. In 2021, our Business Revenue from our Software Platform increased by \$466.7 million from 2020 primarily due to AppDiscovery where installations increased 62% and price per installation increased 81% compared to 2020, as well as our addition of Adjust during the year which contributed 17% of the Business Revenue from Software Platform increase. Our Business Revenue from Apps grew due to a 44% increase in the volume of advertising impressions and a 9% decrease in price per advertising impression, each compared to 2020. Usage of advertising inventory by our Owned Studios and Partner Studios represented 21% of installations in 2021. We do not recognize Business Revenue from transactions with our Owned Studios and Partner Studios.

In 2021, our Consumer Revenue increased by \$718.7 million from 2020, primarily due to a 88% increase in the volume of in-app purchases, as well as a 5% increase in price per in-app purchase.

Cost of revenue

	Years Ended December 31,			2020 to 2021 % change	2019 to 2020 % change
	2021	2020	2019		
	(in thousands, except percentages)				
Cost of revenue	\$ 988,095	\$ 555,578	\$ 241,274	78 %	130 %
Percentage of revenue	35 %	38 %	24 %		

Cost of revenue in 2021 increased by \$432.5 million, or 78%, compared to 2020. The increase in 2021 was primarily due to an increase of \$199.8 million in third-party payment processing fees as a result of the growth in Consumer Revenue, an increase of \$153.9 million in depreciation and amortization of technology-related intangible assets driven by an increase in acquisition activity, and an increase in expenses associated with operating our network infrastructure driven by the growth in our operations of \$49.7 million.

Sales and marketing

	Years Ended December 31,			2020 to 2021 % change	2019 to 2020 % change
	2021	2020	2019		
	(in thousands, except percentages)				
Sales and marketing	\$ 1,129,892	\$ 627,796	\$ 481,781	80 %	30 %
Percentage of revenue	40 %	43 %	48 %		

Sales and marketing expenses in 2021 increased by \$502.1 million, or 80%, compared to 2020 primarily due to a \$432.8 million increase in user acquisition costs, a \$23.2 million increase in personnel-related expenses primarily due to an increase in stock-based compensation as a result of higher fair value in our common stock and increase in headcount, and a \$28.0 million increase in professional service fees.

Research and development

	Years Ended December 31,			2020 to 2021 % change	2019 to 2020 % change
	2021	2020	2019		
	(in thousands, except percentages)				
Research and development	\$ 366,402	\$ 180,652	\$ 44,966	103 %	302 %
Percentage of revenue	13 %	12 %	5 %		

Research and development expenses in 2021 increased by \$185.8 million, or 103%, compared to 2020. The increase was primarily due to an increase of \$109.9 million in professional services costs related to development of new games by third parties and an increase of \$66.1 million in personnel-related expenses related to an increase in stock-based compensation as a result of higher fair value in our common stock and an increase in headcount.

General and administrative

	Years Ended December 31,			2020 to 2021 % change	2019 to 2020 % change
	2021	2020	2019		
	(in thousands, except percentages)				
General and administrative	\$ 158,699	\$ 66,431	\$ 31,712	139 %	109 %
Percentage of revenue	6 %	5 %	3 %		

General and administrative expenses in 2021 increased by \$92.3 million, or 139% compared to 2020. The increase was primarily due to an increase of \$65.4 million in personnel-related expenses related to an increase in stock-based compensation expense as a result of higher fair value in our common stock and an increase in headcount to support our growth and an increase of \$12.4 million in professional services costs primarily associated with audit, tax, and legal support.

Interest expense and loss on settlement of debt

	Years Ended December 31,			2020 to 2021 % change	2019 to 2020 % change
	2021	2020	2019		
	(in thousands, except percentages)				
Interest expense and loss on settlement of debt	\$ (103,170)	\$ (77,873)	\$ (73,955)	32 %	5 %
Percentage of revenue	(4)%	(5)%	(7)%		

In 2021, interest expense and loss on settlement of debt increased by \$25.3 million, or 32%, compared to 2020. The increase was primarily due to a loss on the settlement of term loans of \$16.9 million during the period.

Other income (expense), net

	Years Ended December 31,			2020 to 2021 % change	2019 to 2020 % change
	2021	2020	2019		
	(in thousands, except percentages)				
Other income (expense), net	\$ (535)	\$ 4,209	\$ 5,818	(113)%	(28) %
Percentage of revenue	— %	— %	1 %		

In 2021, other income (expense), net decreased by \$4.7 million, or 113% compared to 2020. The decrease was primarily due to the write-off of an investment in non marketable securities of \$10.0 million, third-party cost incurred for the amendment of term loans of \$3.7 million, and a fair value remeasurement loss of \$2.0 million, which were partially offset by an unrealized gain of \$4.7 million related to marketable equity securities, \$3.9 million in net foreign exchange gains, and a fair value remeasurement gain related to term loan embedded derivative of \$2.0 million.

Provision for (benefit from) Income Taxes

	Years Ended December 31,			2020 to 2021 % change	2019 to 2020 % change
	2021	2020	2019		
	(in thousands, except percentages)				
Provision for (benefit from) income taxes	\$ 10,973	\$ (9,772)	\$ 7,194	(212)%	(236)%
Percentage of revenue	—%	(1)%	1 %		

In 2021, provision for (benefit from) income taxes increased by \$20.7 million, or 212% compared to 2020. The increase was driven by an increase of \$38.0 million due to higher pre-tax income in 2021, an increase of \$15.9 million due to higher valuation allowance, an increase of \$6.0 million due to change in foreign deferred tax rate in 2020, a decrease of \$2.6 million due to foreign loss inclusion, a decrease of \$19.2 million due to excess tax benefit for stock-based compensation, a decrease of \$6.9 million due to higher foreign-derived intangible income deduction, and a decrease of \$12.2 million due to a disallowed deduction for extinguishments of acquisition-related contingent considerations in 2020.

Liquidity and Capital Resources

Since inception, we financed our operations primarily through payments received from business clients using our Software Platform and advertising on our Apps, and from user IAPs from our Apps, and through net proceeds we received from the sales of our convertible preferred stock and of our Class A common stock in our initial public offering and debt borrowings, including borrowings made under our credit agreement. As of December 31, 2021, we had cash and cash equivalents of \$1,520.5 million.

In February 2022, our board of directors authorized a share repurchase program to repurchase \$750.0 million of our Class A common stock over time. The program is effective immediately. We will continuously evaluate efficient alternatives to using cash on hand to fund the program, including accessing the capital markets, subject to market conditions.

We believe that our existing cash and cash equivalents, cash flows from operations, and ability to access capital markets would be sufficient to satisfy our anticipated working capital and capital expenditure needs, including authorized share repurchases, for at least the next 12 months and beyond. Our future capital requirements, however, will depend on many factors, including our growth rate; expansion of sales and marketing activities; timing and extent of spending to support our research and development efforts; capital expenditures to purchase hardware and software; and our continued need to invest in our IT infrastructure to support our growth. In addition, we may enter into additional strategic partnerships as well as agreements to acquire or invest in teams and technologies, including intellectual property rights, which could increase our cash requirements. For example, in 2021, we completed a number of asset and business acquisitions, which reduced our year-end 2021 cash balance by \$1,206.5 million. As a result of these and other factors, we may be required to seek additional equity or debt financing sooner than we currently anticipate. If additional financing from outside sources is required, we may not be able to raise it on terms acceptable to us, or at all. In particular, the recent COVID-19 pandemic has caused a disruption in the global financial markets, which may reduce our ability to access capital and negatively affect our liquidity in the future. If we are unable to raise additional capital when required, or if we cannot expand our operations or otherwise capitalize on our business opportunities because we lack sufficient capital, our business, financial condition, and results of operations could be adversely affected.

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

	Years Ended December 31,		
	2021	2020	2019
	(in thousands)		
Net cash provided by operating activities	\$ 361,851	\$ 222,883	\$ 198,462
Net cash used in investing activities	\$ (1,214,930)	\$ (679,891)	\$ (411,554)
Net cash provided by financing activities	\$ 3,109,546	\$ 377,855	\$ 333,160

Operating Activities

Net cash provided by operating activities was \$361.9 million for 2021, primarily consisting of \$35.3 million of net income, adjusted for certain non-cash items, which included \$431.1 million of amortization, depreciation and write-offs, \$133.2 million of stock-based compensation expense, \$26.3 million of change in operating right of use asset, \$18.2 million of loss on settlement of debt, \$8.8 million of net unrealized gains on fair value remeasurement of financial instruments, and \$12.8 million of amortization of debt issuance costs and discount, partially offset by a net increase in the operating assets and liabilities of \$284.3 million. The net increase in the operating assets and liabilities was primarily driven by an increase in accounts receivable, prepaid expenses and other current assets and decrease in operating lease liabilities partially offset by higher accounts payable and accrued and other liabilities.

Investing Activities

Net cash used in investing activities was \$1,214.9 million for 2021, primarily consisting of \$1,206.5 million related to acquisitions, \$15.0 million in purchases of non-marketable investments and other and \$12.0 million in proceeds from other investing activity.

Financing Activities

Net cash provided by financing activities was \$3,109.5 million for 2021, primarily consisting of \$1,745.2 million of proceeds from issuance of common stock in our initial public offering, net of issuance costs as adjusted for cost reimbursement, \$2,329.1 million of proceeds from debt issuance and \$31.2 million proceeds from exercise of stock awards partially offset by payments for the principal repayment of debt of \$719.8 million, deferred acquisition costs of \$234.1 million and finance leases of \$15.3 million.

Credit Agreement

On August 15, 2018, we entered into a credit agreement with the lenders party thereto and Bank of America, N.A., as administrative agent for the lenders (the credit agreement), which provided for \$820.0 million of senior secured term loans and a \$50.0 million senior secured revolving loan facility. The credit agreement was amended on April 23, 2019 to increase the senior secured term loan facility by \$400.0 million to an aggregate principal amount of \$1.22 billion. The credit agreement was further amended on April 27, 2020 to modify certain negative covenants contained therein. The credit agreement was further amended on May 6, 2020 to increase the senior secured term loan facility by \$300.0 million to an aggregate principal amount of \$1.52 billion. The credit agreement was further amended on October 27, 2020 to add an additional \$541.7 million in aggregate principal amount of revolving commitments and reduce the existing commitments by \$1.7 million, increasing the total revolving commitments to \$590.0 million, reduce the interest rate on the revolving loans, and extend the maturity date of the revolving loans.

The credit agreement was further amended on February 12, 2021 to increase the senior secured term loan facility by \$300.0 million to an aggregate principal amount of \$1.82 billion, to add an additional \$10.0 million in aggregate principal amount of revolving commitments, increasing the total revolving commitments to \$600.0 million and to reduce the interest rate on the incremental term loans issued on May 6, 2020 to have the same interest rate as all other term loans. On March 31, 2021, we borrowed an additional \$250.0 million under our revolving credit facility and in connection with our initial public offering we repaid the entire amount outstanding under this facility. On October 25, 2021, we amended the credit agreement whereby certain additional lenders agreed to provide incremental loans in an aggregate amount of \$1.50 billion.

As of December 31, 2021, our total outstanding indebtedness under the credit agreement was consisting of \$3,272 million of outstanding term loans.

Contractual Obligations

The following table summarizes our contractual obligations as of December 31, 2021:

	Payments Due by Period				
	Total	Less than 1 Year	1-3 Years (in thousands)	3-5 Years	More than 5 years
Long-term debt ⁶	\$ 3,272,273	\$ 25,810	\$ 66,619	\$ 1,751,094	\$ 1,428,750
Deferred acquisition costs ⁷	88,079	88,079	—	—	—
Operating lease commitments ⁸	91,804	21,683	28,798	25,958	15,365
Finance lease commitments ⁹	48,821	23,561	21,400	3,860	—
License asset obligations ¹⁰	26,061	17,374	8,687	—	—
Licensor commitments ¹¹	3,605	2,605	1,000	—	—
Non-cancelable purchase obligations ¹²	262,452	15,465	127,623	119,364	—
Total	<u>\$ 3,793,095</u>	<u>\$ 194,577</u>	<u>\$ 254,127</u>	<u>\$ 1,900,276</u>	<u>\$ 1,444,115</u>

Several of the definitive agreements governing our acquisitions of our Owned Studios and arrangements with Partner Studios provide for payment contingent upon future performance metrics. The table above does not include any amounts related to these obligations. These contingent consideration arrangements include payouts based on a percentage of revenue or profitability metrics, payouts of fixed amounts based on the achievement of certain operating targets, and revenue share arrangements for specific apps, and some of these arrangements do not have a maximum limit of contingent consideration achievable. Because these contingent consideration arrangements are based on the success of relevant Apps and are not guaranteed, we do not expect our results of operations would be materially and adversely effected by the payment of amounts under any such arrangement. The table below presents a summary of the significant contingent consideration arrangements:

Relevant Transaction

Recorded asset acquisition (January 2019)

Contingent Consideration Summary

Future one-time earn-out payments, based on a service agreement, of either \$60.0 million or \$30.0 million per game depending on the nature of the new game App developed, subject to the achievement of a certain monthly revenue milestone in the initial thirty-six months following the launch of a new game App. The term of the service agreement is initially three years, after which time the agreement is terminable by either party upon thirty days' written notice. We are also required to make future one-time earn-out payments, based on a development agreement during the term of six years, of \$10.0 million to each of two additional new game Apps developed, subject to the achievement of the same monthly revenue milestone in the initial thirty-six months following the launch of such game Apps.

Samfinaco Games asset acquisition
(August 2019)

Future earn-out payments for each of the four years from the date of the transaction based on the greater of (i) a predetermined percentage of revenue or (ii) a predetermined percentage of earnings before interest, taxes, depreciation and amortization generated by the acquired game Apps over each such year. We are also required to make future earn-out payments based on performance metrics of the newly developed game Apps which are similar to the performance metrics of the initially acquired mobile game Apps during the four years from the date of the transaction.

⁶ Consists of borrowings under our credit agreement. The table above does not include interest payments which vary based on changes in the interest rate index. See the section titled "Description of Certain Indebtedness" and Note 9 to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for additional information regarding our long-term debt obligations.

⁷ Deferred acquisition costs represent part of the consideration related to games acquired in asset acquisition transactions.

⁸ Consists of non-cancellable commitments for real estate leases and lease of networking equipment colocation space. See Note 8 to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for additional information.

⁹ Consists of payments related to finance leases of networking equipment. One of the leases is under month-to-month lease arrangement with renewal options. The amounts include payments attributable to optional renewal periods if it is reasonably certain that we will exercise such options. See Note 8 to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for additional information.

¹⁰ Represents an obligation related to intellectual property that the Company licenses from a third party.

¹¹ Licensor commitments include minimum guarantee royalty payments due to licensors for use of their mobile game products.

¹² The contractual commitment obligations in the table above are associated with agreements that are enforceable and legally binding.

Asset acquisition (March 2020)	Future earn-out payments based on a predetermined percentage of revenue net of certain direct costs generated by the initially acquired game App, or additional game Apps developed under a service and development agreement, over the term of the agreement, which is initially two years, but which may renew for an additional two-year term.
Asset acquisition (April 2020)	Future earn-out payments for each of the four years from the date of the transaction are based on (i)(a) the revenue generated by the initially acquired game App and any additional game Apps developed under a service and development agreement over the term of four years in excess of (b) a baseline revenue threshold, multiplied by (ii) tiered revenue multiples, up to a cumulative amount of \$45.0 million.
Zenlife asset acquisition (June 2020)	Future earn-out payments for each of the four years from the date of the transaction based on the excess, if any, of revenue generated by the initially acquired game App for such year above the sum of (i) an annual fixed baseline revenue and (ii) the aggregate earn-out payments made in prior years. We are also required to make future earn-out payments for newly developed game Apps determined under the similar approach as for the initially acquired mobile game Apps.
Athena acquisition (November 2020)	Future earn-out payments for each of the four years from the date of the transaction based on (i)(a) the revenue generated by the initially acquired game Apps in each such year in excess of (b) a certain revenue threshold, multiplied by (ii) a predetermined revenue multiple.
Asset acquisition (April 2021)	Future earn-out payments are contingent on the revenue generated by the acquired mobile Apps exceeding a certain revenue threshold, which will be measured and payable (if applicable) each year for four years from the date of the transaction.
Asset acquisition (April 2021)	Future earn-out payments are contingent on the revenue generated by the acquired mobile Apps exceeding a certain revenue threshold, which will be measured and payable (if applicable) each year for four years from the date of the transaction, in addition to a potential one-time earn-out payment of \$50.0 million contingent on the achievement of a certain monthly revenue milestone within the four years following the date of the transaction.
Asset acquisition (June 2021)	Future earn-out payments are contingent on the revenue and/or earnings before interest, taxes, depreciation and amortization ("EBITDA") generated by the acquired mobile Apps exceeding certain thresholds.

For acquisitions of Owned Studios that are accounted for as business combinations, contingent consideration is initially recognized at fair value. For our other transactions, we generally recognize contingent consideration only on the date when the related performance metrics are achieved. See Notes 2 and 6 to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for additional information.

As of December 31, 2021, we had recorded liabilities of \$18.7 million related to uncertain tax positions. Due to uncertainties in the timing of potential tax audits, the timing of the resolution of these positions is uncertain and we are unable to make a reasonable estimate of the timing of payments in individual years particularly beyond 12 months. As a result, this amount is not included in the table above.

In April 2020, we entered into a share purchase agreement with Redemption Games, Inc. (Redemption Games). We purchased a majority of the outstanding common stock of Redemption Games and entered into agreements with the equity holders of Redemption Games that, among other things, provide for call/put rights whereby such holders can elect to require us to purchase all or a portion of their vested securities on a specified date in February of each year from 2022 to 2025 and we can require such holders to sell to us all of their remaining securities on or after February 19, 2025, each for a purchase price per share of the then current fair market value per share of common stock of Redemption Games. Based on the fair market value of the common stock of Redemption Games at December 31, 2021, the purchase price for an exercise in full of such call options would have been \$6.6 million.

Critical Accounting Policies and Estimates

We believe that the following accounting policies involve a high degree of judgment and complexity and are critical to understanding and evaluating our consolidated financial condition and results of our operations. An accounting policy is considered to be critical if it requires judgment on a significant accounting estimate to be made based on assumptions about matters that are uncertain at the time the estimate is made, and if different estimates that reasonably could have been used, or changes in the accounting estimates that are reasonably likely to occur periodically, could materially impact the reported amounts of assets, liabilities, revenue and expenses, and related disclosures in our audited consolidated financial statements. We have based our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Although we believe that the estimates we use are reasonable, due to the inherent uncertainty involved in making those estimates, actual results reported in future periods could differ from those estimates.

We believe that the following critical accounting policies reflect the more significant judgments, estimates and assumptions used in the preparation of our consolidated financial statements. See Note 2 to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for additional information.

Revenue from Contracts with Customers

We generate revenue from two types of customers—Business and Consumer. Business Revenue includes fees paid by mobile app advertisers that use our Software Platform, and revenue generated from the sale of digital advertising inventory of our Apps. Consumer Revenue consists of IAPs made by users within our Apps.

Business Revenue

Our Software Platform provides the technology to match advertisers and third-party owners of digital advertising inventory via auctions at large scale and microsecond-level speeds. The pricing and terms for all mobile advertising arrangements are governed by our terms and conditions and generally stipulate payment terms of 30 days subsequent to the end of the month. The contract is fully cancellable at any time.

For Business Revenue generated through the placement of advertisements on mobile game apps owned by publishers, our performance obligation is to provide an advertiser with access to our Software Platform which facilitates the advertiser's purchase of advertising inventory from publishers. We do not control the advertising inventory prior to its transfer to the advertiser, our customer, because we do not have the substantive ability to direct the use of, nor obtain substantially all of the remaining benefits from, the advertising inventory. We are not primarily responsible for fulfillment and do not have any inventory risk. We are an agent as it relates to the sale of third-party advertising inventory and present revenue on a net basis. The transaction price is the product of either the number of completions of agreed upon actions or advertisements displayed and the contractually agreed upon price per advertising unit with the advertiser less consideration paid or payable to publishers.

Advertisers also purchase the advertising inventory of our Apps either through our Software Platform or through third-party advertising networks. Revenue from the sale of advertising inventory through third-party advertising networks is recognized net of the amounts retained by third-party advertising networks as we are unable to determine the gross amount paid by the advertisers to the third-party advertising networks.

We recognize mobile advertising revenue when the agreed upon action is completed or when the ad is displayed to users, depending on the agreed upon pricing mechanism with an advertiser or third-party advertising network. The number of advertisements delivered and completions of agreed upon actions is determined at the end of each month, which resolves any uncertainty in the transaction price during the reporting period.

Consumer Revenue

IAPs include fees collected from users for the purchase of virtual goods to enhance their gameplay experience. The identified performance obligation is to provide users with the ability to acquire, use, and hold virtual items over the estimated period of time the virtual items are available to the user or until the virtual item is consumed. We categorize our virtual goods as either consumable or durable. Consumable virtual goods represent goods that can be consumed by a specific player action in gameplay; accordingly, we recognize revenue from the sale of consumable virtual goods as the goods are consumed and our performance obligation is satisfied. Durable virtual goods represent goods that are accessible to the user over an extended period of time; accordingly, we recognize revenue from the sale of durable virtual goods ratably over the period of time the goods are available to the user and our performance obligation is satisfied, which is generally the estimated average user life (EAUL). Payment is required at the time of purchase and the purchase price is a fixed amount. Users make IAPs through our distribution partners. The transaction price is equal to the gross amount charged to users because we are the principal in the transaction. IAPs fees are non-refundable. Such payments are initially recorded to deferred revenue.

The EAUL represents our best estimate of the expected life of paying users for the applicable game. The EAUL begins when a user makes a first purchase of durable virtual goods and ends when a user is determined to be inactive. We determine the EAUL on a game-by-game basis. For a newly launched game that has limited playing data, we determine our EAUL based on the EAUL of a game that has sufficiently similar characteristics. We determine the EAUL on a quarterly basis and apply such calculated EAUL to all bookings in the respective quarter. Determining the EAUL is subjective and requires management's judgment. Future playing patterns may differ from historical playing patterns, and therefore the EAUL may change in the future. The EAULs are generally between six and nine months.

We present taxes collected from customers and remitted to governmental authorities on a net basis.

Asset Acquisitions and Business Combinations

We perform an initial test to determine whether substantially all of the fair value of the gross assets transferred are concentrated in a single identifiable asset or a group of similar identifiable assets, such that the acquisition would not represent a business. If that test suggests that the set of assets and activities is a business, we then perform a second test to evaluate whether the assets and activities transferred include inputs and substantive processes that together, significantly contribute to the ability to create outputs, which would constitute a business. If the result of the second test suggests that the acquired assets and activities constitute a business, we account for the transaction as a business combination.

For transactions accounted for as business combinations, we allocate the fair value of acquisition consideration to the tangible assets acquired, liabilities assumed, and intangible assets acquired based on their estimated fair values. Acquisition consideration includes the fair value of any promised contingent consideration. The excess of the fair value of acquisition consideration over the fair values of acquired identifiable assets and liabilities is recorded as goodwill. Contingent consideration is remeasured to its fair value each reporting period with changes in the fair value of contingent consideration recorded in general and administrative expenses. Such valuations require management to make significant estimates and assumptions, especially with respect to intangible assets. Significant estimates and assumptions in valuing certain identifiable intangible assets include, but are not limited to, forecasted revenue and discount rates. Management's estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates. In certain circumstances, the allocations of the excess purchase price are based upon preliminary estimates and assumptions and subject to revision when we receive final information, including appraisals and other analyses. During the measurement period, which is one year from the acquisition date, we may record adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill. Upon the conclusion of the measurement period, any subsequent adjustments are recorded to earnings. Acquisition-related costs are expensed as incurred.

For transactions accounted for as asset acquisitions, the cost, including certain transaction costs, is allocated to the assets acquired on the basis of relative fair values. We generally include contingent consideration in the cost of the assets acquired only when the uncertainty is resolved. We recognize contingent consideration adjustments to the cost of the acquired assets prospectively using the straight-line method over the remaining useful life of the assets. No goodwill is recognized in asset acquisitions.

Services and Development Agreements

We enter into strategic agreements with Partner Studios. We have historically allowed these Partner Studios to continue their operations with a significant degree of autonomy. In some cases, we bought Apps from Partner Studios and entered into service and development agreements whereby Partner Studios provide support in improving existing Apps and developing new Apps. The substantial majority of payments associated with service agreements for existing Apps are expensed to research and development when the services are rendered as the payments primarily relate to developing enhancements for the Apps. Payments for new Apps associated with development agreements are generally made in connection with the development of a particular App, and therefore, we are subject to development risk prior to the release of the App. Accordingly, payments that are due prior to completion of an App are generally expensed to research and development over the development period as the services are incurred. Payments due after completion of an App are generally capitalized and expensed as cost of revenue. See Note 6 to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for additional information.

Software Development Costs

We incur development costs related to internal-use software and the development of Apps. We review software development costs on a quarterly basis to determine if the costs qualify for capitalization. As a result of an agile and iterative development process, the preliminary project stage remains ongoing until just prior to launch, at which time final feature selection occurs. As such, software development costs do not meet the criteria for capitalization and are expensed as incurred to research and development expenses. The software development costs we capitalized during the year ended December 31, 2021 were not material. We did not capitalize any software development costs during the year ended December 31, 2020 and 2019.

Goodwill

Goodwill is allocated to reporting units and tested for impairment on an annual basis during the fourth quarter or more frequently if we believe indicators of impairment exist. Triggering events that may indicate impairment include, but are not limited to, a significant adverse change in customer demand or business climate that could affect the value of goodwill or a significant decrease in expected cash flows. When conducting quantitative annual goodwill impairment assessments, we compare the fair value of its reporting units to their carrying value. If the carrying value of a reporting unit exceeds its fair value, then we record a goodwill impairment. Commencing January 1, 2019, the lesser of (i) the entire amount by which the carrying value of a reporting unit exceeds its fair value or (ii) the carrying value of goodwill allocated to such reporting unit is recorded as an impairment to goodwill. As of December 31, 2021, 2020 and 2019, no impairment of goodwill has been identified.

Intangible Assets

This consists of identifiable intangible assets, primarily Apps, user base, developed technology and intellectual property licenses resulting from acquisitions. Acquired intangible assets are recorded at cost, net of accumulated amortization. Our estimates of useful lives of intangible assets are based on cash flow forecasts which incorporate various assumptions, including forecasted user acquisition costs, user attrition rates and level of user engagement.

Intangible assets also include costs of intellectual property that we license from third parties for use of their content in our game. The licensing agreements include license payments, which are due over the terms of the agreements. We recognize these license payments as a license asset and a license obligation at the fair value on the contract date, based on a discounted cash flow model. The amortization of the licensed asset commences when the game with licensed content is launched and when licensed agreement is executed; and is recorded in cost of revenue on a straight-line method over the remaining license terms or estimated useful life of the game with licensed content, whichever is shorter. The classification of the license obligations between current and long-term is based on the expected timing of the payments to the licensor.

Impairment of Long-Lived Assets

We review long-lived assets for impairment whenever events or changes in circumstances indicate an asset's carrying value may not be recoverable. If such circumstances are present, we assess the recoverability of the long-lived assets by comparing the carrying value to the undiscounted future cash flows associated with the related assets. If the future net undiscounted cash flows are less than the carrying value of the assets, the assets are considered impaired and an expense equal to the amount required to reduce the carrying value of the assets to the estimated fair value is recorded as an impairment of intangible assets in the consolidated statements of operations. Significant judgment is required to estimate the amount and timing of future cash flows and the relative risk of achieving those cash flows. Assumptions and estimates about future values and remaining useful lives are complex and often subjective. They can be affected by a variety of factors, including external factors such as industry and economic trends, and internal factors such as changes in our business strategy and our internal forecasts. For example, if future operating results do not meet current forecasts, we may be required to record future impairment charges for acquired intangible assets. Additional factors which significantly affect future cash flows related to long-lived assets include, but are not limited to, forecasted user acquisition costs, user attrition rates, and level of user engagement. Significant changes in these factors may require us to reassess recoverability of long-lived assets and record impairment. Impairment charges could materially decrease future net income and result in lower asset values on our consolidated balance sheet. There were no material impairment charges recorded for the years ended December 31, 2021, 2020, and 2019.

Stock-Based Compensation

We estimate the fair value of employee stock-based compensation awards on the grant date using the Black-Scholes option pricing model and recognize the grant date fair value as compensation expense on a straight-line basis over the requisite service period. The Black-Scholes option pricing model requires use of various assumptions, including expected option life and expected stock price volatility. We determine the expected option life as the average of the options' contractual term and the options' vesting period. We estimate the options' volatility using volatilities of public companies in a comparable industry, stage of life cycle, and size. We use the straight-line method for recording stock-based compensation expense and recognize forfeitures as they occur.

The following tables summarize the assumptions used in the Black-Scholes option pricing model to determine the fair value of our stock options:

	Year Ended December 31,		
	2021	2020	2019
Weighted-average expected term	5.21	5.94	6.05
Expected volatility	43 %	39 %	43 %
Risk-free interest rate	0.48 %	0.56 %	1.91 %
Dividend yield	0 %	0 %	0 %

Given the absence of a public trading market for our Class A common stock prior to our initial public offering, and in accordance with the American Institute of Certified Public Accountants Accounting and Valuation Guide, *Valuation of Privately-Held Company Equity Securities Issued as Compensation*, our board of directors exercised its reasonable judgment and considered numerous objective and subjective factors to determine the best estimate of fair value of our Class A common stock, including:

- independent third-party valuations of our Class A common stock;
- the price of sales of our Class A common stock and preferred stock in recent secondary sales by existing stockholders to investors;
- our capital resources and financial condition;
- the preferences held by our preferred stock classes relative to those of our Class A common stock;
- the likelihood and timing of achieving a liquidity event, such as an initial public offering or sale of the company, given prevailing market conditions;
- our historical operating and financial performance as well as our estimates of future financial performance;
- valuations of comparable companies;
- the hiring of key personnel;
- the status of our development, product introduction, and sales efforts;
- the price paid by us to repurchase outstanding shares;
- the relative lack of marketability of our Class A common stock;
- industry information such as market growth and volume and macro-economic events; and
- additional objective and subjective factors relating to our business.

Prior to the IPO, in valuing our Class A common stock, our board of directors determined the fair value of our Class A common stock using both the income and market approach valuation methods, in addition to giving consideration to recent secondary sales of our Class A common stock. The income approach estimates value based on the expectation of future cash flows that a company will generate. These future cash flows are discounted to their present values using a discount rate based on our weighted-average cost of capital, and is adjusted to reflect the risks inherent in our cash flows. The market approach estimates value based on a comparison of our company to comparable public companies in a similar line of business. From the comparable companies, a representative market value multiple is determined and then applied to our company's financial forecasts to estimate the value of the subject company.

Following our IPO, the fair value of each equity award grant is determined based on the closing price of our Class A common stock as reported on the Nasdaq Global Select Market on the date of the respective grant.

Income Taxes

We account for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, we determine deferred tax assets and liabilities on the basis of the differences between the financial statement and tax bases of assets and liabilities by using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

We recognize deferred tax assets to the extent that these assets are more likely than not to be realized. In making such a determination, we consider all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax-planning strategies, and results of recent operations. If we determine that we would be able to realize deferred tax assets in the future in excess of their net recorded amount, an adjustment to the deferred tax asset valuation allowance would be made to reduce the provision for income taxes.

We record uncertain tax positions on the basis of a two-step process in which determinations are made (i) whether it is more likely than not that the tax positions will be sustained on the basis of the technical merits of the position and (ii) for

those tax positions that meet the more-likely-than-not recognition threshold, we recognize the largest amount of tax benefit that is more than 50% likely to be realized upon ultimate settlement with a tax authority.

We recognize interest and penalties related to unrecognized tax benefits on the income tax expense line in our consolidated statement of operations. Accrued interest and penalties are included on the related tax liability line in the consolidated balance sheet.

Recent Accounting Pronouncements

See Note 2 to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for recently adopted accounting pronouncements and recently issued accounting pronouncements not yet adopted as of the dates of the statement of financial position included in this Annual Report on 10-K.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risks in the ordinary course of our business, which primarily relate to fluctuations in interest rates.

As of December 31, 2021, we had unrestricted cash and cash equivalents of \$1.52 billion. A hypothetical 10% change in interest rates would not have a material impact on our financial condition or results of operations due to the short-term nature of our cash equivalents.

As of December 31, 2021, we had a debt balance of \$3.27 billion. A hypothetical 50 basis point change in interest rates as of December 31, 2021 would not have a material impact on our consolidated financial statements for the year ended December 31, 2021.

Item 8. Financial Statements and Supplementary Data

APPLOVIN CORPORATION

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of AppLovin Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of AppLovin Corporation and subsidiaries (the "Company") as of December 31, 2021 and 2020, the related consolidated statements of operations, comprehensive income (loss), redeemable noncontrolling interest and stockholders' equity (deficit), and cash flows, for each of the three years in the period ended December 31, 2021, 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, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

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

Acquisitions – Acquisition of Adjust – Forecasted Revenue — Refer to Notes 2 and 6 to the financial statements*Critical Audit Matter Description*

On April 20, 2021, the Company completed the acquisition of adjust GmbH ("Adjust") for a fair value consideration of \$967.8 million. The Company accounted for the acquisition as a business combination. The Company allocated the fair value of acquisition consideration to the tangible assets acquired, liabilities assumed, and intangible assets acquired based on their estimated fair value, including total intangible assets of \$240.0 million, which consisted primarily of \$155.0 million of customer relationships, \$77.0 million of developed technology, and \$8.0 million of tradename. Management estimated the fair value of the intangible assets using the income approach, which is a specific discounted cash flow valuation method.

We identified forecasted revenue used in the determination of fair value of the intangible assets as a critical audit matter because it requires management to make significant estimates and assumptions. This required a high degree of auditor judgment, and an increased extent of effort, when performing audit procedures to evaluate the reasonableness of management's estimates and assumptions related to forecasted revenue.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the forecasted revenue included the following, among others:

- Assessed the reasonableness of forecasted revenue, by comparing it to (1) historical revenue results of the acquired Adjust business, (2) historical and forecasted revenue of peer companies in industry, and (3) communications with the Board of Directors.

/s/ DELOITTE & TOUCHE LLP

San Jose, California
March 11, 2022

We have served as the Company's auditor since 2014.

AppLovin Corporation
Consolidated Balance Sheets
(In thousands, except share and per share data)

	December 31, 2021	December 31, 2020
Assets		
Current assets:		
Cash and cash equivalents	\$ 1,520,504	\$ 317,235
Restricted cash equivalents	1,050,000	—
Accounts receivable, net	514,520	296,964
Prepaid expenses and other current assets	150,040	48,795
Total current assets	3,235,064	662,994
Property and equipment, net	63,608	28,587
Operating lease right-of-use assets	70,975	84,336
Goodwill	966,427	249,773
Intangible assets, net	1,709,347	1,086,332
Other assets	118,158	42,571
Total assets	<u>\$ 6,163,579</u>	<u>\$ 2,154,593</u>
Liabilities, redeemable noncontrolling interest, and stockholders' equity (deficit)		
Current liabilities:		
Accounts payable	\$ 258,220	\$ 147,275
Accrued liabilities	133,770	95,057
Licensed asset obligation	17,374	18,760
Short-term debt	25,810	15,210
Deferred revenue	78,930	86,886
Operating lease liabilities	18,392	22,206
Deferred acquisition costs, current	107,601	212,658
Total current liabilities	640,097	598,052
Non-current liabilities:		
Long-term debt	3,201,834	1,583,990
Operating lease liabilities, non-current	62,498	71,755
Licensed asset obligation, non-current	8,039	—
Other non-current liabilities	112,820	59,032
Total liabilities	4,025,288	2,312,829
Commitments and Contingencies (Note 5)		
Redeemable noncontrolling interest	201	309
Stockholders' equity (deficit):		
Convertible preferred stock, 100,000,000 and 109,090,908 shares authorized, nil and 109,090,908 shares issued and outstanding as of December 31, 2021 and 2020; respectively	—	399,589
Class A Class B and Class F common stock, \$0.00003 par value—1,700,000,000 (Class A 1,500,000,000, Class B 200,000,000, Class F nil) and 429,600,000 (Class A 386,400,000, Class B nil, Class F 43,200,000) shares authorized, 375,089,360 (Class A 296,426,738, Class B 78,662,622, Class F nil) and 226,364,401 (Class A 183,800,251, Class B nil, Class F 42,564,150) shares issued and outstanding as of December 31, 2021 and 2020, respectively	11	7
Additional paid-in capital	3,160,487	453,655
Accumulated other comprehensive income (loss)	(45,454)	604
Accumulated deficit	(976,954)	(1,012,400)
Total stockholders' equity (deficit)	2,138,090	(158,545)
Total liabilities, redeemable noncontrolling interest, and stockholders' equity (deficit)	<u>\$ 6,163,579</u>	<u>\$ 2,154,593</u>

See Accompanying Notes to Consolidated Financial Statements.

AppLovin Corporation
Consolidated Statements of Operations
(In thousands, except share and per share data)

	Years ended December 31,		
	2021	2020	2019
Revenue	\$ 2,793,104	\$ 1,451,086	\$ 994,104
Costs and expenses:			
Cost of revenue	988,095	555,578	241,274
Sales and marketing	1,129,892	627,796	481,781
Research and development	366,402	180,652	44,966
General and administrative	158,699	66,431	31,712
Lease modification and abandonment of leasehold improvements	—	7,851	—
Extinguishments of acquisition-related contingent consideration	—	74,820	—
Total costs and expenses	2,643,088	1,513,128	799,733
Income (loss) from operations	150,016	(62,042)	194,371
Other income (expense):			
Interest expense and loss on settlement of debt	(103,170)	(77,873)	(73,955)
Other income (expense), net	(535)	4,209	5,818
Total other expense	(103,705)	(73,664)	(68,137)
Income (loss) before income taxes	46,311	(135,706)	126,234
Provision for (benefit from) income taxes	10,973	(9,772)	7,194
Net income (loss)	35,338	(125,934)	119,040
Add: Net loss attributable to noncontrolling interest	108	747	—
Net income (loss) attributable to AppLovin	\$ 35,446	\$ (125,187)	\$ 119,040
Less: Net income attributable to participating securities	(3,743)	—	(42,664)
Net income (loss) attributable to common stock—Basic	\$ 31,703	\$ (125,187)	\$ 76,376
Net income (loss) attributable to common stock—Diluted	\$ 31,879	\$ (125,187)	\$ 76,561
Net income (loss) per share attributable to common stockholders:			
Basic	\$ 0.10	\$ (0.58)	\$ 0.36
Diluted	\$ 0.09	\$ (0.58)	\$ 0.36
Weighted average common shares used to compute net income (loss) per share attributable to common stockholders:			
Basic	324,836,076	214,936,545	210,937,147
Diluted	342,763,632	214,936,545	212,365,429

See Accompanying Notes to Consolidated Financial Statements.

AppLovin Corporation
Consolidated Statements of Comprehensive Income (Loss)
(In thousands)

	Years ended December 31,		
	2021	2020	2019
Net income (loss)	\$ 35,338	\$ (125,934)	\$ 119,040
Other comprehensive income (loss), net of tax			
Foreign currency translation gain (loss), net of tax effect of \$12.4 million, nil and nil, respectively	(46,058)	579	(11)
Interest rate swap gain (loss), net of tax effect of nil, \$1.7 million and \$0.4 million, respectively	—	4,165	(1,511)
Total other comprehensive income (loss)	(46,058)	4,744	(1,522)
Add: Net loss attributable to noncontrolling interest	108	747	—
Total comprehensive loss attributable to AppLovin	<u>\$ (10,612)</u>	<u>\$ (120,443)</u>	<u>\$ 117,518</u>

See Accompanying Notes to Consolidated Financial Statements.

AppLovin Corporation
Consolidated Statements of Redeemable Noncontrolling Interest and Stockholders' Equity (Deficit)
(In thousands, except share data)

	Redeemable Noncontrolling Interest	Convertible Preferred Stock		Class A, Class B, and Class F Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity (Deficit)
		Shares	Amount	Shares	Amount				
Balance as of December 31, 2020	\$ 309	109,090,908	\$399,589	226,364,401	\$ 7	\$ 453,655	\$ 604	\$ (1,012,400)	\$ (158,545)
Exercises and vesting of early exercised Class A common stock equity grants	—	—	—	4,326,297	—	29,761	—	—	29,761
Repurchase of Class A common stock	—	—	—	(604,509)	—	—	—	—	—
Exercise of warrant, net of shares withheld	—	—	—	6,229,081	—	—	—	—	—
Conversion of convertible securities to Class A common stock	—	—	—	7,050,049	—	392,170	—	—	392,170
Issuance of Class A common stock	—	—	—	90,830	—	2,503	—	—	2,503
Issuance of Class A common stock in connection with initial public offering, net of offering costs, underwriting discounts and commissions	—	—	—	22,500,000	1	1,747,970	—	—	1,747,971
Conversion of preferred stock to common stock in connection with initial public offering	—	(109,090,908)	(399,589)	109,090,908	3	399,586	—	—	—
Issuance of common stock under employee stock purchase plan	—	—	—	42,303	—	2,877	—	—	2,877
Stock-based compensation	—	—	—	—	—	131,965	—	—	131,965
Other comprehensive loss, net	—	—	—	—	—	—	(46,058)	—	(46,058)
Net income (loss)	(108)	—	—	—	—	—	—	35,446	35,446
Balance as of December 31, 2021	\$ 201	—	\$ —	375,089,360	\$ 11	\$3,160,487	\$ (45,454)	\$ (976,954)	\$ 2,138,090

See Accompanying Notes to Consolidated Financial Statements.

AppLovin Corporation
Consolidated Statements of Redeemable Noncontrolling Interest and Stockholders' Equity (Deficit)
(In thousands, except share data)

	Redeemable Noncontrolling Interest	Convertible Preferred Stock		Class A, Class B, and Class F Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity (Deficit)
		Shares	Amount	Shares	Amount				
Balance as of December 31, 2019	\$ —	109,090,908	\$399,589	220,157,922	\$ 7	\$ 235,190	\$ (4,140)	\$ (887,213)	\$ (256,567)
Exercises and vesting of early exercised Class A common stock options	—	—	—	3,559,168	—	2,303	—	—	2,303
Repurchase of unvested Class A common stock related to early exercised stock options	—	—	—	(425,001)	—	—	—	—	—
Repurchase of Class A common stock	—	—	—	(249,000)	—	(1,766)	—	—	(1,766)
Issuance of common stock warrants and options in connection with an acquisition	—	—	—	—	—	39,040	—	—	39,040
Issuance of Class A common stock in connection with acquisitions	—	—	—	2,479,996	—	106,133	—	—	106,133
Issuance of common stock warrants in connection with lease modification	—	—	—	—	—	433	—	—	433
Issuance of Class A common stock	—	—	—	764,472	—	9,318	—	—	9,318
Issuance of Class A common stock in exchange for noncontrolling equity interest	(1,500)	—	—	76,844	—	1,500	—	—	1,500
Acquisition of noncontrolling interest	2,556	—	—	—	—	—	—	—	—
Stock-based compensation	—	—	—	—	—	61,504	—	—	61,504
Other comprehensive income, net	—	—	—	—	—	—	4,744	—	4,744
Net loss	(747)	—	—	—	—	—	—	(125,187)	(125,187)
Balance as of December 31, 2020	\$ 309	109,090,908	\$399,589	226,364,401	\$ 7	\$ 453,655	\$ 604	\$ (1,012,400)	\$ (158,545)

See Accompanying Notes to Consolidated Financial Statements.

AppLovin Corporation
Consolidated Statements of Redeemable Noncontrolling Interest and Stockholders' Equity (Deficit)
(In thousands, except share data)

	Redeemable Noncontrolling Interest	Convertible Preferred Stock		Class A, Class B, and Class F Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity (Deficit)
		Shares	Amount	Shares	Amount				
Balance as of December 31, 2018	\$ —	109,090,908	\$ 399,589	178,446,087	\$ 5	\$ 230,922	\$ (2,618)	\$ (1,006,253)	\$ (378,355)
Exercises and vesting of early exercised Class A common stock equity grants	—	—	—	6,771,873	1	2,939	—	—	2,940
Repurchase of unvested Class A common stock related to early exercised stock options	—	—	—	(8,595)	—	(11)	—	—	(11)
Repurchase of Class A common stock	—	—	—	(2,775,000)	—	(9,074)	—	—	(9,074)
Issuance of Class A common stock in connection with acquisitions	—	—	—	3,267,792	—	192	—	—	192
Repurchase of unvested restricted stock awards	—	—	—	(360,552)	—	—	—	—	—
Exercise of warrant	—	—	—	34,816,317	1	—	—	—	1
Stock-based compensation	—	—	—	—	—	10,222	—	—	10,222
Other comprehensive loss, net	—	—	—	—	—	—	(1,522)	—	(1,522)
Net income	—	—	—	—	—	—	—	119,040	119,040
Balance as of December 31, 2019	\$ —	109,090,908	\$ 399,589	220,157,922	\$ 7	\$ 235,190	\$ (4,140)	\$ (887,213)	\$ (256,567)

See Accompanying Notes to Consolidated Financial Statements.

AppLovin Corporation
Consolidated Statements of Cash Flows
(In thousands)

	Years Ended December 31,		
	2021	2020	2019
Operating Activities			
Net income (loss)	\$ 35,338	\$ (125,934)	\$ 119,040
Adjustments to reconcile net income (loss) to operating activities:			
Amortization, depreciation and write-offs	431,063	254,951	92,806
Amortization of debt issuance costs and discount	12,825	8,152	4,979
Stock-based compensation	133,177	62,387	10,222
Change in operating right-of-use asset	26,313	9,333	2,602
Lease modification and abandonment of leasehold improvements	—	7,851	—
Loss on extinguishments of acquisition related contingent consideration	—	74,820	—
Change in fair value of contingent consideration	(230)	442	—
Loss on settlement of debt	18,236	—	—
Net unrealized gains on fair value remeasurement of financial instruments	(8,841)	(4,180)	—
Net loss (gain) on foreign currency remeasurement	(1,734)	2,097	14
Changes in operating assets and liabilities:			
Accounts receivable	(201,948)	(113,234)	(33,524)
Prepaid expenses and other current assets	(97,324)	(13,289)	(19,867)
Other assets	(45,938)	(19,092)	(1,485)
Accounts payable	98,612	49,120	13,534
Operating lease liabilities	(26,854)	(8,812)	(2,242)
Accrued and other liabilities	3,063	2,783	5,661
Deferred revenue	(13,907)	35,488	6,722
Net cash provided by operating activities	361,851	222,883	198,462
Investing Activities			
Purchase of property and equipment	(1,390)	(3,241)	(3,358)
Acquisitions, net of cash acquired	(1,206,482)	(674,650)	(404,196)
Purchase of non-marketable investments and other	(15,000)	(2,000)	(4,000)
Proceeds from other investing activities	12,009	—	—
Capitalized software development costs	(4,067)	—	—
Net cash used in investing activities	(1,214,930)	(679,891)	(411,554)
Financing Activities			
Proceeds from issuance of common stock in initial public offering, net of issuance costs as adjusted for cost reimbursement	1,745,228	—	—
Proceeds from debt issuance, net of issuance costs	2,329,059	481,273	388,859
Payments of debt principal	(719,810)	(64,295)	(11,208)
Payments of finance leases	(15,271)	(9,708)	(5,663)
Proceeds from exercise of stock options	31,156	2,303	2,637
Proceeds from issuance of common stock	—	9,318	—
Proceeds from the issuance of common stock under the Employee Stock Purchase Plan	2,877	—	—
Payments of deferred acquisition costs	(234,068)	(17,586)	(41,454)
Payments of licensed asset obligation	(17,970)	(18,940)	—
Payments of related party notes	(11,655)	—	—
Repurchases of common stock	—	(1,766)	(11)
Payments of deferred IPO costs	—	(2,744)	—
Net cash provided by financing activities	3,109,546	377,855	333,160
Effect of foreign exchange rate on cash, cash equivalents and restricted cash equivalents	(3,198)	141	60
Net increase (decrease) in cash, cash equivalents and restricted cash equivalents	2,253,269	(79,012)	120,128
Cash, cash equivalents and restricted cash equivalents at beginning of the period	317,235	396,247	276,119
Cash, cash equivalents and restricted cash equivalents at end of the period	\$ 2,570,504	\$ 317,235	\$ 396,247

See Accompanying Notes to Consolidated Financial Statements.

AppLovin Corporation
Consolidated Statement of Cash Flows
(In thousands)

	Years Ended December 31,		
	2021	2020	2019
Supplemental non-cash investing and financing activities disclosures:			
Conversion of convertible securities to Class A common stock	\$ 392,170	\$ —	\$ —
Issuance of convertible securities related to acquisitions	\$ 342,170	\$ 45,000	\$ —
Acquisitions not yet paid	\$ 79,095	\$ 94,758	\$ —
Assets acquired not yet paid	\$ 25,640	\$ —	\$ —
Assets acquired under finance leases	\$ 20,497	\$ 7,475	\$ 3,061
Settlement of bonus compensation through issuance of common stock	\$ 2,503	\$ —	\$ —
Acquisition of business through issuance of common stock and common stock warrants	\$ —	\$ 38,167	\$ 192
Settlement of contingent consideration through issuance of common stock	\$ —	\$ 31,422	\$ —
Deferred IPO costs not yet paid	\$ —	\$ 888	\$ —
Accretion of interest on related party promissory notes	\$ 595	\$ 553	\$ 48
Common stock issued in exchange for redeemable noncontrolling interest	\$ —	\$ 1,500	\$ —
Repurchases of common stock from related parties financed by promissory notes	\$ —	\$ —	\$ 9,074
Interest expense offset by non-cash financing activities	\$ —	\$ —	\$ 3,549
Common stock warrant issued in connection with lease modification	\$ —	\$ 433	\$ —
Supplemental disclosure of cash flow information:			
Cash paid for income taxes	\$ 90,616	\$ 12,666	\$ 30,474
Cash paid for interest on debt	\$ 76,695	\$ 59,360	\$ 62,278

See Accompanying Notes to Consolidated Financial Statements.

APPROVIN CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Description of Business

AppLovin Corporation (the “Company” or “AppLovin” or “we”) was incorporated in the state of Delaware on July 18, 2011. The Company is a leader in the mobile app industry with a focus on building a software-based platform for mobile app developers to improve the marketing and monetization of their apps. The Company also has a globally diversified portfolio of apps—free-to-play mobile games that it operates through its own or partner studios.

The Company's operations are headquartered in Palo Alto, California, and has several operating locations in the U.S. as well as various international office locations in North America, Asia and Europe.

Initial Public Offering and Capital Structure Change

The Company's registration statement on Form S-1 (the “IPO Registration Statement”) related to its IPO was declared effective on April 14, 2021, and the Company's Class A common stock began trading on the Nasdaq Global Select Market on April 15, 2021. On April 19, 2021, the Company completed its IPO, in which the Company sold 22,500,000 shares of Class A common stock at price to the public of \$80.00 per share. The Company received aggregate net proceeds of \$1.75 billion after deducting underwriting discounts and commissions of \$47.2 million and offering expenses of \$7.9 million subject to certain cost reimbursements. KKR Capital Markets LLC (“KKR Capital Markets”) was an underwriter for the IPO and is an affiliate of KKR Denali Holdings L.P. (“KKR Denali”), who is a principal stockholder of the Company. The Company used \$400.0 million of the net proceeds from the IPO to repay the entire outstanding amount under the revolving credit facility (See Note 9). KKR Capital Markets is a lender under the revolving credit facility and an affiliate of KKR Denali, a principal stockholder of the Company.

Following the effectiveness of the IPO Registration Statement, the Company filed its Amended and Restated Certificate of Incorporation, which became effective immediately prior to the closing of the IPO (the “IPO Certificate”). The IPO Certificate authorizes a total of 1,500,000,000 shares of Class A common stock, 200,000,000 shares of Class B common stock, 150,000,000 shares of Class C common stock, and 100,000,000 shares of preferred stock. Upon the filing and effectiveness of the IPO Certificate, all shares of Class F common stock and Series A convertible preferred stock then outstanding automatically converted into the equivalent number of shares of Class A common stock, respectively (the “Capital Stock Conversions”). Following the Capital Stock Conversions and immediately prior to the completion of the IPO, a total of 150,307,622 shares of Class A common stock held by Adam Foroughi, the Company's co-founder, CEO, and Chairperson; Herald Chen, the Company's President, Chief Financial Officer, and a member of the Company's board of directors; and KKR Denali (collectively with certain affiliates, the Class B Stockholders) were exchanged for an equivalent number of shares of Class B common stock pursuant to the terms of certain exchange agreements.

2. Summary of Significant Accounting Policies

Principles of Consolidation—The accompanying consolidated financial statements have been prepared in conformity with U.S. generally accepted accounting principles (“GAAP”). Consolidated financial statements include accounts and operations of the Company and its subsidiaries in which the Company has a controlling financial interest. In accordance with the provisions of Accounting Standards Codifications (“ASC”) 810, the Company consolidates any variable interest entities (“VIE”) where it is the primary beneficiary. The Company engages in business relationships with certain entities in the ordinary course of business to develop game Apps. The typical condition for a controlling financial interest ownership is holding a majority of the voting interests of an entity; however, a controlling financial interest may also exist in entities, such as VIEs, through arrangements that do not involve controlling voting interests. ASC 810 requires a variable interest holder to consolidate a VIE if that party has the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and has the obligation to absorb losses of the VIE that could potentially be significant to the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. We do not consolidate a VIE in which we have a majority ownership interest when we are not considered the primary beneficiary. The Company evaluates its relationships with all VIEs on an ongoing basis. All intercompany transactions and balances have been eliminated upon consolidation.

Use of Estimates—The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported and disclosed in the consolidated financial statements and accompanying notes. Actual results could differ materially from these estimates. On an ongoing basis, the Company evaluates its estimates, including those related to fair values of intangible assets and goodwill, useful lives of intangible assets and property and equipment, expected period of consumption of virtual goods, expected life of paying users, income and indirect taxes, contingent liabilities, evaluation of recoverability of intangible assets and long-lived assets, goodwill impairment, and fair value of derivatives and other financial instruments among others. The Company bases its estimates on assumptions, both historical and forward-looking, that are believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities.

Risk and Uncertainties—The Company is subject to risks and uncertainties, including, but not limited to, as a result of the warfare in Ukraine and related sanctions against Russia, as well as, the COVID-19 pandemic. As of the issuance date of these consolidated financial statements, the Company's results of operations have not been materially impacted. However, the future impact of these events remains uncertain as the response to and information related to these events is rapidly evolving. Economies worldwide have been negatively impacted by the COVID-19 pandemic and the events in the Ukraine and Russia are expected to have a further impact on the global economy. A weakened global economy may negatively impact in-app purchasing decisions and consumer buying decisions across the globe generally, which could adversely affect advertiser activity. The full impact of these events on the global economy and the extent to which these events may impact the Company's business, financial condition, and results of operations in the future remains uncertain. The severity of the impact of the war in Ukraine, Russian sanctions and the COVID-19 pandemic on the Company's business will depend on a number of factors, including, but not limited to, the duration and severity of these events and the extent and severity of the impact on the Company's customers, all of which are uncertain and cannot be predicted. The Company's future results of operations and liquidity could be adversely impacted by delays in payments of outstanding receivable amounts beyond normal payment terms and uncertain demand.

Revenue from Contracts with Customers—The Company generates Business and Consumer revenue. Business Revenue includes fees paid by mobile app advertisers that use the Company's software platform ("Software Platform"), and revenue generated from the sale of digital advertising inventory of the Company's apps ("Apps"). Consumer Revenue consists of mobile in-app purchases ("IAPs") made by users within Apps.

Business Revenue

The Software Platform provides the technology to match advertisers and third-party owners of digital advertising inventory ("Publishers") via auctions at large scale and microsecond-level speeds. The pricing and terms for all mobile advertising arrangements are governed by the Company's terms and conditions and generally stipulate payment terms of 30 days subsequent to the end of the month. The contract is fully cancellable at any time.

For Business Revenue generated through placement of advertisements on mobile applications owned by Publishers, the Company's performance obligation is to provide an advertiser with access to the Software Platform which facilitates the advertiser's purchase of advertising inventory from Publishers. The Company does not control the advertising inventory prior to its transfer to the advertiser, the Company's customer, because the Company does not have the substantive ability to direct the use of, nor obtain substantially all of the remaining benefits from the advertising inventory. The Company is not primarily responsible for fulfillment and does not have any inventory risk. The Company is an agent as it relates to the sale of third-party advertising inventory and presents revenue on a net basis. The transaction price is the product of either the number of completions of agreed upon actions or advertisements displayed and the contractually agreed upon price per advertising unit with the advertiser less consideration paid or payable to Publishers.

Advertisers purchase Apps advertising inventory either through the Software Platform or through third-party advertising networks ("Ad Networks"). Revenue from the sale of advertising inventory through Ad Networks is recognized net of the amounts retained by Ad Networks as the Company is unable to determine the gross amount paid by the advertisers to Ad Networks.

The Company recognizes mobile advertising revenue when the agreed upon action is completed or when the ad is displayed to users, depending on the agreed upon pricing mechanism with an advertiser or Ad Network. The number of advertisements delivered and completions of agreed upon actions is determined at the end of each month, which resolves any uncertainty in the transaction price during the reporting period.

Consumer Revenue

IAPs include fees collected from users for the purchase of virtual goods to enhance their gameplay experience. The identified performance obligation is to provide users with the ability to acquire, use, and hold virtual items over the estimated period of time the virtual items are available to the user or until the virtual item is consumed. The Company categorizes its virtual goods as either consumable or durable. Consumable virtual goods represent goods that can be consumed by a specific player action in gameplay; accordingly, the Company recognizes revenue from the sale of consumable virtual goods as the goods are consumed and the Company's performance obligation is satisfied. Durable virtual goods represent goods that are accessible to the user over an extended period of time; accordingly, the Company recognizes revenue from the sale of durable virtual goods ratably over the period of time the goods are available to the user and the Company's performance obligation is satisfied, which is generally the estimated average user life ("EAUL"). Payment is required at the time of purchase and the purchase price is a fixed amount. Users make IAPs through the Company's distribution partners. The transaction price is equal to the gross amount charged to users because the Company is the principal in the transaction. IAPs fees are non-refundable. Such payments are initially recorded to deferred revenue.

The EAUL represents the Company's best estimate of the expected life of paying users for the applicable game. The EAUL begins when a user makes a first purchase of durable virtual goods and ends when a user is determined to be inactive. The Company determines the EAUL on a game-by-game basis. For a newly launched game that has limited

playing data, the Company determines its EAUL based on the EAUL of a game that has sufficiently similar characteristics. The Company determines the EAUL on a quarterly basis and applies such calculated EAUL to all bookings in the respective quarter. Determining the EAUL is subjective and requires management's judgment. Future playing patterns may differ from historical playing patterns, and therefore the EAUL may change in the future. The EAULs are generally between six and nine months.

The Company presents taxes collected from customers and remitted to governmental authorities on a net basis.

Disaggregation of Revenue

The following table present revenue disaggregated by type (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Business Revenue—Software Platform	\$ 673,952	207,285	\$ 198,305
Business Revenue—Apps	660,557	503,867	397,643
Total Business Revenue	1,334,509	711,152	595,948
Consumer Revenue	1,458,595	739,934	398,156
Total Revenue	\$ 2,793,104	\$ 1,451,086	\$ 994,104

Revenue disaggregated by geography, based on user location, consists of the following (in thousands):

	Year Ended December 31,		
	2021	2020	2019
United States	\$ 1,687,080	\$ 895,987	\$ 622,051
Rest of the World	1,106,024	555,099	372,053
Total Revenue	\$ 2,793,104	\$ 1,451,086	\$ 994,104

Contract Balances

Contract liabilities consist of deferred revenue and include payments received in advance of the satisfaction of performance obligations. During the years ended December 31, 2021 and 2020, the Company recognized \$86.9 million and \$8.2 million of revenue that was included in deferred revenue as of December 31, 2020 and 2019, respectively.

Unsatisfied Performance Obligations

All of the Company's unsatisfied performance obligations relate to contracts with an original expected length of one year or less.

Cash and Cash Equivalents—Cash and cash equivalents primarily consist of cash on deposit with banks and investments in money market funds with maturities of 90 days or less from the date of purchase.

Restricted Cash Equivalents—The Company classifies cash equivalents that are legally or contractually restricted for withdrawal or usage as restricted cash equivalents. Restricted cash equivalents as of December 31, 2021 consisted of investments in certain money market fund of funds held in an escrow account related to the MoPub acquisition, which was closed in January 2022.

Accounts Receivable, net—The Company records accounts receivable at the invoiced amount, maintains an allowance for doubtful accounts to reserve for potentially uncollectible receivables, and reviews accounts receivable periodically to identify specific customers with known disputes or collectability issues. As of December 31, 2021 and 2020, the allowance for doubtful accounts was not material.

Derivatives—The Company accounts for derivative instruments at fair value. Interest rate swaps may qualify as cash flow hedges. Changes in the interest rate swaps that qualify as cash flow hedges are recorded within accumulated other comprehensive income (loss). Amounts recorded within accumulated other comprehensive income (loss) are reclassified to earnings in a manner that matches the earnings impact of the hedged interest expense. The Company's policy for classifying cash flows from derivatives is to report the cash flows consistent with the underlying hedged item.

Fair Value of Financial Instruments—The Company uses a three-tier fair value hierarchy to classify and disclose all assets and liabilities measured at fair value on a recurring basis, as well as assets and liabilities measured at fair value on a non-recurring basis, in periods subsequent to their initial measurement. The hierarchy requires the Company to use observable inputs when available, and to minimize the use of unobservable inputs when determining fair value. The three tiers are defined as follows:

Level 1—Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2—Inputs other than quoted prices included in Level 1 that are observable either directly or indirectly.

Level 3—Unobservable inputs of which there is little or no market data, which require the Company to develop its own assumptions.

Concentration of Credit Risk and Uncertainties—The Company's financial instruments that are exposed to concentrations of credit risk consist primarily of cash, cash equivalents, restricted cash equivalents and accounts receivable. The Company places its cash deposits with large, reputable financial institutions. As of December 31, 2021 and 2020, the Company maintained cash balances in excess of the Federal Deposit Insurance Corporation ("FDIC") insured limits. Cash equivalents consist of money market funds that are composed of U.S. Treasury and U.S. Government securities.

The Company's accounts receivable balance is derived from both domestic and international sales. The Company reviews its exposure to accounts receivable credit risk and generally requires no collateral for its accounts receivable.

The Company uses various distribution partners to collect and remit payments from users of Apps for virtual goods. As of December 31, 2021, two distribution partners accounted for 10% of the accounts receivable, net. As of December 31, 2020, two distribution partners accounted for 20% and 13% of the accounts receivable, net.

No individual customer accounted for 10% or more of the Company's accounts receivable or revenue during the years ended December 31, 2021, 2020 and 2019.

Property and Equipment, net—Property and equipment are stated at cost, net of accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful lives of the assets, which is as follows:

	Useful Life
Computer equipment	3-5 years
Software and licenses	3 years
Furniture and fixtures	3-5 years
Leasehold improvements	Over the shorter of useful life (up to 10 years) or lease term

When assets are retired or otherwise disposed of, the cost and accumulated depreciation and amortization are removed from the accounts and any resulting gain or loss is reflected in operations in the period realized. Maintenance and repairs are charged to operations as incurred.

Leases—Leases consist of real estate property, network and other equipment. The Company determines if an arrangement is or contains a lease at inception. Operating and finance lease right-of-use assets and liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term. Lease payments consist primarily of the fixed payments under the arrangement, less any lease incentives. The Company generally use an incremental borrowing rate estimated based on the information available at the lease commencement date to determine the present value of lease payments, unless the implicit rate is readily determinable. Operating lease costs are recognized on a straight-line basis over the lease terms. Finance lease assets are amortized on a straight-line basis over the shorter of the estimated useful lives of the assets or the lease terms.

The Company accounts for lease and non-lease components as a single lease component of contracts for real estate property leases and does not recognize right-of-use assets and lease liabilities for leases with a term of 12 months or less. Generally, the lease term is based on non-cancelable lease term when determining the lease assets and liabilities. The lease terms may include periods under options to extend or terminate the lease when it is reasonably certain that we will exercise that option. Payments under our lease arrangements are primarily fixed, however, certain lease agreements contain variable payments, which are expensed as incurred and not included in the lease right-of-use assets and liabilities. Variable lease payments are primarily comprised of real estate taxes, common area maintenance, and insurance.

Deferred Offering Costs—Deferred offering costs, which consist primarily of accounting, legal and other fees directly attributable to the Company's initial public offering ("IPO"), are capitalized in other assets on the Company's consolidated balance sheets. Upon the completion of an IPO, the deferred offering costs are presented in stockholders' equity as a reduction of the IPO proceeds. As of December 31, 2021 and 2020, deferred offering costs included in other assets on the Company's consolidated balance sheets were nil and \$3.6 million, respectively.

Segment Reporting—The Company's chief operating decision-maker is the Chief Executive Officer who makes resource allocation decisions and assesses performance based on financial information presented on a consolidated basis. There are no segment managers who are held accountable by the chief operating decision-maker, or anyone else, for operations, operating results, and planning for levels or components below the consolidated unit level. Accordingly, the Company has a single reportable and operating segment structure.

Asset Acquisitions and Business Combinations—The Company performs an initial test to determine whether substantially all of the fair value of the gross assets transferred are concentrated in a single identifiable asset or a group of similar identifiable assets, such that the acquisition would not represent a business. If that test suggests that the set of assets and activities is a business, the Company then performs a second test to evaluate whether the assets and activities transferred include inputs and substantive processes that together, significantly contribute to the ability to create outputs, which would constitute a business. If the result of the second test suggests that the acquired assets and activities constitute a business, the Company accounts for the transaction as a business combination.

For transactions accounted for as business combinations, the Company allocates the fair value of acquisition consideration to the tangible assets acquired, liabilities assumed, and intangible assets acquired based on their estimated fair value. Acquisition consideration includes the fair value of any promised contingent consideration. The excess of the fair value of acquisition consideration over the fair value of identifiable assets acquired and liabilities assumed is recorded as goodwill. Contingent consideration is remeasured to its fair value each reporting period with changes in the fair value of contingent consideration recorded in general and administrative expenses. Such valuations require management to make significant estimates and assumptions, especially with respect to intangible assets. Significant estimates and assumptions in valuing certain identifiable intangible assets include, but are not limited to, forecasted revenue and discount rates. Management's estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable, and as a result, actual results may differ from estimates. In certain circumstances, the allocations of the excess purchase price are based upon preliminary estimates and assumptions and subject to revision when the Company receives final information, including appraisals and other analyses. During the measurement period, which is one year from the acquisition date, the Company may record adjustments to the assets acquired and liabilities assumed with the corresponding offset to goodwill. Upon the conclusion of the measurement period, any subsequent adjustments are recorded to earnings. Acquisition-related costs are expensed as incurred.

For transactions accounted for as asset acquisitions, the cost, including certain transaction costs, is allocated to the assets acquired on the basis of relative fair values. The Company generally includes contingent consideration in the cost of the assets acquired only when the uncertainty is resolved. The Company recognizes contingent consideration adjustments to the cost of the acquired assets prospectively using the straight-line method over the remaining useful life of the assets. No goodwill is recognized in asset acquisitions.

Services and Development Agreements—The Company enters into strategic agreements with mobile gaming studios ("Partner Studios"). The Company has historically allowed these Partner Studios to continue their operations with a significant degree of autonomy. In some cases, the Company bought Apps from Partner Studios and entered into service and development agreements whereby Partner Studios provide support in improving existing Apps and developing new Apps. The substantial majority of payments associated with service agreements for existing Apps are expensed to research and development when the services are rendered as the payments primarily relate to developing enhancements for the Apps. Payments for new Apps associated with development agreements are generally made in connection with the development of a particular App, and therefore, the Company is subject to development risk prior to the release of the App. Accordingly, payments that are due prior to completion of an App are generally expensed to research and development over the development period as the services are incurred. Payments due after completion of an App are generally capitalized and expensed as cost of revenue. See Note 6, "Acquisitions" for additional information.

Software Development Costs—The Company incurs development costs related to internal-use software and the development of Apps. The Company reviews software development costs on a quarterly basis to determine if the costs qualify for capitalization. The Company typically follows an agile and iterative development process. As a result, the preliminary project stage remains ongoing until just prior to launch, at which time final feature selection occurs. As such, software development costs do not meet the criteria for capitalization and are expensed as incurred to research and development expenses. The software development costs the Company capitalized during the year ended December 31, 2021 were not material. The Company did not capitalize any software development costs during the years ended December 31, 2020 and December 31, 2019.

Goodwill—Goodwill is allocated to reporting units and tested for impairment on an annual basis during the fourth quarter, or more frequently if the Company believes indicators of impairment exist. Triggering events that may indicate impairment include, but are not limited to, a significant adverse change in customer demand or business climate that could affect the value of goodwill or a significant decrease in expected cash flows. When conducting quantitative annual goodwill impairment assessments, the Company compares the fair value of its reporting units to their carrying value. If the carrying value of a reporting unit exceeds its fair value, then the Company records a goodwill impairment. The lesser of (i) the entire amount by which the carrying value of a reporting unit exceeds its fair value or (ii) the carrying value of goodwill allocated to such reporting unit is recorded as an impairment to goodwill. As of December 31, 2021, 2020 and 2019, no impairment of goodwill has been identified.

Intangible Assets—This consists of identifiable intangible assets, primarily Apps, user base, developed technology and intellectual property licenses resulting from acquisitions. Acquired intangible assets are recorded at cost, net of accumulated amortization. The Company's estimates of useful lives of intangible assets are based on cash flow forecasts which incorporate various assumptions, including forecasted user acquisition costs, user attrition rates and level of user engagement.

Intangible assets also include costs of intellectual property that the Company licenses from third parties for use of their content in the Company's game. The licensing agreements include license payments, which are due over the terms of the agreements. The Company recognizes these license payments as a license asset and a license obligation at the fair value on the contract date, based on a discounted cash flow model. The amortization of the licensed asset is recorded in cost of revenue on a straight-line basis over the remaining license terms. The classification of the license obligations between current and long-term is based on the expected timing of the payments to the licensor.

Impairment of Long-Lived Assets—The Company reviews long-lived assets for impairment whenever events or changes in circumstances indicate an asset's carrying value may not be recoverable. If such circumstances are present, the Company assesses the recoverability of the long-lived assets by comparing the carrying value to the undiscounted future cash flows associated with the related assets. If the future net undiscounted cash flows are less than the carrying value of the assets, the assets are considered impaired and an expense equal to the amount required to reduce the carrying value of the assets to the estimated fair value is recorded as an impairment of intangible assets in the consolidated statements of operations. Significant judgment is required to estimate the amount and timing of future cash flows and the relative risk of achieving those cash flows. Assumptions and estimates about future values and remaining useful lives are complex and often subjective. They can be affected by a variety of factors, including external factors such as industry and economic trends, and internal factors such as changes in the Company's business strategy and internal forecasts. For example, if future operating results do not meet current forecasts, the Company may be required to record future impairment charges for acquired intangible assets. Additional factors which significantly affect future cash flows related to long-lived assets include, but are not limited to, forecasted user acquisition costs, user attrition rates and level of user engagement. Significant changes in these factors may require the Company to reassess recoverability of long-lived assets and record impairment. Impairment charges could materially decrease future net income and result in lower asset values on the Company's consolidated balance sheet. There were no material impairment charges recorded for the years ended December 31, 2021, 2020 and 2019.

Cost of Revenue—Cost of revenue consists primarily of third-party payment processing fees related to Consumer Revenue and paid to the Company's distribution partners, amortization of intangible assets related to acquired technology and Apps, and expenses associated with operating network infrastructure which include bandwidth, energy, and other equipment costs related to the co-located data centers and costs for third-party cloud service providers.

Sales and Marketing—Sales and marketing expenses consist primarily of user acquisition costs, other advertising expenses, sales incentives, and amortization of acquired separately-identifiable user-related intangible assets. Related costs associated with these functions such as, marketing programs, travel, customer service costs as well as allocated facilities and information technology costs are also included in sales and marketing expenses. Costs for advertising are expensed as incurred. Advertising costs, which consist primarily of user acquisition costs, totaled \$983.7 million, \$550.9 million, and \$436.1 million for the years ended December 31, 2021, 2020 and 2019, respectively.

Research and Development—Research and development expenses include new product development costs such as salaries and employee benefits, consulting costs, stock-based compensation, regulatory compliance costs as well as allocated facilities and information technology costs.

General and Administrative—General and administrative expenses include costs associated with the Company's finance, accounting, legal, human resources, and administrative personnel. Related costs associated with these functions, such as attorney and accounting fees, recruiting services, administrative services, insurance, travel, as well as allocated facilities and information technology costs are also included in general and administrative expenses.

Stock-Based Compensation—The Company accounts for stock-based compensation based on the fair value of awards as of the grant date. The Company recognizes stock-based compensation expense on the straight-line basis over the requisite service period and accounts for forfeitures as they occur.

Prior to IPO, the fair value of employee stock options are estimated using the Black-Scholes option-pricing model, which requires use of various assumptions including the expected term, the expected stock price volatility, and the risk-free interest rate. The Company estimates the expected term using the simplified method which is based on the mid-point between the weighted-average time to vesting and the contractual maturity. The Company estimates the volatility of its common stock on the date of grant based on the weighted average historical stock price volatility of comparable publicly-traded companies. The risk-free interest rate assumption is based on the U.S. Treasury instruments whose term was consistent with the expected term of the Company's stock options. Following the IPO, the Company has granted RSUs for which the fair value is established based on the closing price of the Company's publicly traded Class A common stock on the date of grant.

The Company recognizes stock-based compensation expense related to shares issued pursuant to the Employee Stock Purchase Plan ("ESPP") on a straight-line basis over the offering period, which is generally 24 months. The Company estimates the fair value of shares to be issued under the ESPP using the Black-Scholes option-pricing model.

Stock-based compensation expense also includes liability classified options to employees that may be settled in the stock of one of the Company's subsidiaries.

Income Taxes—The Company accounts for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, the Company determines deferred tax assets and liabilities on the basis of the differences between the financial statement and tax bases of assets and liabilities by using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

The Company recognizes deferred tax assets to the extent that these assets are more likely than not to be realized. In making such a determination, the Company considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax-planning strategies, and results of recent operations. If the Company determines that it would be able to realize deferred tax assets in the future in excess of their net recorded amount, an adjustment to the deferred tax asset valuation allowance would be made to reduce the provision for income taxes.

The Company records uncertain tax positions on the basis of a two-step process in which determinations are made (1) whether it is more likely than not that the tax positions will be sustained on the basis of the technical merits of the position; and (2) for those tax positions that meet the more-likely-than-not recognition threshold, the Company recognizes the largest amount of tax benefit that is more than 50% likely to be realized upon ultimate settlement with a tax authority.

The Company recognizes interest and penalties related to unrecognized tax benefits on the income tax expense line in the accompanying consolidated statements of operations. Accrued interest and penalties are included on the related tax liability line in the consolidated balance sheets.

Foreign Currency Transactions—Generally, the functional currency of our international subsidiaries is the U.S. dollar. In cases where the functional currency is not the U.S. dollar, the Company translates the financial statements of these subsidiaries to U.S. dollars using the exchange rate at the prevailing consolidated balance sheet date for assets and liabilities, and average exchange rates during the period for revenue and costs and expenses. The Company records translation gains and losses in accumulated other comprehensive income (loss) as a component of stockholders' equity. The Company reflects foreign exchange transaction gains and losses resulting from the conversion of the transaction currency to functional currency, which includes gains and losses from the remeasurement of assets and liabilities, as a component of other income (expense), net.

Comprehensive Income (Loss)—Comprehensive income (loss) is composed of net income (loss) and other comprehensive income (loss). Other comprehensive income (loss) consists of gains and losses on cash flow hedges and foreign currency translation adjustments.

Net Income (Loss) Per Share Attributable to Common Stockholders—Basic and diluted net income (loss) per share attributable to common stockholders is presented under the two-class method required for participating securities. The Company considers its convertible preferred stock, options exercised in exchange for nonrecourse promissory notes, early exercised unvested stock options and unvested restricted stock awards to be participating securities. Under the two-class method, the net loss attributable to common stockholders is not allocated to convertible preferred stock, options exercised in exchange for nonrecourse promissory notes, early exercised unvested common stock options and unvested restricted stock awards as the holders of these instruments do not have a contractual obligation to share in the Company's losses. Net income is attributed to common stockholders and participating securities based on their participation rights. Basic net loss per share attributable to common stockholders is computed by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period. Diluted earnings per share attributable to common stockholders adjusts basic earnings per share for the potentially dilutive impact of stock options.

Noncontrolling Interests and Redeemable Noncontrolling Interests—For less-than-wholly-owned consolidated subsidiaries, noncontrolling interest is the portion of equity not attributable, directly or indirectly, to AppLovin. The Company evaluates whether noncontrolling interests possess any redemption features outside of our control. If such features exist, the noncontrolling interests are presented outside of permanent equity on the consolidated balance sheets within redeemable noncontrolling interest. The Company reports revenues, expenses and net income (loss) from less-than-wholly-owned consolidated subsidiaries at the consolidated amounts, including both the amounts attributable to the Company and noncontrolling interests; the income or loss attributable to the noncontrolling interest holders is reflected in net income or loss attributable to noncontrolling interest on the consolidated statements of operation. Redeemable noncontrolling interests are adjusted to the greater of their fair value or carrying value as of each balance sheet date.

Recent Accounting Pronouncements (Issued and Not Yet Adopted)—In August 2020, the FASB issued ASU 2020-06, *Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity*, to simplify the accounting for certain financial instruments with characteristics of liabilities and equity, including convertible instruments and contracts on an entity's own equity. The standard eliminates beneficial conversion feature and cash conversion models resulting in more convertible instruments being accounted for as a single unit; and simplifies

classification of debt on the balance sheet and earnings per share calculation. These changes will become effective for the Company on January 1, 2022. The Company is currently evaluating the potential impact of these changes.

In October 2021, the FASB issued ASU 2021-08, *Business Combinations—Accounting for Contract Assets and Contract Liabilities from Contracts with Customers*. The ASU requires acquiring entities to apply Topic 606 to recognize and measure contract assets and contract liabilities in a business combination. The amendments in this Update improve comparability for both the recognition and measurement of acquired revenue contracts with customers at the date of and after a business combination. The amendments improve comparability by specifying for all acquired revenue contracts regardless of their timing of payment (i) the circumstances in which the acquirer should recognize contract assets and contract liabilities that are acquired in a business combination and (ii) how to measure those contract assets and contract liabilities. The amendments improve comparability after the business combination by providing consistent recognition and measurement guidance for revenue contracts with customers acquired in a business combination and revenue contracts with customers not acquired in a business combination. These changes will become effective for the Company on January 1, 2023. The Company is currently evaluating the potential impact of these changes.

Recent Accounting Pronouncements (Issued and Adopted)—In December 2019, the FASB issued ASU 2019-12, *Simplifying the Accounting for Income Taxes*. The ASU impacts various topic areas within ASC 740, including accounting for taxes under hybrid tax regimes, accounting for increases in goodwill, allocation of tax amounts to separate company financial statements within a group that files a consolidated tax return, intra period tax allocation, interim period accounting, and accounting for ownership changes in investments, among other minor codification improvements. The Company adopted this ASU on January 1, 2021 with no material financial statement impact upon adoption.

In January 2020, the FASB issued ASU 2020-01, *Clarifying the Interactions between Investments—Equity Securities, Investments—Equity Method and Joint Ventures, and Derivatives and Hedging*. This ASU clarifies the interaction among the accounting standards for equity securities, equity method investments and certain derivatives. The Company adopted this ASU on January 1, 2021 with no material financial statement impact upon adoption.

3. Fair Value Measurements

The following table sets forth the Company's financial instruments that were measured at fair value by level within the fair value hierarchy on a recurring basis as of the dates indicated (in thousands):

	Balance Sheet Location	Total	As of December 31, 2021		
			Level 1	Level 2	Level 3
Financial Assets:					
Unrestricted Balances					
Money market funds	Cash and cash equivalents	\$ 1,070,979	\$ 1,070,979	\$ —	\$ —
Marketable equity securities	Prepaid expenses and other current assets	\$ 2,532	\$ 2,532	\$ —	\$ —
Restricted Balances					
Money market funds	Restricted cash equivalents	\$ 1,050,000	\$ 1,050,000	\$ —	\$ —
Total financial assets		\$ 2,123,511	\$ 2,123,511	\$ —	\$ —

			As of December 31, 2020		
	Balance Sheet Location	Total	Level 1	Level 2	Level 3
<u>Financial Asset:</u>					
Money market funds	Cash and cash equivalents	\$ 6,413	\$ 6,413	\$ —	\$ —
Embedded derivative	Long-term debt	\$ 5,680	\$ —	\$ —	\$ 5,680
Total financial assets		<u>\$ 12,093</u>	<u>\$ 6,413</u>	<u>\$ —</u>	<u>\$ 5,680</u>
<u>Financial Liability:</u>					
Convertible security	Deferred acquisition costs, current	\$ 46,500	\$ —	\$ —	\$ 46,500

Convertible Security

In November 2020, the Company issued a convertible security as part of the consideration exchanged for certain mobile game Apps acquired from an independent foreign-based mobile game developer, as discussed in Note 6. The Company has elected to account for the convertible security using the fair value option. Under the fair value option, the financial liability is initially measured at its issue-date estimated fair value and subsequently remeasured at estimated fair

value on a recurring basis at each reporting period date. The fair value of the convertible security was determined using the probability-weighted expected return method ("PWERM"). This valuation methodology is based on unobservable estimates and judgements, and therefore is classified as a Level 3 fair value measurement. Upon issuance the significant unobservable input used in the fair value measurement of the convertible security is the expected timing of occurrence of an IPO and a discount for lack of marketability derived based on the remaining term of the lock up period related to the Company's Class A common stock into which the convertible security is convertible.

In August 2021, the lock-up period to which the Class A common stock was subject expired and the fair value of the related convertible security was transferred from Level 3 to Level 1. Upon the expiration of the lock-up period, the holder elected to convert the convertible security with a stated value of \$20.0 million into 405,205 shares of the Company's Class A common stock at a conversion price of \$49.40 per share. In October 2021, the holder elected to convert the remaining convertible security with a stated value of \$20.0 million into 324,156 shares of the Company's Class A common stock at a conversion price of \$61.70 per share. As a result of these conversions, the convertible security was fully settled and the related liability was reclassified into the Company's consolidated stockholders' equity. During the year ended December 31, 2021 and 2020, the Company recorded a total loss of \$3.5 million and \$1.5 million, respectively, in other income (expense), net in the Company's consolidated statements of operations due to the change in fair value of the convertible security prior to settlement.

Embedded Derivative

Loans issued under the Credit Agreement contain certain interest adjustment feature that was determined to be an embedded derivative requiring bifurcation and separate accounting, as discussed in Note 9. The embedded derivative was initially valued and remeasured using a "with-and-without" method. The "with-and-without" methodology involves valuing the whole instrument with and without the embedded derivative using a discounted cash flow approach. The difference of the estimated fair value between the instrument with the embedded derivative and the instrument without the embedded derivative is the fair value of the embedded derivative. This valuation methodology is based on unobservable estimates and judgements, and therefore is classified as a Level 3 fair value measurement. The significant unobservable input used in the fair value measurement of the embedded derivative is the expected timing of occurrence of an IPO. Fair value measurements are highly sensitive to changes in these inputs and significant changes in these inputs would result in a significantly higher or lower fair value. The initial fair value of the embedded derivative was determined to be nominal for term loans issued prior to 2021 and \$5.6 million for the term loans issued in February 2021, which was accounted for as a reduction to the carrying amount of the term loans. After the effectiveness of the IPO Registration Statement, the applicable margins for both the Term Loans and the Revolving Credit Loans were reduced by 0.25% on April 16, 2021 in accordance with the pre-existing terms of the Credit Agreement. As a result, the embedded derivative for the contingent interest adjustment feature related to the term loans was settled. The Company remeasured the embedded derivative to its fair value of \$17.8 million on the settlement date, and then reclassified it to the carrying amount of the term loans. For the years ended December 31, 2021 and 2020, the Company recorded a total gain of \$7.6 million and \$5.7 million, respectively, in other income (expense), net in the Company's consolidated statements of operations due to the change in fair value of the embedded derivative prior to settlement.

Marketable Equity Securities

The Company's marketable equity securities consist entirely of its investment in the ordinary shares of Huuuge, Inc., a foreign-based independent mobile game developer, which completed its initial public offering and became listed on the Warsaw Stock Exchange in the first quarter of 2021. The Company had carried the investment at cost in other assets on the Company's consolidated balance sheets in prior fiscal years. The cost basis of the investment was immaterial. The fair value of the marketable equity securities was based on the quoted market price of Huuuge, Inc.'s ordinary shares as of December 31, 2021, and therefore was classified as a Level 1 fair value measurement. For the year ended December 31, 2021, the Company recorded a total unrealized gain of \$2.5 million in other income (expense), net in the Company's consolidated statements of operations as a result of remeasuring the investment to fair value.

The following table presents a reconciliation of the Company's financial asset and liability measured at fair value as of December 31, 2021 using significant unobservable inputs (Level 3), and the change in fair value (in thousands):

	Embedded Derivative	Convertible Security
Balance as of December 31, 2019	\$ —	\$ —
Balance as of Initial fair value recognition	—	45,000
Change in fair value recognized in earnings	5,680	1,500
Balance as of December 31, 2020	\$ 5,680	\$ 46,500
Addition related to the issuance of term loans in February 2021	5,630	—
Extinguishment of term loans in February 2021	(1,130)	—
Change in fair value recognized in earnings	7,640	3,500
Settlement	(17,820)	—
Transfers	—	(50,000)
Balance as of December 31, 2021	\$ —	\$ —

4. Supplemental Financial Statement Information

Property and equipment, net consists of the following (in thousands):

	December 31,	
	2021	2020
Computer equipment	\$ 77,730	\$ 33,977
Leasehold improvements	18,640	18,176
Furniture and fixtures	3,686	2,824
Software and licenses	3,211	3,191
Total property and equipment	103,267	58,168
Less: accumulated depreciation	(39,659)	(29,581)
Total property and equipment, net	\$ 63,608	\$ 28,587

Depreciation expenses were \$25.6 million, \$14.2 million and \$7.9 million for the years ended December 31, 2021, 2020 and 2019, respectively.

As of December 31, 2021 and 2020, networking equipment under finance leases with a cost basis of \$63.6 million and \$21.0 million, respectively, was included in computer equipment.

Accrued liabilities consists of the following (in thousands):

	December 31,	
	2021	2020
Tax accruals and withholdings	\$ 67,159	\$ 40,127
Compensation and related liabilities	32,862	39,076
Finance lease liabilities	21,999	2,821
Accrued expenses and other	11,750	13,033
Total accrued liabilities	\$ 133,770	\$ 95,057

5. Commitments and Contingencies

Commitments—As of December 31, 2021, the Company's non-cancelable minimum purchase commitments totaled \$262.5 million, which consisted primarily of a certain arrangement related to cloud platform services. Future minimum payments under these non-cancelable purchase commitments were as follows (in thousands):

2022	\$15,465
2023	58,483
2024	69,140
2025	86,270
2026	33,094
Total non-cancelable purchase commitments	<u>\$ 262,452</u>

The Company made purchases of \$55.0 million under these non-cancelable purchase commitments for the year ended December 31, 2021. Purchases made were not material for the year ended, December 31, 2020 and 2019.

Contingencies—From time to time, the Company may have certain contingent liabilities that arise in the ordinary course of business activities. The Company accrues a liability for such matters when it is probable that future expenditures will be made, and such expenditures can be reasonably estimated.

Letters of Credit—As of December 31, 2021 and 2020, the Company had outstanding letters of credit in the aggregate amount of \$11.1 million, which were issued as security for certain leased office facilities under the Credit Agreement (see Note 9). These letters of credit have never been drawn upon.

Legal Proceedings—The Company is involved from time to time in litigation, claims, and proceedings. The outcomes of the Company's legal proceedings are inherently unpredictable and subject to significant uncertainty.

The Company records a liability when it is probable that a loss has been incurred and the amount can be reasonably estimated. If it is determined that a loss is reasonably possible and the loss or range of loss can be estimated, the reasonably possible loss is disclosed. The Company evaluates developments in legal matters that could affect the amount of liability that has been previously accrued, and related reasonably possible losses disclosed, and makes adjustments as appropriate. Significant judgment is required to determine the likelihood of matters and the estimated amount of a loss related to such matters. To date, losses in connection with legal proceedings have not been material.

The Company expenses legal fees in the period in which they are incurred.

Indemnifications—The Company enters into indemnification provisions under agreements with other parties in the ordinary course of business, including certain customers, business partners, investors, contractors and the Company's officers, directors and certain employees. It is not possible to determine the maximum potential loss under these indemnification provisions due to the Company's limited history of prior indemnification claims and the unique facts and circumstances involved in each particular provision. To date, losses recorded in the Company's consolidated statements of operations in connection with the indemnification provisions have not been material. As of December 31, 2021, the Company did not have any material indemnification claims that were probable or reasonably possible.

Non-income Taxes—The Company may be subject to audit by various tax authorities with regard to non-income tax matters. The subject matter of non-income tax audits primarily arises from different interpretations on tax treatment and tax rates applied. The Company accrues liabilities for non-income taxes that may result from examinations by, or any negotiated agreements with, these tax authorities when a loss is probable and reasonably estimable. If a loss is reasonably possible and the loss or range of loss can be estimated, the Company discloses the reasonably possible loss.

6. Acquisitions

2021 Acquisitions

Business Combinations

On April 20, 2021, the Company acquired adjust GmbH ("Adjust"), a mobile application tracking and analytics company. The Company purchased all of the outstanding shares of the capital stock of Adjust and settled all of Adjust's debt for the stated purchase consideration of \$980.0 million, which was composed of \$352.0 million stated value of convertible securities convertible into a variable number of shares of the Company's Class A common stock at a variable conversion price, \$50.0 million of cash holdback, and remaining amount of \$578.0 million in cash consideration. The fair value of the convertible securities and fair value of the cash holdback are estimated to be \$342.2 million and \$47.6 million, respectively. As such, the fair value of the acquisition consideration is determined to be \$967.8 million. The transaction is expected to expand the Company's Software solutions and has been accounted for as a business combination. Transaction costs incurred by the Company in connection with the acquisition, including professional fees, were \$3.1 million.

The following table summarizes the preliminary allocation of the purchase consideration to the acquisition-date fair value of the assets acquired and liabilities assumed (in thousands):

	Provisional Amounts at December 31, 2021
Cash and cash equivalents	\$ 12,155
Accounts receivable and other current assets	21,840
Intangible assets	
Customer Relationships—estimated useful life of 12 years	155,000
Developed Technology—estimated useful life of 6 years	77,000
Tradename—estimated useful life of 5 years	8,000
Goodwill	761,747
Operating lease right-of-use assets	8,130
Property and equipment, net	1,897
Finance lease right-of-use assets	43,156
Other assets	16,791
Accounts payable, accrued liabilities and other current liabilities	(15,540)
Deferred revenue	(5,600)
Operating lease liabilities	(8,130)
Finance lease liabilities	(43,156)
Deferred income tax liability	(65,473)
Total purchase consideration	<u>\$ 967,817</u>

The Company initially recorded \$1.6 million of deferred tax assets and \$66.3 million of deferred tax liabilities for the deferred tax effects associated with the fair value of assets and liabilities assumed using the applicable tax rates, with a corresponding adjustment to goodwill. During the current year, the Company recognized a decrease of \$0.8 million to deferred tax liabilities and an increase of \$13.6 million to deferred tax assets related to measurement period adjustments, with a corresponding adjustment to goodwill. The adjustments to the preliminary purchase price allocation were the result of finalizing the analysis for the preliminary purchase price allocation. Such measurement period adjustments are reflected in the table above.

The above allocation of the purchase price is still provisional and subject to change within the measurement period, including potential adjustments to deferred tax balances as tax returns are finalized and as additional information is received. The final allocation of the purchase price is expected to be completed as soon as practicable, but no later than one year from the date of the acquisition close.

The income approach was used to determine the preliminary fair value of the customer relationships, developed technology and tradename. Goodwill represents the excess of the purchase price over the preliminary fair value of identifiable assets acquired and liabilities assumed at the acquisition date and is primarily attributable to the assembled workforce and expected synergies at the time of the acquisition. For tax purposes, an estimated tax deductible goodwill of \$692.5 million was generated as a result of this acquisition.

The Company's consolidated statement of operations for the twelve months ended December 31, 2021 includes Adjust's revenue of \$77.9 million and pre-tax loss of \$37.1 million for the period from the acquisition date of April 20, 2021 to December 31, 2021.

See Pro forma results of operations below under "Supplemental Pro Forma Information".

In May 2021, the convertible securities were converted into 6,320,688 shares of the Company's Class A common stock with a fair value of \$342.2 million. As a result, the fair value of the convertible securities was reclassified into the stockholders' equity.

Asset Acquisitions

In April 2021, the Company completed two separate transactions to acquire certain mobile Apps from two foreign-based independent mobile game developers in exchange for an aggregate upfront cash consideration of \$300.0 million and potential future earn-out payments. The Company incurred a total transaction cost of \$6.0 million related to these transactions. Both transactions were accounted for as asset acquisitions with \$306.0 million allocated to the acquired mobile Apps, which will be amortized over approximately eight years. Concurrent with the closings of these transactions,

the Company entered into a development services agreement with each of the independent mobile game developers to support the acquired mobile Apps, as well as to develop new mobile Apps during the four-year term of the agreement. With respect to the first transaction, the potential future earn-out payments are contingent on the revenue generated by the acquired mobile Apps exceeding a certain revenue threshold, which will be measured and payable (if applicable) each year for four years from the date of the transaction. With respect to the second transaction, the potential future earn-out payments will be determined in a manner similar to the first transaction, in addition to a potential one-time earn-out payment of \$50.0 million contingent on the achievement of a certain monthly revenue milestone within the four years following the date of the transaction.

In June 2021, the Company acquired certain mobile Apps from a foreign-based independent mobile game developer in exchange for an upfront cash consideration of \$130.0 million and future earn-out payments. The Company incurred a total transaction cost of \$4.0 million related to the transaction. The transaction was accounted for as an asset acquisition with \$134.0 million allocated to the acquired mobile Apps, which will be amortized over nine years. Concurrent with the closing of the transaction, the Company entered into a development services agreement with the independent mobile game developer to support the acquired mobile Apps, as well as to develop new mobile Apps during the four-year term of the agreement. With respect to all initially acquired mobile Apps, the potential future earn-out payments are contingent on the revenue and/or earnings before interest, taxes, depreciation and amortization ("EBITDA") generated by the acquired mobile Apps exceeding certain thresholds.

In August 2021, the Company acquired certain mobile Apps from a foreign-based independent mobile game developer in exchange for a total cash consideration of \$150.0 million. The transaction was accounted for as an asset acquisition with \$150.0 million allocated to the acquired mobile Apps, which will be amortized over six years.

During the year ended December 31, 2021, the Company also completed a number of other asset acquisitions for an aggregate cash consideration of \$53.7 million, as well as potential future earn-out payments that are contingent on the revenue and/or profit generated by the acquired mobile Apps.

During the year ended December 31, 2021, the Company recognized total earn-out costs of \$116.6 million, of which \$77.1 million and \$14.8 million related to asset acquisitions that were closed in 2020 and 2019, respectively. These earn-out costs increased the book value of the acquired mobile Apps, and are amortized over the remaining useful life of the originally acquired mobile Apps.

In January 2021, the Company paid \$60.0 million to Recoded, an independent foreign-based mobile game developer, in relation to a new mobile App acquired in 2020. In February 2021, the Company paid an additional \$90.0 million to Recoded related to deferred cash consideration for an asset acquisition closed in 2019.

2020 Acquisitions

Business Combinations

Geewa—On January 31, 2020, the Company acquired Geewa A.S. ("Geewa"), a privately held company specializing in mobile gaming. The transaction is expected to expand the Company's Apps portfolio and has been accounted for as a business combination. The Company purchased all of the outstanding shares of the capital stock of Geewa for a total consideration of \$25.6 million of which \$23.5 million was paid in cash and the unpaid balance was attributed to a \$2.1 million indemnity holdback that will be paid in the next 12 months. Transaction costs incurred by the Company in connection with the acquisition, including professional fees, were \$0.3 million.

The following table summarizes the fair value of identifiable assets acquired and liabilities assumed (in thousands):

Cash	\$	1,043
Accounts receivable and other current assets		1,457
Intangible assets		
Apps—estimated useful life of 5 years		17,040
Tradenname—estimated useful life of 5 years		260
Developed Technology—estimated useful life of 2 years		590
Property, equipment and other tangible assets		369
Goodwill		9,805
Accounts payable, accrued liabilities and other liabilities		(4,935)
Total purchase consideration	\$	25,629

The income approach was used to value the developed Apps and tradenname. Goodwill represents the excess of the purchase price over the fair value of the identifiable assets and assumed liabilities acquired and is primarily attributable to the assembled workforce and expected synergies at the time of the acquisition. Goodwill is not deductible for tax purposes.

Pro forma results of operations have not been presented because the effect of the acquisition was not material to the consolidated statements of operations.

Redemption Games—On April 6, 2020, the Company acquired Redemption Games, Inc. ("Redemption Games"), a privately held company specializing in mobile gaming. The transaction is expected to expand the Company's Apps portfolio and has been accounted for as a business combination. As part of the transaction, the Company purchased 95.5% of the outstanding shares of the capital stock of Redemption Games for an aggregate total consideration of \$53.7 million. Based on the consideration paid and the percent acquired, the transaction implied a total value for Redemption of \$56.2 million. Transaction costs incurred by the Company in connection with the acquisition, including professional fees, were \$0.6 million. In November 2020, the Company increased its ownership in Redemption Games to 98.2% by exchanging 2.7% of minority shares for the Company's Class A common stock. The difference between the \$4.5 million in fair value of the Class A common stock issued and the \$1.5 million in fair value of the minority shares was recognized as stock-based compensation in research and development expenses.

The following table summarizes the fair value of identifiable assets acquired and liabilities assumed (in thousands):

Cash	\$	2,787
Accounts receivable, net		1,850
Intangible Assets		
Apps—estimated useful life of 5 years		44,000
Tradenname—estimated useful life of 5 years		900
Goodwill		20,198
Other tangible assets		131
Accounts payable		(2,492)
Other liabilities		(11,142)
Total valuation		56,232
Redeemable noncontrolling interest		(2,556)
Total purchase consideration	\$	53,676

The income approach was used to value the developed Apps and tradenname. Goodwill represents the excess of the purchase price over the fair value of the identifiable assets and assumed liabilities acquired and is primarily attributable to the assembled workforce and expected synergies at the time of the acquisition. Goodwill is not deductible for tax purposes.

Pro forma results of operations have not been presented because the effect of the acquisition was not material.

Machine Zone, Inc.—On May 19, 2020, the Company acquired Machine Zone, Inc. ("Machine Zone"), a privately held company specializing in mobile gaming. The transaction is expected to expand the Company's Apps portfolio and has been accounted for as a business combination. The Company purchased all of the outstanding shares of the capital stock of Machine Zone and settled all Machine Zone debt for an aggregate acquisition price of \$328.6 million comprising \$287.1 million cash paid to Machine Zone lenders, common stock warrants issued to Machine Zone lenders and preferred stockholders with the aggregate fair value of \$38.2 million and a settlement of the preexisting accounts receivable balance of \$3.3 million. Transaction costs incurred by the Company in connection with the acquisition, including professional fees, were \$2.8 million.

As part of the Machine Zone acquisition the Company assumed an IP license agreement with a third-party game content provider with future fixed payments of \$37.1 million as of the acquisition date.

The following table summarizes the fair value of identifiable assets acquired and liabilities assumed (in thousands):

Cash	\$ 37,767
Accounts receivable and other current assets	27,284
Intangible assets	
Tradename—estimated useful life of 10 years	13,000
Apps—estimated useful life of 3—5 years	272,000
IP license—useful life of 2 years	28,551
Goodwill	82,353
Right-of-use assets under operating leases	125,639
Property, equipment and other tangible assets	42,312
Accounts payable, accrued liabilities and other liabilities	(81,591)
Deferred revenue	(43,200)
License obligations	(35,685)
Operating lease liabilities	(139,875)
Total purchase consideration	<u>\$ 328,555</u>

The income approach was used to value the developed Apps and tradename. The replacement cost approach was used to value the IP license asset. Goodwill represents the excess of the purchase price over the fair value of the identifiable assets and assumed liabilities acquired and is primarily attributable to the assembled workforce and expected synergies at the time of the acquisition. Goodwill is deductible for tax purposes.

Contemporaneously with the closing of the acquisition, the Company exited from one of Machine Zone's real estate leases. The Company accounted for this lease termination as a transaction separate from the business combination since the lease termination was negotiated primarily for the benefit of the combined entity, the Company was the party who directly negotiated this lease amendment with the lessor, and such negotiation took place contemporaneously with the negotiation of the business combination. The Company decreased the operating lease right-of-use asset and operating lease liability by \$57.6 million and \$63.1 million, respectively. The Company also wrote-off \$15.0 million of leasehold improvements and other assets related to this real estate lease. In connection with this transaction the Company issued a common stock warrant with the fair value of \$0.4 million.

The Company's consolidated statements of operations include Machine Zone's revenue of \$113.8 million and pre-tax loss of \$89.7 million for the period from the acquisition date of May 19, 2020 to December 31, 2020.

See Pro forma results of operations below under "Supplemental Pro Forma Information".

Asset Acquisitions

Zenlife asset acquisition—In June 2020, the Company acquired certain mobile Apps from an independent foreign-based mobile game developer in exchange for an upfront cash consideration of \$160.0 million and future earn-out payments for each of the four years from the date of the transaction based on the excess, if any, of revenue generated by the initially acquired mobile App for such year above the sum of (i) an annual fixed baseline revenue and (ii) the aggregate earn-out payments made in prior years. The transaction was accounted for as an asset acquisition with \$173.3 million allocated to the acquired mobile Apps and \$13.3 million to deferred tax liability. The recorded value of acquired mobile Apps is amortized over five years. Additionally, the Company entered into a service and development agreement with the independent mobile game developer to support the initially acquired mobile Apps as well as to develop new mobile Apps during the four-year term of the agreement. The Company is also required to make future earn-out payments for newly developed mobile Apps determined under the similar approach as for the initially acquired mobile Apps.

Athena asset acquisition—In November 2020, the Company acquired certain mobile game Apps from an independent foreign-based mobile game developer in exchange for upfront cash consideration of \$110.0 million, deferred cash consideration of \$20.0 million due in the next 18 months with an acquisition-date fair value of \$19.0 million, a convertible security with a principal amount of \$40.0 million and the acquisition date fair value of \$45.0 million, and future earn-out payments for each of the four years from the date of the transaction based on (i)(a) the revenue generated by the initially acquired game Apps in excess of (b) a certain revenue threshold, multiplied by (ii) a predetermined revenue multiple. The Company determined that the convertible security represents predominantly a share-settled obligation and recognized the instrument as a level 3 liability. For details regarding the fair value measurement of and the accounting for the convertible security, see Note 3. The transaction was accounted for as an asset acquisition with \$170.7 million allocated to the acquired mobile game Apps, \$4.0 million allocated to the acquired tradename, and the remaining \$0.7 million allocated to deferred tax liability. The recorded value of acquired mobile game Apps and tradename is amortized over 6 years. Additionally, the Company entered into a service and development agreement with the independent mobile game developer to support the initially acquired mobile game Apps as well as to develop new game Apps during the four-year

term of the agreement. The Company is not required to make additional earn-out payments for any new game Apps developed.

Other asset acquisitions—In March and April 2020, the Company completed two asset acquisitions to acquire two mobile Apps from two separate independent foreign-based mobile game developers in exchange for an aggregate upfront cash consideration of \$35.0 million and future earn-out payments. Both transactions were accounted for as asset acquisitions with \$35.0 million allocated to the acquired mobile Apps, which will be amortized over three and five years. Additionally, the Company entered into service and development agreements with the independent mobile game developers to support the initially acquired mobile Apps as well as to develop new mobile Apps. With respect to the first asset acquisition, future earn-out payments are based on a predetermined percentage of revenue net of certain direct costs generated by the initially acquired mobile App, or additional mobile Apps developed under the service and development agreement, over the term of the agreement, which is initially two years, but which may renew for an additional two-year term. With respect to the second asset acquisition, future earn-out payments for each of the four years from the date of the transaction are based on (i)(a) the revenue generated by the initially acquired mobile App and any additional mobile Apps developed under the service and development agreement over the term of four years in excess of (b) a baseline revenue threshold, multiplied by (ii) tiered revenue multiples, up to a cumulative amount of \$45.0 million.

Modification of asset acquisition-related contingent consideration—In September 2020, the Company amended the terms of an asset acquisition to settle the acquisition holdback and the earn-out due to the sellers 12 months following the acquisition's closing in 2019. Under the terms of the amendment, the Company agreed to settle a \$34.8 million liability related to an acquisition holdback and earn-out, with a combination of a cash payment of \$3.4 million and the Company's Class A common stock at the fair value of \$106.1 million as of the settlement date, resulting in a \$74.7 million extinguishment loss of the acquisition-related contingent consideration.

During the year ended December 31, 2020, the Company also completed a number of other asset acquisitions for an aggregate cash consideration of \$46.4 million, substantially all of which was attributable to acquired mobile game Apps.

During the year ended December 31, 2020, the Company recognized total earn-out costs of \$38.8 million, of which \$31.9 million related to asset acquisitions that were closed in 2019. These earn-out costs increased the book value of the acquired mobile Apps, and are amortized over the remaining useful life of the originally acquired mobile Apps.

Supplemental Pro Forma Information

The unaudited supplemental pro forma information below presents the combined historical results of operations of the Company, Machine Zone and Adjust for each of the periods presented as if Adjust had been acquired as of January 1, 2020 and Machine Zone had been acquired as of January 1, 2019 (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Revenue	\$ 2,829,060	\$ 1,625,476	\$ 1,332,476
Net income (loss)	36,614	(179,415)	(105,353)

The unaudited supplemental pro forma information above include the following adjustments to net income (loss) in the appropriate pro forma periods (in thousands):

	Year Ended December 31,		
	2021	2020	2019
An (increase) in amortization expense related to the fair value of acquired identifiable intangible assets, net of the amortization expense already reflected in actual historical results	\$ (7,325)	\$ (48,006)	\$ (61,969)
A net increase (decrease) in revenue related to fair value adjustment	\$ 1,901	\$ 54,126	\$ (61,928)
A decrease (increase) in expenses related to transaction expenses	\$ 14,115	\$ (2,327)	\$ —
An decrease (increase) in interest expense related to new debt financing, net of interest expense related to pre-existing debt settled as part of the acquisitions	\$ (2,640)	\$ 93,432	\$ 147,943
A (decrease) in other income - liability classified warrants	\$ —	\$ (1,730)	\$ (9,040)
An (increase) in tax provision	\$ (1,381)	\$ (21,906)	\$ (3,305)

The unaudited supplemental pro forma information has been presented for illustrative purposes only and is not necessarily indicative of results of operations that would have been achieved had the acquisitions taken place on the date indicated, or of the Company's future consolidated results of operations. The supplemental pro forma information presented above has been derived from the Company's historical consolidated financial statements and from the historical accounting records of Adjust and Machine Zone.

7. Goodwill and Acquired Intangible Assets, Net

The following table presents goodwill activity (in thousands):

December 31, 2019	\$	137,121
Goodwill acquired		112,356
Foreign currency translation		296
December 31, 2020	\$	249,773
Goodwill acquired		762,553
Foreign currency translation		(45,899)
December 31, 2021	\$	966,427

	Weighted-Average Remaining Useful Life (Years)	As of December 31, 2021			As of December 31, 2020		
		Gross Carrying Value	Accumulated Amortization	Net Book Value	Gross Carrying Value	Accumulated Amortization	Net Book Value
<u>Long-lived intangible assets:</u>							
Apps	5.0	\$ 1,939,180	\$ (529,012)	\$ 1,410,168	\$ 1,222,417	\$ (232,832)	\$ 989,585
Customer Relationships	11.3	145,870	(8,442)	137,428	—	—	—
User base	4.3	68,817	(27,369)	41,448	68,817	(17,617)	51,200
License asset	1.5	25,640	—	25,640	28,551	(10,918)	17,633
Developed technology	5.2	87,851	(21,435)	66,416	14,946	(8,489)	6,457
Other	5.6	34,895	(6,648)	28,247	23,321	(1,864)	21,457
Total long-lived intangible assets		2,302,253	(592,906)	1,709,347	1,358,052	(271,720)	1,086,332
<u>Short-lived intangible assets:</u>							
Apps	0.4	40,348	(38,724)	1,624	29,869	(25,599)	4,270
Total intangible assets		\$ 2,342,601	\$ (631,630)	\$ 1,710,971	\$ 1,387,921	\$ (297,319)	\$ 1,090,602

As of December 31, 2021 and 2020, short-lived mobile Apps were included in prepaid expenses and other current assets.

The Company recorded amortization expenses related to acquired intangible assets as follows (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Cost of revenue	\$ 373,726	\$ 228,339	\$ 74,787
Sales and marketing	22,661	11,587	7,641
Total	\$ 396,387	\$ 239,926	\$ 82,428

As of December 31, 2021, the expected future amortization expense related to acquired intangible assets is estimated as follows (in thousands):

2022	\$	339,254
2023		329,084
2024		320,537
2025		320,537
2026		313,223
Thereafter		88,336
Total	\$	1,710,971

8. Leases

The Company leases real estate property under operating leases. The Company also leases networking equipment under arrangements with certain providers of IT infrastructure services which were accounted as finance leases or short-term operating leases.

The Company's leases do not provide a readily determinable implicit rate. Therefore, the Company estimates its incremental borrowing rate to discount the lease payments based on information available at lease commencement. The Company determines its incremental borrowing rate based on the rate of interest it would have to pay to borrow on a collateralized basis with an equal lease payment amount, over a similar term, and in a similar economic environment.

Operating Leases—The Company has entered into various non-cancelable operating leases primarily for our office facilities. The most significant leases are related to the Company's corporate headquarters in Palo Alto, California. As of December 31, 2021, the remaining lease terms varied from 2 months to 8.2 years. For certain leases the Company has an option to extend the lease term for periods varying from 2 to 5 years. These renewal options are not considered in the remaining lease term unless it is reasonably certain that the Company will exercise such options. For leases with an initial term greater than 12 months, the Company has recorded a right-of-use asset and lease liability representing the fixed component of the lease payments.

Further, the Company leases certain networking equipment, colocation space and office space under lease arrangements with terms 12 months or less, which are classified as short-term leases.

The table below presents the operating lease-related assets and liabilities (in thousands):

	Year Ended December 31,		Balance Sheet Classification
	2021	2020	
Operating lease right-of-use assets	\$70,975	\$84,336	Operating lease right-of-use assets
Current operating lease liabilities	\$18,392	\$22,206	Operating lease liabilities
Non-current operating lease liabilities	\$62,498	\$71,755	Operating lease liabilities, non-current
Weighted-average remaining term (years)	5.3	3.7	
Weighted-average discount rate	5.0%	4.7%	

The table below presents certain information related to the lease costs for operating leases which are allocated to cost of revenue, sales and marketing, research and development, and general and administrative expenses (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Operating lease cost	\$ 28,676	\$ 17,372	\$ 3,520
Short-term lease cost	9,683	8,196	3,231
Variable lease cost	7,862	2,147	479
Total lease cost	\$ 46,221	\$ 27,715	\$ 7,230

Cash paid for amounts included in the measurement of operating lease liabilities was \$25.5 million, \$23.8 million and \$3.2 million for the years ended December 31, 2021, 2020 and 2019, respectively. Right-of-use assets acquired under operating leases was \$6.1 million, \$10.8 million and \$7.4 million for the years ended December 31, 2021, 2020 and 2019, respectively.

Finance Leases—The Company has entered into various non-cancelable finance leases primarily for networking equipment with weighted average remaining lease term of approximately 2.5 years. The Company has recorded a right-of-use asset and lease liability representing the fixed component of the lease payments.

The table below presents the finance lease-related assets and liabilities (in thousands):

	Year Ended December 31,		Balance Sheet Classification
	2021	2020	
Finance lease right-of-use assets	\$ 44,575	\$ 5,067	Property and equipment, net
Current finance lease liabilities	\$ 21,999	\$ 2,821	Accrued liabilities
Non-current finance lease liabilities	\$ 24,085	\$ 2,340	Other non-current liabilities
Weighted-average remaining term (years)	2.5	0.6	
Weighted-average discount rate	5.0 %	6.0 %	

The Company recognized depreciation expenses related to finance lease of networking equipment of \$17.8 million, \$8.4 million and \$5.5 million for the years ended December 31, 2021, 2020 and 2019, respectively. The Company recognized interest expenses related to finance lease of networking equipment of \$1.5 million, \$0.3 million, and \$0.2 million for the years ended December 31, 2021, 2020 and 2019, respectively.

Cash paid for amounts included in the measurement of finance lease liabilities was \$15.3 million, \$9.7 million and \$5.9 million for the years ended December 31, 2021, 2020 and 2019, respectively.

One of the Company's 2020 acquired companies entered into a sublease agreement in 2017. This agreement is with an unrelated third party to occupy approximately 104,852 square feet of the Company's office space. We recorded rent expense on a straight-line basis for the lease, net of sublease income. For the years ended December 31, 2021 and 2020 we have the following operating sublease information (in thousands):

	Year Ended December 31,	
	2021	2020
Fixed sublease expense	\$ 9,524	\$ 5,769
Variable sublease expense	1,421	836
Sublease income	(9,421)	(5,678)
Variable sublease income	(1,407)	(836)
Net Loss	\$ 117	\$ 91

Undiscounted cash flow—The tables below reconcile the undiscounted cash flows for each of the first five years and total of the remaining years to the operating and finance lease liabilities recorded in the consolidated balance sheets (in thousands):

	As of December 31, 2021		
	Operating Leases	Finance Leases	Total
2022	21,683	23,561	45,244
2023	15,143	15,163	30,306
2024	13,655	6,237	19,892
2025	13,648	2,885	16,533
2026	12,310	975	13,285
Thereafter	15,365	—	15,365
Total lease payments	91,804	48,821	140,625
Less: amount representing interest	10,914	2,737	13,651
Present value of future lease payments	80,890	46,084	126,974
Less: current obligations under leases	18,392	21,999	40,391
Non-current lease obligations	\$ 62,498	\$ 24,085	\$ 86,583

In addition, the Company will receive \$5.5 million and \$0.6 million of sublease income from its real estate leases in 2022 and 2023 respectively.

As of December 31, 2021, we did not have any additional significant lease that had not yet commenced.

9. Credit Agreement

On August 15, 2018, the Company entered into a Credit Agreement which provided for senior secured term loans in an aggregate principal amount of \$820.0 million (the "Closing Term Loans") and a revolving credit facility of \$50.0 million.

On April 23, 2019, the Credit Agreement was amended to increase the senior secured term loan facility by \$400.0 million, on terms identical to those applicable to the Closing Term Loans (together with the Closing Term Loans, the "Initial Term Loans").

On April 27, 2020, the Credit Agreement was further amended to modify certain negative covenants.

On May 6, 2020, the Credit Agreement was further amended (the "Third Amendment") to increase the senior secured term loan facility by an additional \$300.0 million (the "Third Amendment Term Loans").

On October 27, 2020, the Credit Agreement was further amended to increase the aggregate principal amount of the revolving credit facility by an additional \$540.0 million.

On November 30, 2020, the Company borrowed \$150.0 million under the revolving credit facility (the "Revolving Credit Loans").

The Company is required under the Credit Agreement, as amended, to make equal quarterly repayments of (i) with respect to the Initial Term Loans, \$3.1 million, and (ii) with respect to the Third Amendment Term Loans, 0.25% of the aggregate principal amount of the Third Amendment Term Loans made on the effective date of the Third Amendment. The

remaining principal amounts of the Initial Term Loans and the Third Amendment Term Loans are due on August 15, 2025. With respect to the Revolving Credit Loans, the principal amount is due on February 15, 2025.

The Initial Term Loans, the Third Amendment Term Loans and the Revolving Credit Loans bear interest due on a quarterly basis at a rate equal to an applicable margin plus, at the Company's option, either (a) a base rate equal to the highest of (i) the prime rate then in effect, (ii) the federal funds rate, plus 0.50% and (iii) the LIBOR rate, plus 1.0% (the "base rate"), or (b) an adjusted LIBOR rate (the "LIBOR rate"). The applicable margin with respect to both the Initial Term Loans and the Third Amendment Term Loans is equal to 3.5% in the case of LIBOR rate loans and 2.50% in the case of base rate loans. The applicable margin with respect to the Revolving Credit Loans is equal to 2.50% in the case of LIBOR rate loans and 1.50% in the case of base rate loans. In addition, the applicable margins for the Initial Term Loans, the Third Amendment Term Loans and the Revolving Credit Loans are subject to a reduction of 0.25% upon the closing of an IPO and an additional reduction of 0.25% based on the Company's consolidated first lien secured debt to consolidated EBITDA ratio. The Company determined that upon issuance, the contingent interest adjustment feature, which reduces their applicable margins upon the closing of an IPO, is an embedded derivative that requires bifurcation and separate accounting as the feature is not clearly and closely related to the host instrument. The Company determined that the value of this embedded derivative was nominal as of the respective issuance dates. The embedded derivative was recorded at fair value each reporting period, with changes in fair value recorded in interest income and other gains in the Company's consolidated statements of operations. No hedge accounting treatment was applied. For details regarding the fair value measurement of the embedded derivative, see Note 3.

On February 12, 2021, the Company further amended the Credit Agreement (the "Fifth Amendment") to 1) increase the senior secured term loan facility by an aggregate principal amount of \$597.8 million (the "Fifth Amendment Term Loans", and together with the "Initial Term Loans", the "New Initial Term Loans"), on terms identical to those applicable to the existing Initial Term Loans, the proceeds of which was partially used to repay in full the outstanding principal and accrued and unpaid interest of the Third Amendment Term Loans, totaling \$298.2 million, in accordance with the pre-existing early redemption option in the Credit Agreement, and 2) increase the aggregate principal amount of the revolving credit facility by an additional \$10.0 million, on terms identical to those applicable to the existing revolving credit facility. According to the amended Credit Agreement, the Company is required to make equal quarterly repayments of \$4.6 million with respect to the New Initial Term Loans. In connection with this amendment, the Company paid \$0.8 million in fees to KKR Capital Markets, who is affiliated with KKR Denali, one of the Company's principal stockholders.

The Company evaluated the accounting for the Fifth Amendment Term Loans on a creditor-by-creditor basis. For existing creditors who participated in the Fifth Amendment Term Loans, the transaction was accounted for as a debt modification because the present value of the cash flows between the two debt instruments before and after the transaction was less than 10%. For new creditors, the transaction was accounted for as an issuance of new debt. As a result, \$2.9 million of the \$3.5 million third-party issuance costs related to the modified debt was recorded in other income (expense), net on the Company's consolidated statements of operations, with the remaining \$0.6 million related to the new debt recorded as a reduction to the carrying amount of the Term Loans. In addition, the Company recorded \$5.6 million for an embedded derivative related to the contingent interest adjustment feature of the Fifth Amendment Term Loans, which was bifurcated and accounted for separately as the feature is not clearly and closely related to the host instrument. For details regarding the fair value measurement of the embedded derivative, see Note 3. The debt discount, comprising of 1) the deferred third-party issuance costs, 2) the bifurcated embedded derivative and 3) the debt discount of the Initial Term Loans that were modified as part of the amendment, is being amortized to interest expense using the effective interest method over the remaining contractual term of the Term Loans.

The Company accounted for the early repayment of the Third Amendment Term loans pursuant to the Fifth Amendment as a debt extinguishment. As a result, the Company recognized a loss on debt extinguishment of \$16.9 million during the three months ended March 31, 2021, which was recorded in interest expense and loss on extinguishment of debt on the Company's condensed consolidated statements of operations. The loss on debt extinguishment consisted primarily of the unamortized original issue discount and debt issuance cost.

On March 31, 2021, the Company drew down an additional \$250.0 million from the Company's \$600.0 million revolving credit facility. A lender under the revolving credit facility is an affiliate of KKR Denali, a principal stockholder of the Company. Following such draw down, the Company had an aggregate amount of \$400.0 million outstanding under the revolving credit facility, which was repaid in full with the net proceeds from the IPO in April 2021.

After the effectiveness of the IPO Registration Statement, the applicable margins for both the New Initial Term Loans and the Revolving Credit Loans were reduced by 0.25% on April 16, 2021 in accordance with the pre-existing terms of the Credit Agreement. As a result, the embedded derivative for the contingent interest adjustment feature related to the New Initial Term Loans was settled. The Company remeasured the embedded derivative to its fair value of \$17.8 million on the settlement date by recording a gain of \$1.1 million in other income (expense), net in the Company's consolidated statements of operations, and then reclassified it to the carrying amount of the New Initial Term Loans as an additional debt discount. The new unamortized discount balance is subsequently amortized using the new effective interest rate determined on the settlement date of the embedded derivative of 3.9%.

On October 25, 2021, the Company further amended the Credit Agreement (the "Sixth Amendment") to increase the senior secured term loan facility by an aggregate principal amount of \$1.50 billion (the "Sixth Amendment Term Loans", and together with the "New Initial Term Loans", the "Term Loans"). Under the terms of the amended Credit Agreement, the Sixth Amendment Term Loans bear interest at a floating rate equal to, at the Company's option, either (i) an adjusted LIBOR rate for a specified interest period plus an applicable margin of 3.00% or (ii) a base rate plus an applicable margin of 2.00%. The LIBOR rate applicable to the Sixth Amendment Term Loans is subject to a "floor" of 0.50%. The Company is required to repay the Sixth Amendment Term Loans in equal quarterly repayments commencing with the fiscal quarter ending on June 30, 2022, a principal amount equal to 0.25% of the aggregate outstanding principal amount on the effective date of the Sixth Amendment or \$3.8 million, with the remaining principal amount of the Sixth Amendment Term Loans due on October 25, 2028. The other terms and conditions of the Sixth Amendment Term Loans are consistent with the term loans outstanding immediately prior to the effectiveness of the Sixth Amendment. In connection with this amendment, the Company paid \$1.4 million in fees to KKR Capital Markets, who is affiliated with KKR Denali, one of the Company's principal stockholders. The Company accounted for the Sixth Amendment Term Loans as an issuance of new debt. Accordingly, the total debt discount and third-party debt issuance costs of \$15.7 million was recorded as a reduction to the carrying amount of the Sixth Amendment Term Loans, which is being amortized over its contractual term at an effective interest rate of 3.7%.

The Credit Agreement requires the Company to prepay, subject to certain exceptions, the term loan with:

- 100% of net cash proceeds above a threshold amount of certain asset sales, certain debt incurrences and casualty events, subject to, in the case of asset sales, casualty events, and sale leasebacks, (i) step-downs to (x) 50% if the Company's consolidated first lien secured debt to consolidated EBITDA ratio is less than or equal to 3.50 to 1.00, but greater than 2.50 to 1.00 and (y) 0% if the Company's consolidated first lien secured debt to consolidated EBITDA ratio is less than or equal to 2.50 to 1.00, and (ii) reinvestment rights and certain other exceptions;
- 50% of annual excess cash flow above a threshold amount, subject to (i) a step-down to 25% if the Company's consolidated first lien secured debt to consolidated EBITDA ratio is less than or equal to 4.00 to 1.00, but greater than 3.50 to 1.00, and (ii) a step-down to 0% if the Company's first lien net leverage ratio is less than or equal to 3.50 to 1.00; provided that such prepayment is required only in the amount (if any) by which such prepayment exceeds \$10 million in such fiscal year. The amount of excess cash flow is subject to certain deductions and exceptions, including a dollar-for-dollar reduction based on the amount of voluntary prepayments of term loans and loans under the revolving credit facility (to the extent accompanied by a permanent commitment reduction); and
- 100% of the net cash proceeds of certain other debt incurrences.

The Company is permitted to voluntarily prepay or repay outstanding loans under the Revolving Credit Facility or Term Loans at any time, in whole or in part, subject to prior written notice, minimum amount requirements, and customary "breakage" costs with respect to LIBOR rate loans. Amounts prepaid under the Revolving Credit Facility may subsequently be reborrowed.

The Company's obligations under the Credit Agreement are secured by substantially all of the assets of the Company and its domestic subsidiary guarantors (other than customarily excluded assets).

The Credit Agreement contains customary affirmative and negative covenants, including covenants limiting the ability of AppLovin and its restricted subsidiaries to, among other things, incur debt, grant liens, undergo certain fundamental business changes, make investments, pay-out dividends to third parties, dispose of assets, and enter into transactions with affiliates, in each case, subject to limitations and exceptions set forth in the Credit Agreement. The Credit Agreement also contains customary events of default that include, among other things, certain payment defaults, cross defaults to other indebtedness, covenant defaults, change of control defaults, judgment defaults, and bankruptcy and insolvency defaults. If an event of default exists, the lenders may require the immediate payment of all obligations under the Credit Agreement and may exercise certain other rights and remedies provided for under the Credit Agreement, the other loan documents and applicable law. As of December 31, 2021, the Company was in compliance with all of the covenants.

The following table presents the amount of interest expense recognized relating to the contractual interest coupon, amortization of the debt discount and issuance costs, and loss on debt extinguishment with respect to the Company's Term Loans, for the years ended December 31, 2021, 2020, and 2019 (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Contractual interest coupon	\$ 70,882	\$ 58,810	\$ 65,859
Amortization of debt discount and issuance costs	7,442	7,319	4,754
Loss on debt extinguishment	16,852	—	—
Total interest expense from Term Loans	<u>\$ 95,176</u>	<u>\$ 66,129</u>	<u>\$ 70,613</u>

The aggregate future maturities of long-term debt as of December 31, 2021 are as follows (in thousands):

2022	\$ 25,810
2023	33,310
2024	33,310
2025	1,736,094
2026	15,000
Thereafter	1,428,750
Total outstanding term loan principal	<u>\$ 3,272,274</u>
Unaccreted discount and debt issuance costs	<u>(44,630)</u>
Total debt	<u>\$ 3,227,644</u>
Less: short-term debt	<u>25,810</u>
Long-term debt	<u>\$ 3,201,834</u>

10. Derivative Instruments

The Company manages exposure to market risk associated with fluctuating interest rates with the use of interest rate derivative financial instruments, namely interest rate swaps. The Company does not use derivatives for trading or speculative purposes. On November 14, 2018, the Company entered into an interest rate swap agreement as part of its interest rate risk management strategy in connection with the term loan (See Note 9). The notional amount for the swap was \$410.0 million. The swap was a receive-variable (one-month LIBOR) and pay-fixed (2.9065%) interest rate swap, which expired on December 31, 2020, with settlement date commencing on the last calendar day of each month and reset date on first day of each month beginning December 31, 2018.

The Company applied the hedge accounting provisions of the critical terms match hedge, and formally documented at inception all relationships between hedging instruments and hedged items, as well as its risk management objectives and strategies for undertaking the various hedges. The critical terms of the swap and hedged item coincided (notional amount, interest rate reset dates, interest rate payment dates, and underlying index), the hedge was expected to offset changes in expected cash flows due to fluctuations in one-month LIBOR over the term of the hedge. Therefore, the effectiveness of the hedge relationship was assessed each quarter by comparing the current terms of the swap and the debt to assure they continued to coincide and through an evaluation of the continued ability of the counterparty to the swap to honor its obligations under the swap. Had the critical terms no longer matched exactly, hedge effectiveness (both prospective and retrospective) would have to be assessed by evaluating the cumulative dollar-offset ratio for the actual derivative and the hedged item.

Unrealized changes in the fair value of derivatives accounted for as a critical term match hedge were reported in other comprehensive income (loss) and subsequently reclassified to earnings in the same period or periods during which the hedged forecasted transaction affected earnings. For the years ended December 31, 2021, 2020 and 2019, the Company recognized nil, \$9.5 million and \$2.7 million, respectively, of realized loss related to the hedged transactions that were recorded in interest expense. The interest rate swap contract expired on December 31, 2020 and the settlement value of the interest rate swap liability was reclassified to earnings. The Company had no such interest rate derivative financial instruments during the year ended December 31, 2021.

11. Convertible Preferred Stock

On July 13, 2018, the Company signed an agreement with KKR Denali for a \$400.0 million equity investment by KKR Denali. Pursuant to such agreement, on August 15, 2018, the Company issued 109,090,908 shares of Series A Preferred Stock to KKR Denali in exchange for their investment.

Prior to the filing of the IPO Certificate, the Company's Restated Certificate of Incorporation designated and authorized 109,090,908 shares of Series A Preferred Stock, \$0.00003 par value per share, of the Company.

The holders of Series A convertible preferred stock had various rights and preferences as follows:

Voting—Each share of convertible preferred stock had voting rights equal to an equivalent number of shares of common stock into which it was convertible and votes together as one class with the common stock, except as below:

Holders of Series A convertible preferred stock, voting together as a single class on an as-converted basis, were entitled to certain protective provisions which required a majority of holders of preferred stock to approve, among other actions, a liquidation event, an amendment, waiver, or repeal of provisions of the Company's Restated Certificate of Incorporation or Bylaws in a way that adversely affects the rights, privileges and obligations of the preferred stock, a change to the number of directors of the Company, and a declaration or payment of any dividend.

Holders of Series A convertible preferred stock, voting as a separate class, were entitled to elect two members to the Company's Board of Directors (the "Board"). Holders of common stock, voting as a separate class, were entitled to elect five members to the Board. Holders of common stock and preferred stock, voting together as a single class on an as converted basis, were entitled to elect all remaining directors.

Dividends—The holders of Series A convertible preferred stock were entitled to receive, out of any funds legally available, dividends on a pari-passu basis to any dividends paid on the common stock, as adjusted for stock splits, stock dividends, combinations, recapitalizations, and similar transactions, when, and if declared by the Board. No dividends have been declared or paid on the Company's preferred stock.

Liquidation Preference—In the event of any liquidation, dissolution, or winding-up of the Company, the holders of preferred stock were entitled to receive, prior and in preference to any distribution of the assets or funds of the Company to the holders of the common stock, an amount equal to the issuance price per share of \$3.67 for Series A convertible preferred stock, as adjusted for stock splits, stock dividends, combinations, recapitalizations, and similar transactions, plus any declared but unpaid dividends (the "Liquidation Preference"). If the Company had insufficient assets to permit payment of the Liquidation Preference in full to all holders of preferred stock, then the assets of the Company would be distributed ratably to the holders of preferred stock in proportion to the Liquidation Preference such holders would otherwise be entitled to receive.

After payment of the Liquidation Preference to the holders of preferred stock, the remaining assets of the Company would be distributed ratably to the holders of common stock. If the holders of preferred stock would have been entitled to a larger distribution had they converted their shares to common stock, then the preferred stock would be deemed to have converted to common stock.

Redemption—Series A convertible preferred stock were not redeemable.

Conversion—Each share of preferred stock was convertible at the option of the holder, at any time after the date of issuance of such share, into shares of Class A common stock as determined by dividing the original purchase price of preferred stock by the conversion price in effect at the time of conversion for such series of preferred stock. The conversion price per share of Series A convertible preferred stock was \$3.67. The conversion ratio for convertible preferred stock was one-to-one.

Each share of preferred stock would automatically be converted into shares of common stock at the then-effective conversion rate of such shares upon the earlier of (i) the closing of a firm commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, covering the offer and sale of common stock of the Company to the public not less than \$75.0 million or (ii) the consent of holders of at least a majority of the then-outstanding shares of preferred stock, voting together as a single class on an as-converted basis.

Notwithstanding anything to the contrary herein, in connection with the IPO, if (a) the price per share of common stock sold to the public in such IPO as set forth on the cover of the Company's final prospectus (prior to underwriting discounts and expenses) (the "IPO Price") would be less than the Conversion Price of the Series A Preferred Stock prior to giving effect to this provision, then the Conversion Price of the Series A Preferred Stock would be adjusted downward to an amount equal to the IPO Price (the "IPO Conversion Price Adjustment") and the Conversion Price of the Series A preferred stock as so adjusted would be used to determine the number of shares of Class A common stock to be received by the holders of Series A Preferred Stock upon conversion of the Series A preferred stock in connection with the IPO. The IPO Conversion Price Adjustment, if any, would occur as of immediately prior to the effectiveness of the Company's registration statement for such IPO.

Anti-Dilution Protection—Series A convertible preferred stock had antidilution protection. If the antidilution protection for the preferred stock would be triggered, the conversion price would be subject to a broad-based weighted-average adjustment to reduce dilution.

IPO Conversion

Upon the filing and effectiveness of the IPO Certificate, all shares of Series A convertible preferred stock then outstanding automatically converted into the equivalent number of shares of Class A common stock.

The Company's IPO Certificate authorizes the issuance of undesignated preferred stock with rights and preferences, including voting rights, designated from time to time by the Board. As of December 31, 2021 there were no shares of preferred stock issued and outstanding.

12. Common Stock

Following the effectiveness of the IPO Registration Statement, the Company filed its IPO Certificate. The IPO Certificate authorizes a total of 1,500,000,000 shares of Class A common stock, 200,000,000 shares of Class B common stock, and 150,000,000 shares of Class C common stock. As of December 31, 2021 the Company had two classes of outstanding common stock: 296,426,738 shares of Class A common stock and 78,662,622 shares of Class B common stock.

The rights of the holders of all classes of stock pursuant to the IPO Certificate are as follows:

The rights of the holders of Class A common stock, Class B common stock, and Class C common stock (referred to together as the "common stock") are identical, except with respect to voting and conversion.

Voting Rights

Holders of the Class A common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders, holders of the Class B common stock are entitled to 20 votes for each share held on all matters submitted to a vote of stockholders, and holders of the Class C common stock are not entitled to vote on any matter that is submitted to a vote of stockholders, except as otherwise required by law. The holders of the Class A common stock and Class B common stock will vote together as a single class, unless otherwise required by law. Under the IPO Certificate, approval of the holders of at least a majority of the outstanding shares of the Class B common stock voting as a separate class will be required to increase the number of authorized shares of the Class B common stock. In addition, Delaware law could require either holders of the Class A common stock, the Class B common stock, or the Class C common stock to vote separately as a single class in the following circumstances:

- if the Company were to seek to amend the IPO Certificate to increase or decrease the par value of a class of stock, then that class would be required to vote separately to approve the proposed amendment; and
- if the Company were to seek to amend the IPO Certificate in a manner that alters or changes the powers, preferences or special rights of a class of stock in a manner that affected its holders adversely, then that class would be required to vote separately to approve the proposed amendment.

Until the date on which the final conversion of all outstanding shares of Class B common stock pursuant to the terms of the IPO Certificate occurs, approval of at least two-thirds of the outstanding shares of the Company's Class B common stock voting as a separate class will be required to amend or modify any provision of the IPO Certificate inconsistent with, or otherwise alter, any provision of the IPO Certificate to modify the voting, conversion, or other rights, powers, preferences, privileges, or restrictions of the Company's Class B common stock.

Upon the closing of the IPO, the Class B Stockholders held all of the issued and outstanding shares of the Company's Class B common stock. The Class B Stockholders have entered into a voting agreement (the "Voting Agreement") whereby all Class B common stock held by the Class B Stockholders and their respective permitted entities and permitted transferees will be voted as determined by two of Mr. Foroughi, Mr. Chen, and KKR Denali (one of which must be Mr. Foroughi).

Dividend Rights

Subject to preferences that may apply to any shares of preferred stock outstanding at the time, the holders of the Company's common stock will be entitled to receive dividends out of funds legally available if the Company's Board, in its discretion, determines to issue dividends and then only at the times and in the amounts that the Company's Board may determine.

No Preemptive or Similar Rights

The Company's common stock will not be entitled to preemptive rights, and is not subject to conversion, redemption or sinking fund provisions.

Right to Receive Liquidation Distributions

If the Company becomes subject to a liquidation, dissolution or winding-up, the assets legally available for distribution to the Company's stockholders would be distributable ratably among the holders of the Company's common stock and any participating preferred stock outstanding at that time, subject to prior satisfaction of all outstanding debt and liabilities and the preferential rights of and the payment of liquidation preferences, if any, on any outstanding shares of preferred stock.

Conversion of Class B Common Stock

Each share of Class B common stock is convertible at any time at the option of the holder into one share of Class A common stock. Following the closing of the IPO, shares of Class B common stock will automatically convert into shares of Class A common stock upon sale or transfer except for certain transfers described in the IPO Certificate, including transfers for estate planning, transfers among KKR Denali and its affiliates, or other transfers among the Class B Stockholders. Withdrawal from the Voting Agreement constitutes a transfer.

Each share of Class B common stock will convert automatically into one share of Class A common stock upon the date fixed by the Company's Board that is no less than 61 days and no more than 180 days following the date on which (i) the Voting Agreement is terminated or (ii) Adam Foroughi is no longer involved with the Company as a member of the Board or as an executive officer.

Conversion of Class C Common Stock

After the conversion or exchange of all outstanding shares of the Company's Class B common stock into shares of Class A common stock, all outstanding shares of Class C common stock will convert automatically into Class A common stock, on a share-for-share basis, on the date or time specified by the holders of a majority of the outstanding shares of Class A common stock, voting as a separate class.

Warrant—On January 3, 2019, AppLovin entered into a Warrant Transfer Agreement with Applovin Holdings LLC granting the transfer of the common stock warrant issued in connection with prior debt financing to Angel Pride Holdings Limited and Hontai App Fund Limited Partnership in the amount of 26,021,583 shares and 8,794,734 shares of Class A common stock, respectively. Subsequently, Angel Pride Holding Limited and Hontai App Fund Limited Partnership exercised their rights to purchase the Company's Class A common stock and each paid \$868 and \$293, respectively.

13. Stock-based Compensation

Following the effective date of the IPO Registration Statement, the Company maintains the 2021 Equity Incentive Plan, the 2021 Partner Studio Incentive Plan and the ESPP, all of which were adopted by the Board and approved by its stockholders.

2021 Equity Incentive Plan

The 2021 Equity Incentive Plan (the "2021 Plan") provides for the grant of restricted stock units ("RSUs"), incentive stock options ("ISOs"), nonqualified stock options ("NSOs"), restricted stock, stock appreciation rights ("SARs"), performance units, and performance shares to the Company's employees, directors, consultants and other service providers. The total shares of the Company's Class A common stock that were initially reserved for issuance under the 2021 Plan was 39,000,000, and provides for an annual increase of shares, equal to the least of (a) 39,000,000 shares, (b) five percent (5%) of the outstanding shares of all classes of the Company's common stock as of the last day of the immediately preceding fiscal year, or (c) such other amount as the Company's Board may determine. Immediately prior to the effectiveness of the 2021 Plan, the Company's 2011 Equity Incentive Plan (the "2011 Plan") was terminated. All outstanding awards under the 2011 Plan continue to be governed by their existing terms, and options cancelled under the 2011 Plan are added to the option pool available under the 2021 Plan.

2021 Partner Studio Incentive Plan

The 2021 Partner Studio Incentive Plan (the "2021 Partner Plan") provides for the grant of RSUs, ISOs, NSOs, SARs, performance units, and performance shares to individuals or entities engaged by the Company or a parent or subsidiary of the Company to render bona fide services to the party engaging such individual or entity. A total of 390,000 shares of the Company's Class A common stock are reserved for issuance pursuant to the 2021 Partner Plan.

Following the IPO, the Company has only granted RSUs under the 2021 Plan and 2021 Partner Plan. RSU grants included service-based vesting condition that generally approximates 4 years. A summary of RSUs activity is as follows: (in thousands, except per share data):

	Number of Restricted Stock Units	Weighted Average Grant Date Fair Value	Aggregate Intrinsic Value
Balances at December 31, 2020	—	—	—
Granted	7,575,963	\$ 60.18	
Vested	(126,234)	62.15	
Cancelled	(126,325)	59.92	
Balances at December 31, 2021	7,323,404	\$ 60.15	\$ 690,304

As of December 31, 2021, there was \$375.9 million of unrecognized compensation cost related to unvested employee RSUs. This amount is expected to be recognized over a weighted-average period of 3.7 years. The fair value as of the respective vesting dates of RSUs that vested during the year ended December 31, 2021 was \$11.9 million.

Employee Stock Purchase Plan

The ESPP permits participants to purchase shares of the Company's Class A common stock through contributions of up to 15% of their eligible compensation. The ESPP provides for consecutive, overlapping 24-month offering periods, during which the contributed amount by the participant will be used to purchase shares of the Company's Class A common stock at the end of each 6-month purchase period with the purchase price of the shares being 85% of the lower of the fair market value of the Company's Class A common stock on the first day of an offering period or on the exercise date. A participant may purchase a maximum of 590 shares of the Company's Class A common stock during a purchase period. Participants may end their participation at any time during an offering and will be paid their accrued contributions that have not yet been used to purchase shares. Participation ends automatically upon termination of employment with the Company.

A total of 7,800,000 shares of the Company's Class A common stock are reserved for issuance under the ESPP. The number of shares of the Company's Class A common stock that will be available for sale under the ESPP, and provides for an annual increase of shares, equal to the least of: (a) 7,800,000 shares, (b) one percent (1%) of the outstanding shares of all classes of the Company's common stock as of the last day of the immediately preceding fiscal year, or (c) such other amount as the Company's board of directors may determine. The initial offering period is from April 15, 2021 through November 19, 2023. During the year ended December 31, 2021, 42,303 shares of Class A common stock have been purchased under the ESPP.

The weighted-average assumptions used to estimate the fair value of shares to be issued under the ESPP are as follows:

	Year Ended December 31,	
	2021	
Weighted-average expected term		1.25
Expected volatility	44	%
Risk-free interest rate	0.17	%
Dividend yield	0	%

As of December 31, 2021, total unrecognized compensation cost related to the ESPP was \$5.6 million, which will be amortized over a period of 0.9 years.

2011 Equity Incentive Plan

The Company's 2011 Plan provides for the grant of stock options to employees, directors, consultants, and service providers of the Company. Options under the 2011 Plan may be granted for periods of up to 10 years and generally vest over four years. As noted above, immediately prior to the effectiveness of the 2021 Plan, the 2011 Plan was terminated, and no further awards will be granted thereunder. All outstanding awards under the 2011 Plan continue to be governed by their existing terms, and options cancelled under the 2011 Plan are added to the option pool available under the 2021 Plan.

Stock Options—During the years ended December 31, 2021, 2020 and 2019, the Company granted stock options to purchase 263,200, 13,158,430 and 12,199,200 shares of common stock, with a weighted-average grant date stock fair value of \$48.14, \$15.94 and \$1.97 per share, respectively.

The weighted-average assumptions used to estimate the fair value of stock options granted are as follows:

	Year Ended December 31,		
	2021	2020	2019
Weighted-average expected term	5.21	5.94	6.05
Expected volatility	43 %	39 %	43 %
Risk-free interest rate	0.48 %	0.56 %	1.91 %
Dividend yield	0 %	0 %	0 %

The Company's stock options activity under the 2011 Plan was as follows:

	Number of Options	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Term (Years)
Balances at December 31, 2020	28,889,524	\$ 5.92	8.8
Granted	263,200	27.03	
Exercised	(8,947,563)	5.40	
Forfeited	(1,411,457)	6.42	
Expired	(390,000)	7.45	
Balances at December 31, 2021	18,403,704	\$ 6.39	7.9
Vested and exercisable at December 31, 2021	12,030,363	\$ 5.87	7.8
Vested and expected to vest at December 31, 2021	16,696,145	\$ 6.63	8.0

The aggregate intrinsic value of options outstanding as of December 31, 2021 and 2020, was \$1.62 billion and \$1.83 billion, respectively. As of December 31, 2021 there was approximately \$70.1 million of total unrecognized compensation costs related to unvested options granted, which is expected to be recognized over the weighted-average vesting period of 2.3 years. The total intrinsic value of share options exercised during the years ended December 31, 2021, 2020, and 2019 was \$622.1 million, \$33.8 million and \$1.8 million, respectively.

Early Exercise of Stock Options—Subject to the Board's approval, the Plan allows for the early exercise of options granted. Under the terms of the Plan, option holders, upon early exercise, must sign a restricted stock purchase agreement that gives the Company the right to repurchase any unvested shares, at the original exercise price, in the event the optionees' employment terminates for any reason. The right to exercise options before they are vested does not change existing vesting schedules in any way and the early exercised options may not be sold or transferred before they are vested. The repurchase right lapses over time as the shares vest at the same rate as the original option vesting.

schedule. The cash amounts received in exchange for these early exercised shares are recorded as a liability on the accompanying balance sheets and reclassified into common stock and additional paid-in-capital as the shares vest. The Company's right to repurchase these shares lapses by 1/4th of the shares on the one-year anniversary of the vesting start date and ratably each month over the next 36-months.

The Company has 486,999 shares and 19,800 shares of Class A common stock subject to repurchase as of December 31, 2021 and 2020, respectively. The liability for the repurchase as of December 31, 2021 and 2020 included in accrued liabilities was \$1.4 million and \$0.1 million, respectively.

During the years ended December 31, 2021, 2020 and 2019, the Company provided financing to certain employees in the form of promissory notes to early exercise stock options. These promissory notes are partially collateralized by shares and in-substance are nonrecourse. For accounting purposes, exercised options via nonrecourse promissory notes are not substantive and are continued to be treated as options. In February 2021, promissory notes issued to executive officers in the amount of \$20.9 million were settled through either share repurchase, in the amount of \$17.2 million, or cash payment, in the amount of \$3.7 million. In connection with the repurchase of shares, the Company accelerated vesting of 60,968 shares of Class A common stock for one of the Company's officers. The acceleration of vesting was accounted as an option modification with an immaterial impact to the stock-based compensation expense.

As of December 31, 2021 and 2020, the Company had 2,884,999 and 8,022,499 shares of Class A common stock options, respectively, that were exercised via nonrecourse promissory notes of which 663,856 and 4,136,677 shares, respectively, were unvested and subject to repurchase. The principal balances of nonrecourse promissory notes outstanding amounted to \$15.1 million and \$40.4 million as of December 31, 2021 and 2020, respectively.

Restricted Stock—Restricted stock awards are classified as equity awards based on the requirements established by the applicable accounting rules for stock-based compensation. The fair value of the restricted stock awards was determined based on the price of the Company's valuation on the date of grant as approved by the Company's board of directors.

The Company has historically granted restricted stock awards to certain employees. Restricted stock award activity for the periods presented herein has not been material. As of December 31, 2021 there was \$0.3 million of total unrecognized compensation cost related to unvested restricted stock awards. That cost is expected to be recognized over a weighted-average period of 0.7 years.

The Company recognized stock-based compensation expense for all equity awards for the periods indicated as follows (in thousands):

	Year Ended December 31,		
	2021	2020	2019
Cost of revenue	\$ 2,335	\$ 982	\$ 124
Sales and marketing	15,224	10,668	1,922
Research and development	63,344	36,852	5,009
General and administrative	52,274	13,885	3,167
Total stock-based compensation expense	<u>\$ 133,177</u>	<u>\$ 62,387</u>	<u>\$ 10,222</u>

For the years ended December 31, 2021, 2020 and 2019 total stock-based compensation expense included \$1.2 million, \$0.9 million and nil associated with awards that may be settled with one of the Company's subsidiaries, respectively.

14. Net Income (Loss) Per Share

The following table sets forth the computation of basic and diluted net income (loss) per share attributable to common stockholders for the years ended December 31, 2021, 2020 and 2019 (in thousands, except share and per share data):

	Year Ended December 31,		
	2021	2020	2019
BASIC EPS			
Numerator:			
Net income (loss)	\$ 35,446	\$ (125,187)	\$ 119,040
Less:			
Income attributable to convertible preferred stock	(3,209)	—	(39,500)
Income attributable to options exercised by promissory notes	(387)	—	(1,088)
Income attributable to unvested early exercised options	(95)	—	(39)
Income attributable to unvested RSAs	(52)	—	(2,037)
Net income (loss) attributable to common stock	\$ 31,703	\$ (125,187)	\$ 76,376
Denominator:			
Weighted-average shares used in computing net income (loss) per share: Basic	324,836,076	214,936,545	210,937,147
Net income (loss) per share attributable to common stock: Basic	\$ 0.10	\$ (0.58)	\$ 0.36
DILUTED EPS			
Numerator:			
Net income (loss)	\$ 35,446	\$ (125,187)	\$ 119,040
Less:			
Income attributable to convertible preferred stock	(3,058)	—	(39,329)
Income attributable to options exercised by promissory notes	(369)	—	(1,083)
Income attributable to unvested early exercised options	(91)	—	(39)
Income attributable to unvested RSAs	(49)	—	(2,028)
Net income (loss) attributable to common stock	\$ 31,879	\$ (125,187)	\$ 76,561
Denominator:			
Weighted-average shares used in computing net income (loss) per share: Basic	324,836,076	214,936,545	210,937,147
Weighted-average dilutive stock options, RSUs, and convertible security	17,927,556	—	1,428,282
Weighted-average shares used in computing net income (loss) per share: Diluted	342,763,632	214,936,545	212,365,429
Net income (loss) per share attributable to common stock: Diluted	\$ 0.09	\$ (0.58)	\$ 0.36

The following table presents the forms of antidilutive potential common shares:

	Year Ended Year Ended December 31,		
	2021	2020	2019
Convertible preferred stock	—	109,090,908	109,090,908
Stock options exercised for promissory notes	2,884,999	8,022,499	5,760,000
Early exercised stock options	487,000	19,800	11,337
Unvested RSAs	181,737	1,236,771	3,924,414
Stock options	—	20,754,985	7,439,700
Unvested RSU	291,093	—	—
ESPP	246,246	—	—
Total antidilutive potential common shares	4,091,075	139,124,963	126,226,359

The table above does not include the convertible security issued in 2020. The sellers converted the convertible security in 2021 following the completion of the Company's IPO.

15. Income Taxes

Net income (loss) before income taxes for the years ended December 31, 2021, 2020 and 2019, includes the following components (in thousands):

	Year Ended December 31,		
	2021	2020	2019
U.S.	\$ 193,161	\$ (118,296)	\$ 149,797
Foreign	(146,850)	(17,410)	(23,563)
Net income (loss) before income tax	<u>\$ 46,311</u>	<u>\$ (135,706)</u>	<u>\$ 126,234</u>

Provision for (benefit from) income taxes for the years ended December 31, 2021, 2020 and 2019 consist of the following (in thousands)

	Year Ended December 31,		
	2021	2020	2019
Current:			
Federal	\$ 64,585	\$ 20,162	\$ 23,703
State	10,234	4,087	1,888
Foreign	1,914	4,027	568
	<u>76,733</u>	<u>28,276</u>	<u>26,159</u>
Deferred:			
Federal	(52,162)	(29,235)	(720)
State	(2,394)	(4,800)	(99)
Foreign	(11,204)	(4,013)	(18,146)
	<u>(65,760)</u>	<u>(38,048)</u>	<u>(18,965)</u>
Total provision for (benefit from) income taxes.	<u>\$ 10,973</u>	<u>\$ (9,772)</u>	<u>\$ 7,194</u>

The reconciliation of federal statutory income tax rate to the effective income tax rate is as follows (in thousands):

	Years ended December 31,		
	2021	2020	2019
Tax provision (benefit) at U.S. federal statutory rate	\$ 9,725	\$ (28,498)	\$ 26,509
State income taxes, net of federal benefit	1,866	(1,137)	1,412
Foreign income taxed at different rates	10,563	8,710	2,887
Change in foreign deferred tax rate	—	(6,038)	(17,143)
Stock-based compensation	(8,807)	10,347	1,671
Foreign-derived intangible income	(10,477)	(3,518)	(8,600)
Research and development credits	(6,193)	(2,561)	(1,025)
Extinguishments of acquisition-related contingent consideration	—	12,237	—
Foreign Income Inclusion	(2,622)	—	—
Change in valuation allowance	15,905	—	—
Other	1,013	686	1,483
Total provision for (benefit from) income taxes	<u>\$ 10,973</u>	<u>\$ (9,772)</u>	<u>\$ 7,194</u>

In August 2019, the Company acquired certain mobile game apps from an entity based in Cyprus. A deferred tax liability was created due to basis differences of assets acquired. In December 2019, pursuant to a year-end restructuring, the Company changed the tax residency of the operations related to the mobile game apps acquired. Accordingly, the deferred tax liability associated with basis differences in Cyprus was reduced by \$17.1 million.

The following summarizes the current and deferred tax assets and liabilities (in thousands):

	As of December 31,	
	2021	2020
Deferred tax assets:		
Accrued expenses and reserves	\$ 6,374	\$ 4,757
Stock-based compensation	14,651	1,955
Tax credit carryforwards	4,835	2,526
Net operating loss	12,042	3,787
Identified intangibles	—	8,996
Operating lease liability	16,622	20,551
Other comprehensive income	16,251	—
Foreign tax deduction	12,363	—
Other	2,247	(256)
Valuation allowance	(18,842)	(531)
Total deferred tax assets	66,543	41,785
Deferred tax liabilities:		
Depreciation and amortization	(5,433)	(6,857)
Identified intangibles	(6,049)	—
Operating lease right-of-use assets	(16,622)	(20,345)
Total deferred tax liabilities	(28,104)	(27,202)
Net deferred tax assets	38,439	14,583

As of December 31, 2021 and 2020, the Company has federal net operating loss carryforwards of \$13.7 million and \$19.6 million, respectively, to reduce future taxable income. The net operating losses are not subject to expiration. As of December 31, 2021 and 2020, the Company has federal tax credit carryforwards of \$0.9 million and \$0.9 million, respectively, to offset future tax liability. The credit carryforwards will begin to expire in 2035. As of December 31, 2021, the Company has federal capital loss carryforward of \$4.7 million to reduce future capital gains. The capital loss carryforward will expire in 2026.

As of December 31, 2021 and 2020, the Company has California net operating loss carryforwards of \$8.8 million and \$9.2 million, respectively, to reduce future taxable income. The net operating losses will begin to expire in 2037. As of December 31, 2021 and 2020, the Company has California tax credit carryforwards of \$9.5 million and \$4.8 million, respectively, to offset future tax liability. The credit carryforwards are not subject to expiration. As of December 31, 2021 and 2020, the Company has Texas tax credit carryforwards of \$0.2 million and \$0.3 million, respectively, to offset future tax liability. The credit carryforwards will begin to expire in 2040.

The valuation allowance on the Company's net deferred tax assets increased by \$18.3 million, \$0.5 million and nil during the years ended December 31, 2021, 2020 and 2019, respectively.

In assessing the realizability of the Company's deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Management's assessment is based on the weight of available evidence, including cumulative losses since inception and expected future losses and as such, management believes it is more likely than not that the deferred tax assets will be realized. As of December 31, 2021 and 2020, the Company maintained a valuation allowance with respect to certain of its deferred tax assets relating primarily to certain state tax credits and operating losses in certain non-U.S. jurisdictions that we believe are not likely to be realized.

Internal Revenue Code (IRC) Section 382 places a limitation on the amount of taxable income that can be offset by net operating loss carryforwards and tax credits after a greater than 50% change in control in ownership; California has similar rules. The Company's capitalization described herein may have resulted in such a change. Utilization of the net operating loss carryforwards may be subject to annual limitations under IRC Section 382 and similar state provisions. The annual limitation may result in the expiration of the net operating loss carryforwards before utilization.

The Company has not provided U.S. income or foreign withholding taxes on the undistributed earnings of its foreign subsidiaries as of December 31, 2021 and 2020, because it intends to permanently reinvest such earnings outside of the U.S. If these foreign earnings were to be repatriated in the future, the related U.S. tax liability will be immaterial, due to the participation exemption put in place in the Tax Act.

Uncertain Tax Positions

The following table summarizes the activity related to the gross unrecognized tax benefits (in thousands):

	As of December 31,		
	2021	2020	2019
Balance at beginning of year	\$ 14,401	\$ 6,646	\$ 2,858
Increases related to prior year positions	5,027	4,681	2,377
Increases related to current year positions	2,631	3,498	1,581
Decreases related to lapse of statutes	(172)	(424)	(170)
Decreases related to settlements	(3,431)	—	—
Balance at end of year	\$ 18,456	\$ 14,401	\$ 6,646

Of the unrecognized tax benefits, \$13.6 million and \$13.0 million represents the amount that if recognized, would favorably affect the effective income tax rate in 2021 and 2020, respectively. The Company does not expect a significant change to its unrecognized tax benefits or recorded liabilities over the next twelve months. The unrecognized tax benefits may increase or change during the next year for items that arise in the ordinary course of business.

The Company records interest and penalties related to unrecognized tax benefits in income tax expense. As of December 31, 2021, 2020 and 2019, the Company had approximately \$3.6 million, \$2.3 million, and \$0.7 million of interest and penalties, respectively.

The tax return for years 2017 through 2021 remain open to examination for federal and other major domestic taxing jurisdictions and for years 2016 through 2021 for other major foreign jurisdictions.

16. Geographic Information

The following table presents the property and equipment, net by geographic area (in thousands):

	As of December 31,	
	2021	2020
United States	\$ 25,681	\$ 27,942
Germany	22,872	11
Netherlands	14,265	—
All other countries	790	634
Total property and equipment, net	\$ 63,608	\$ 28,587

For information regarding revenue disaggregated by geography, see Note 2—Summary of Significant Accounting policies, Revenue from Contracts with Customers

17. Related Party

KKR Capital Markets, an affiliate of KKR Denali, acted as a joint lead arranger and joint bookrunner for the Credit Agreement. KKR Denali is also one of the Company's principal stockholders. In 2021, 2020 and 2019, the Company paid \$2.3 million, \$1.5 million and \$2.0 million, respectively, in fees to KKR Capital Markets in connection with the Credit Agreement. See Note 9.

In November 2020 and March 2021, the Company borrowed \$150.0 million and \$250.0 million under the revolving credit facility, respectively (together, the "Revolving Credit Loans"). A lender of the Revolving Credit Loans is an affiliate of KKR Denali, a principal stockholder of the Company. The Company repaid such Revolving Credit Loans in full with the net proceeds from the IPO in April 2021. See Note 9.

In December 2021, the Company completed a secondary offering of 7,500,000 shares of its Class A common stock, at a price of \$83.00 per share, with all shares offered by certain of the Company's stockholders, including KKR Denali. The Company incurred a payable of \$5.0 million to KKR Capital Markets in connection with the secondary offering, which was included in accounts payable on the Company's consolidated balance sheet as of December 31, 2021.

In December 2019, the Company purchased 2,475,000 shares and 300,000 shares of the Company's Class A Common Stock from the Company's chief executive officer and from the Company's Board member, respectively. The chief executive officer is also the Company's principal stockholder. The fair value of the purchased shares was \$14.0 million. The purchase of shares was paid through the issuance of two unsecured 5-year promissory notes with the principal

amount of \$10.0 million and \$1.2 million, respectively. The promissory notes are redeemable upon the earlier of maturity, (ii) immediately prior to an acquisition of the Company as defined in the Company's 2011 Equity Incentive Plan, or (iii) immediately prior to the Company's filing an S-1 with the Securities and Exchange Commission. The promissory notes bear interest at a rate of 2% per annum paid annually. Both promissory notes were recorded in other non-current liabilities at the aggregated initial fair value of \$9.1 million representing a discount of 19% to its principal amount and resulting in a purchase of the Company's common stock shares below its fair value. The discount is amortized over a period of five years under the effective interest method with amortization expense included in interest expense. The shares of the Company's Class A Common Stock purchased in exchange for the issuance of the promissory note were added to the pool of shares available for the grant under the Company's 2011 Equity Incentive Plan. The Company recorded the difference between fair value of the shares purchased and the fair value of promissory notes as an increase to additional paid-in capital. In December 2021, the Company repaid both promissory notes and recognized a loss on debt extinguishment of \$1.4 million based on the difference between the \$11.7 million repayment amount and the carrying value of such promissory notes on the settlement date. The interest expense recognized on this note was not material for the years ended December 31, 2021, 2020, and 2019.

The Company published a mobile game app developed by a mobile game developer owned by a member of the Company's Board, under a game assignment and revenue share agreement entered in October 2020. Under such agreement, the Company made payments to the mobile game developer in the amount of \$0.7 million during the year ended December 31, 2021. Payments for the year ended December 31, 2020 was not material.

The Company had no other material related party transactions for the years ended December 31, 2021, 2020, and 2019.

18. Subsequent Events

In January 2022, the Company completed its previously announced acquisition from Twitter, Inc. of the MoPub business for approximately \$1.0 billion in cash, pursuant to an agreement by and between the Company, Twitter, Inc. and Twitter International Company dated October 6, 2021. The Company plans to integrate MoPub's customer base and product features into its existing platform. The acquisition will be accounted for as a business combination and, accordingly, the total purchase price will be allocated to the intangible assets acquired based on their respective fair values on the acquisition close date. Due to the timing of the close, as of the date of issuance of these consolidated financial statements, acquisition accounting is incomplete as the Company is still in the process of estimating the initial purchase price allocation. As a result, the Company is unable to provide this information as well as the pro forma financial information of the combined entity, which will be reported on its Form 10-Q for the quarter ended March 31, 2022. The Company incurred transaction costs of approximately \$1.6 million included within the general and administrative expenses for the year ended December 31, 2021 in connection with the business combination for legal, accounting and other fees.

In February 2022, the Company entered into a definitive agreement to acquire all of the equity interests of Wurl, Inc. ("Wurl"), a connected TV software platform, for approximately \$430.0 million, which is expected to be funded with 55% in cash and 45% in the Company's Class A common stock. The transaction will enable the Company to expand into the Connected TV market. Concurrent with entering into the definitive agreement, the Company also adopted a multi-year performance-based incentive plan for certain key employees of Wurl, under which the key employees may earn up to a total of \$600.0 million in additional shares of the Company's Class A common stock through 2025, contingent upon the achievement of certain revenue and other performance targets by the acquired business and the continued employment of such key employees. Such plan will become effective at the closing of the transaction. The transaction is subject to customary closing conditions and expected to close in the first half of 2022.

In February 2022, the Company's Board authorized the repurchase of up to \$750.0 million of the Company's Class A common stock. Repurchases may be made from time to time through open market purchases or through privately negotiated transactions, subject to market conditions, applicable legal requirements and other relevant factors. Open market repurchases may be structured to occur in accordance with the requirements of Rule 10b-18. The Company may also, from time to time, enter into Rule 10b-5 trading plans to facilitate repurchases of its shares. The repurchase program does not obligate the Company to acquire any particular amount of its Class A common stock, has no expiration date and may be modified, suspended or terminated at any time at the Company's discretion. As of March 11, 2022, the Company repurchased 893,556 shares of our Class A common stock for an aggregate amount of \$43.7 million.

In March 2022, the Company committed to invest up to RMB 300.0 million (approximately \$47.5 million) as a limited partner in a China-based private equity fund ("the Fund") that will invest primarily in the equity of non-public media, telecom and technology companies operating mainly in China. Pursuant to the limited partnership agreement, the Fund has an initial term of seven years, which may be extended for two additional years with the applicable approval. This investment is subject to certain restrictions regarding transfers and withdrawals. Distributions from the Fund will be received as the underlying investments are liquidated. As of the date of issuance of these consolidated financial statements, the Company had not funded any of the committed capital contribution.

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

Not applicable.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation and supervision of our principal executive officer and our principal financial officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under Exchange Act as of the end of the period covered by this Annual Report on Form 10-K. Based on such evaluation, our principal executive officer and principal financial officer have concluded that, as of such date, our disclosure controls and procedures were effective at a reasonable assurance level.

Management's Report on Internal Control Over Financial Reporting

This Annual Report on Form 10-K does not include a report of management's assessment regarding internal control over financial reporting or an attestation report of our independent registered public accounting firm as permitted in this transition period under the rules of the SEC for newly public companies.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting identified in management's evaluation pursuant to Rules 13a-15(d) and 15d-15(d) of the Exchange Act during the quarter ended December 31, 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on Effectiveness of Controls and Procedures

Our management, including our principal executive officer and principal financial officer, do not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. The design of any system of controls is also based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Due to inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Item 9B. Other Information

Not applicable.

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 the definitive proxy statement for our 2022 Annual Meeting of Stockholders, which will be filed with the SEC, no later than 120 days after December 31, 2021 (the "Proxy Statement").

Item 11. Executive Compensation

The information required by this item is incorporated by reference to the Proxy Statement.

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

The information required by this item is incorporated by reference to the Proxy Statement.

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

The information required by this item is incorporated by reference to the Proxy Statement.

Item 14. Principal Accountant Fees and Services

The information required by this item is incorporated by reference to the Proxy Statement.

Part IV

Item 15. Exhibit and Financial Statement Schedules

Documents filed as part of this report are as follows:

- (1) Consolidated Financial Statements: Our consolidated financial statements are listed in the “Index to Consolidated Financial Statements” under Part II, Item 8 of this report.
- (2) Financial Statement Schedules: Financial statement schedules have been omitted because they are not applicable or the required information is shown in the Consolidated Financial Statements or Notes thereto.
- (3) Exhibits: The documents listed below are incorporated by reference or are filed with this report, in each case as indicated therein.

EXHIBIT INDEX

Exhibit Number	Exhibit Title	Information Incorporated by Reference		Exhibit	Filing Date
		Form	File No.		
2.1	Agreement and Plan of Merger, by and among the registrant, Morocco, Inc., Morocco Acquisition Sub, Inc. and Machine Zone, Inc., dated as of May 19, 2020.	S-1	333-253800	2.1	March 2, 2021
2.2#	Amended and Restated Share Purchase Agreement, by and among the registrant, AppLovin Active Holdings, LLC, adjust GmbH, the shareholders of adjust GmbH, and Spree Eternity GmbH, dated as of March 12, 2021, as amended on March 30, 2021.	S-1/A	333-253800	2.2	April 7, 2021
3.1	Amended and Restated Certificate of Incorporation of the registrant.	S-1/A	333-253800	3.2	March 22, 2021
3.2	Certificate of Change of Location of Registered Agent and/or Registered office.	8-K	001-40325	3.1	June 15, 2021
3.3	Amended and Restated Bylaws of the registrant	S-1/A	333-253800	3.4	March 22, 2021
4.1	Form of Class A common stock certificate of the registrant.	S-1	333-253800	4.1	March 2, 2021
4.2	Investors' Rights Agreement among the registrant and certain holders of its capital stock, dated as of August 15, 2018, as amended.	S-1/A	333-253800	4.2	March 22, 2021
4.3	Form of Warrant to Purchase Class A Common Stock.	S-1	333-253800	4.3	March 2, 2021
4.4	Description of Capital Stock				
10.1+	Form of Indemnification Agreement between the registrant and each of its directors and executive officers.	S-1	333-253800	10.1	March 2, 2021
10.2+	AppLovin Corporation 2011 Equity Incentive Plan and related form agreements.	S-1	333-253800	10.2	March 2, 2021

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10.3+	AppLovin Corporation 2021 Equity Incentive Plan and related form agreements.	S-1/A	333-253800	10.3	March 22, 2021
10.4+	AppLovin Corporation 2021 Executive Incentive Compensation Plan.	S-1/A	333-253800	10.4	March 22, 2021
10.5+	AppLovin Corporation 2021 Employee Stock Purchase Plan and related form agreements.	S-1/A	333-253800	10.5	March 22, 2021
10.6	AppLovin Corporation 2021 Partner Studio Incentive Plan and related form agreements.	S-1/A	333-253800	10.6	March 22, 2021
10.7+	AppLovin Corporation Outside Director Compensation Policy.	S-1	333-253800	10.6	March 2, 2021
10.8+	Executive Change in Control and Severance Plan and Summary Plan Description.	S-1/A	333-253800	10.8	March 22, 2021
10.9+	Form of Confirmatory Employment Letter between the registrant and each of its executive officers.	S-1	333-253800	10.7	March 2, 2021
10.10	Amended and Restated Sublease, by and between 1050 Page Mill Road Property, LLC and AppLovin Corporation, dated as of February 18, 2021.	S-1	333-253800	10.8	March 2, 2021
10.11	Credit Agreement, by and between the registrant, the lenders from time to time thereto and Bank of America, N.A., as administrative agent and collateral agent, dated August 15, 2018.	S-1	333-253800	10.9	March 2, 2021
10.12	Amendment No. 1 to Credit Agreement, by and between the registrant, the lenders from time to time thereto and Bank of America, N.A., as administrative agent and collateral agent, dated April 23, 2019.	S-1	333-253800	10.10	March 2, 2021
10.13	Amendment No. 2 to Credit Agreement, by and between the registrant, the lenders from time to time thereto and Bank of America, N.A., as administrative agent and collateral agent, dated April 27, 2020.	S-1	333-253800	10.11	March 2, 2021
10.14	Amendment No. 3 to Credit Agreement, by and between the registrant, the lenders from time to time thereto and Bank of America, N.A., as administrative agent and collateral agent, dated May 6, 2020.	S-1	333-253800	10.12	March 2, 2021
10.15	Amendment No. 4 to Credit Agreement, by and between the registrant, the lenders from time to time thereto and Bank of America, N.A., as administrative agent and collateral agent, dated October 27, 2020.	S-1	333-253800	10.13	March 2, 2021
10.16	Amendment No. 5 to Credit Agreement, by and between the registrant, the lenders from time to time thereto and Bank of America, N.A., as administrative agent and collateral agent, dated February 12, 2021.	S-1/A	333-253800	10.16	March 22, 2021
10.17	Amendment No. 6 to Credit Agreement, by and between the registrant, the lenders from time to time there to and Bank of America, N.A., as administrative agent and collateral agent, dated October 25, 2021.	8-K	001-40325	10.1	October 29, 2021

10.18	Exchange Agreement between the registrant and each of Adam Foroughi, Herald Chen, KKR Denali Holdings L.P., and certain related entities, dated March 16, 2021.	S-1/A	333-253800	10.17	March 22, 2021
10.19+	Equity Exchange Agreement between the registrant and Herald Chen, dated March 16, 2021.	S-1/A	333-253800	10.18	March 22, 2021
10.20	Director Nominations Agreement between the registrant and KKR Denali Holdings L.P., dated March 16, 2021.	S-1/A	333-253800	10.19	March 22, 2021
21.1	List of subsidiaries of the registrant.				
23.1	Consent of Deloitte & Touche LLP, Independent Registered Public Accounting Firm.				
24.1	Power of Attorney (included on signature page hereto).				
31.1	Certification of Principal Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
31.2	Certification of Principal Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
32.1†	Certifications 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.				
101	The following financial statements from the Company's Annual Report on Form 10-K for the year ended December 31, 2021, formatted in Inline XBRL: (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Comprehensive Income (Loss), (iv) Consolidated Statements of Redeemable Noncontrolling Interest and Stockholders' Deficit, (v) Consolidated Statements of Cash Flows, and (vi) Notes to Consolidated Financial Statements.				
104	Cover Page Interactive Data File (contained in Exhibit 101).				

+ Indicates management contract or compensatory plan.

Certain exhibits and schedules to this exhibit have been omitted in accordance with Regulation S-K Item 601(b)(2). We agree to furnish supplementally a copy of all omitted exhibits and schedules to the Securities and Exchange Commission upon its request.

† The certifications attached as Exhibit 32.1 that accompany this Annual Report on Form 10-K are deemed furnished and not filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of AppLovin Corporation under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as

amended, whether made before or after the date of this Annual Report on Form 10-K, irrespective of any general incorporation language contained in such filing.

Item 16. Form 10-K Summary

None.

SIGNATURES

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

Date: March 11, 2022

APPLOVIN CORPORATION

By: /s/ Adam Foroughi

Adam Foroughi

Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Adam Foroughi, Herald Chen and Victoria Valenzuela, and each one of them, as their true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for them and in their name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as they might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Adam Foroughi</u> Adam Foroughi	Chief Executive Officer and Chairperson (Principal Executive Officer)	March 11, 2022
<u>/s/ Herald Chen</u> Herald Chen	Chief Financial Officer, President, and Director (Principal Financial Officer)	March 11, 2022
<u>/s/ Elena Arutunian</u> Elena Arutunian	Chief Accounting Officer (Principal Accounting Officer)	March 11, 2022
<u>/s/ Craig Billings</u> Craig Billings	Director	March 11, 2022
<u>/s/ Margaret Georgiadis</u> Margaret Georgiadis	Director	March 11, 2022

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Alyssa Harvey Dawson</u> Alyssa Harvey Dawson	Director	March 11, 2022
<u>/s/ Edward Oberwager</u> Edward Oberwager	Director	March 11, 2022
<u>/s/ Asha Sharma</u> Asha Sharma	Director	March 11, 2022
<u>/s/ Eduardo Vivas</u> Eduardo Vivas	Director	March 11, 2022