

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

Form 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the year ended December 31, 2021

or

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

Commission file number: 001-38211

ROKU, INC.

(Exact name of Registrant as specified in its charter)

Delaware
*(State or other jurisdiction of
incorporation or organization)*

4841
*(Primary standard industrial
code number)*

26-2087865
(I.R.S. employer identification no.)

1155 Coleman Avenue
San Jose, California 95110
(408) 556-9040

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A Common Stock, \$0.0001 par value	ROKU	The Nasdaq Global Select Market

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

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

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

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

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

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

Large Accelerated Filer	<input checked="" type="checkbox"/>	Accelerated Filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
Emerging Growth Company	<input type="checkbox"/>		

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. Yes No

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

As of June 30, 2021, the aggregate market value of voting stock held by non-affiliates of the registrant, based upon the closing sales price for the registrant's common stock, as reported in the Nasdaq Global Select Market System, was \$53,234,001,409. Shares of common stock beneficially owned by each executive officer and director of the Registrant and by each person known by the Registrant to beneficially own 10% or more of the outstanding common stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for any other purpose.

As of January 31, 2022, the registrant had 119,086,923 shares of Class A common stock, \$0.0001 par value per share and 16,215,344 shares of Class B common stock, \$0.0001 par value per share.

DOCUMENTS INCORPORATED BY REFERENCE

Part III incorporates by reference certain information from the Registrant's definitive proxy statement (the "2021 Proxy Statement") for the 2022 Annual Meeting of Stockholders. The 2021 Proxy Statement will be filed with the Securities and Exchange Commission within 120 days of the registrant's fiscal year ended December 31, 2021.

TABLE OF CONTENTS

	Page
<u>PART I</u>	
Item 1	Business 5
Item 1A	Risk Factors 15
Item 1B	Unresolved Staff Comments 60
Item 2	Properties 60
Item 3	Legal Proceedings 60
Item 4	Mine Safety Disclosures 60
PART II	
Item 5	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities 61
Item 6	Reserved..... 64
Item 7	Management's Discussion and Analysis of Financial Condition and Results of Operations 64
Item 7A	Quantitative and Qualitative Disclosures About Market Risk 80
Item 8	Financial Statements and Supplementary Data 82
Item 9	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure 124
Item 9A	Controls and Procedures 124
Item 9B	Other Information 127
Item 9C	Disclosure Regarding Foreign Jurisdictions that Prevent Inspections 127
PART III	
Item 10	Directors, Executive Officers and Corporate Governance 128
Item 11	Executive Compensation..... 128
Item 12	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters 128
Item 13	Certain Relationships and Related Transactions, and Director Independence 128
Item 14	Principal Accounting Fees and Services 128
PART IV	
Item 15	Exhibits, Financial Statement Schedules 129
Item 16	Form 10-K Summary 132
	Signatures..... 133

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K (“Annual Report”) contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (“Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (“Exchange Act”), about us and our industry that involve substantial risks and uncertainties. All statements other than statements of historical facts in this Annual Report, including statements regarding our future results of operations and financial condition, business strategy, and plans and objectives of management for future operations, are forward-looking statements. For example, statements in this Annual Report regarding the potential future impact of the COVID-19 pandemic on our business and results of operations are forward-looking statements. In some cases, forward-looking statements may be identified by words such as “anticipate,” “believe,” “continue,” “could,” “design,” “estimate,” “expect,” “intend,” “may,” “plan,” “potentially,” “predict,” “project,” “should,” “will,” “would,” “target,” or the negative of these terms or other similar expressions. We caution you that the foregoing may not encompass all of the forward-looking statements made in this Annual Report.

Forward-looking statements are based on our management’s beliefs and assumptions and on information currently available. These forward-looking statements are subject to a number of known and unknown risks, uncertainties, and assumptions, including risks described in the section titled “Risk Factors” and elsewhere in this Annual Report, regarding, among other things:

- our financial performance, including our revenue, cost of revenue, operating expenses, and our ability to maintain and grow our profitability;*
- the impact of the COVID-19 pandemic, supply chain disruptions, and inflationary pressures on our business, operations, and the markets and communities in which we and our advertisers, content providers, Roku TV brand partners, other device licensees, manufacturers, suppliers, retailers, and users operate;*
- our ability to attract and retain users and increase streaming hours;*
- our ability to attract and retain advertisers;*
- our ability to attract and retain TV brands and service operators to license and deploy our technology;*
- our ability to produce or acquire rights to distribute popular content on our platform on favorable terms, or at all, including the renewals of our existing agreements with content publishers;*
- changes in consumer viewing habits and the growth of TV streaming;*
- the growth of our relevant markets, including the growth in advertising spend on TV streaming platforms, and our ability to successfully grow our business in those markets;*
- our ability to adapt to changing market conditions and technological developments;*
- our ability to develop and launch new products and provide ancillary services and support;*
- our ability to integrate acquired businesses, products, and technologies;*
- our ability to compete effectively with existing competitors and new market entrants;*
- our ability to successfully manage domestic and international expansion;*
- our ability to attract and retain qualified employees and key personnel;*
- our ability to address potential and actual security breaches and system failures involving our products, systems and operations;*
- our ability to maintain, protect, and enhance our intellectual property; and*
- our ability to comply with laws and regulations that currently apply or may become applicable to our business both in the United States and internationally, including compliance with privacy and data protection regulations in various U.S. and international jurisdictions.*

Other sections of this Annual Report may include additional factors that could harm our business and financial performance. Moreover, we operate in a very competitive and rapidly changing environment. New risk factors emerge from time to time, and it is not possible for our management to predict all risk factors nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ from those contained in, or implied by, any forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. We cannot assure you that the events and circumstances reflected in the forward-looking statements will be achieved or occur. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance, or achievements. Except as required by law, we undertake no obligation to update publicly any forward-looking statements for any reason after the date of this Annual Report or to conform these statements to actual results or to changes in our expectations. You should read this Annual Report, and the documents referenced in and filed as exhibits to this Annual Report, with the understanding that our actual future results, levels of activity, performance, and achievements may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

Investors and others should note that we may announce material business and financial information to our investors using our investor relations website (roku.com/investor), U.S. Securities and Exchange Commission (“SEC”) filings, webcasts, press releases, and conference calls. We use these mediums to communicate with investors and the general public about our company, our products and services, and other issues. It is possible that the information that we make available may be deemed to be material information. We therefore encourage investors, the media, and others interested in our company to review the information that we post on our investor relations website.

Roku, the Roku logo, and other trade names, trademarks, or service marks of Roku appearing in this report are the property of Roku. Trade names, trademarks, and service marks of other companies appearing in this report are the property of their respective holders.

PART I

Item 1: Business

Overview

Roku, Inc. (“Roku,” “the Company,” “we,” or “us”) is the leading TV streaming platform in the United States, Mexico, and Canada by hours streamed.

We pioneered streaming to the TV. We believe that someday, all TV content and all TV advertising will be streamed. The shift of the TV ecosystem to streaming is continuing and is creating more options for consumers, content publishers, advertisers, and other industry participants. TV streaming is now mainstream and consumers are spending more time watching TV streaming services, with many ‘cutting the cord’ from legacy TV services entirely. Over the past several years, nearly every major media company has entered TV streaming and launched a streaming service. Similarly, advertisers looking to reach and engage with streaming audiences are increasingly taking advantage of the benefits inherent to the digital advertising capabilities of TV streaming platforms and are re-allocating their budgets accordingly.

Our Strategy

Our mission is to be the global TV streaming platform that connects and benefits the entire TV ecosystem of consumers, content publishers, and advertisers. Through our TV streaming platform, we are focused on connecting consumers to the entertainment they love, enabling content publishers to build and monetize large audiences, and providing advertisers with unique capabilities to engage consumers. Central to our platform is the Roku operating system (the “Roku OS”). The Roku OS is purpose built for TV and designed to run on low-cost hardware which allows us to manufacture and sell streaming players that are affordable. The Roku OS also powers Roku TV models that are manufactured and sold by our TV brand partners who license the Roku OS and leverage our smart TV hardware reference designs. Roku TV models and Roku streaming players enable consumers to access a wide selection of content by connecting their Roku device to our streaming platform via a home broadband network.

The features and functionality of our platform, powered by the Roku OS, enable us to address the needs of our consumers, content publishers, advertisers, Roku TV brand partners, and other partners. Consumers can discover and access a wide variety of streaming content, content publishers can reach our highly-engaged user base of over 60 million active accounts and utilize our billing services and data insight tools, advertisers can serve targeted and measurable ads to the TV viewers that they want to reach, Roku TV brand partners can build market share by offering high performance smart TVs in a range of sizes and price points, and retailers can offer customers Roku’s highly-rated streaming devices online and in stores. We continue to invest significant resources to advance the Roku OS; to provide an industry-leading platform for our consumers, content publishers, and advertisers; to obtain content for our platform that attracts users, including our own original content; and to extend Roku’s advantage as the streaming decade continues.

Our Business Model

Three core areas of focus define our business model. First, we build scale by increasing our active accounts. Second, we increase engagement by growing the hours of content streamed through our platform. And third, we monetize the activities that consumers engage in through our platform. Furthermore, our business model is designed to fulfill the needs of the participants in the TV streaming ecosystem: consumers, content publishers, advertisers, TV brand partners, other device licensees, and retailers.

Scale: Increasing the number of active accounts

We make access to TV streaming affordable in part by offering a lineup of stand-alone streaming players that connect to a user's TV. To enhance our users' experience and to provide a better audio experience, we also offer our Roku Streambars with a streaming player built in that enables the soundbar to connect to our streaming platform, Roku wireless speakers that connect to Roku TV models and Roku Streambars, and our Roku Wireless Subwoofers. Furthermore, we offer customer choice with The Roku TV Ready program, which in partnership with audio companies, we enable their audio products to work seamlessly with Roku TV models. We launch new devices and provide updates via the Roku OS periodically to ensure they offer the highest performance at an affordable price.

We also license the Roku OS to TV brand partners that manufacture and sell co-branded Roku TV models that integrate the Roku OS to enable basic TV functions and connect to our TV streaming platform. We have driven strong active account growth through our Roku TV licensing program. Using our reference designs results in relatively low hardware costs, enabling these TV brand licensees to manufacture and sell smart TVs that are competitively priced for consumers and that are automatically updated whenever we issue a Roku OS update.

We also license the Roku OS and our streaming player designs, as well as provide ongoing technology and support services, to certain international pay TV and telecommunications service operators that distribute co-branded players to their subscribers in their markets.

We offer consumers tremendous optionality and value with respect to gaining access to the Roku platform that is combined with an exceptional user experience on the platform. We have been able to significantly scale our active account base over a multi-year period. In 2021, we added over 8.9 million active accounts, ending the year with 60.1 million active accounts.

Engagement: Growing streaming hours

We believe that offering users a wide range of content and easy-to-use user interface drives increased user engagement by delivering a better overall streaming experience. Streaming hours on our platform have grown from 58.7 billion hours in 2020 to 73.2 billion hours in 2021, as our active accounts have grown through the distribution of Roku streaming players and our partners' Roku TV models.

Through our streaming platform and our streaming devices, we make it easy and affordable for our users to watch their favorite TV shows and movies, as well as listen to streaming audio. Furthermore, we believe our platform offers users an incredible streaming experience through a user interface that is easy to use and navigate. From the Roku home screen, our users can easily find and access the 500,000+ free and paid movies and TV episodes, as well as live TV, news, sports, hit movies, popular shows, and more, that are available from the thousands of channels on our streaming platform. And Roku's powerful cross-channel search capabilities make it simple for our users to find the entertainment they are looking for. Users have the optionality to align their spend to their budget by choosing content that is available on an ad-supported, subscription, or transactional basis. Our direct relationship with our users provides us with detailed insights about our users and their behavior on our platform, including certain content they search for, the channels they install, the channels they watch, and certain content that they purchase or subscribe to on our platform. Our first party data enables us to develop actionable insights such as content recommendations to improve our users' experience.

We enable our content partners to publish streaming channels, quickly and easily, which makes us an attractive platform for content publishers to partner with as they seek to reach TV streaming, or over-the-top ("OTT"), users. Content publishers can deliver content directly to our large and relevant audiences and reach those users who no longer use or those who never used legacy TV or paid TV subscriptions. As consumers shift

to TV streaming, content publishers that use our platform are able to reach these streaming audiences at scale and engage users directly.

The Roku Channel is our own streaming channel that drives user engagement on our platform by providing our users free, ad-supported access to a large library of third-party movies and shows on-demand that we directly license, live streaming linear channels, original content, and subscription video on demand (“SVOD”) content made available through Premium Subscriptions on The Roku Channel. The Roku Channel offers Premium Subscriptions from dozens of content partners, giving users the ability to browse all available content before signing up, obtain free trials for subscriptions, sign up in one-click, and enjoy simple subscription management with a single monthly bill. The Roku Channel also is intended to help content publishers drive additional viewership and maximize the value of their content on our platform. For example, we provide personalized content selection for users and integrated Roku Pay billing services into The Roku Channel to enable one-click subscriptions. The Roku Channel is available in the United States, the United Kingdom, and Canada. In the United States, The Roku Channel features a diverse lineup of more than 80,000 free movies and TV shows, including original and exclusive content, 200+ free live linear television channels, free ad-supported entertainment for kids and family with more than 10,000 titles, and more than 50 premium subscription channels.

The Roku Channel model offers content that grows engagement, which accelerates advertising revenue, which then enables more investment in content. To further drive user engagement on our platform, in 2021, we acquired exclusive movies and TV shows for the first time, featuring titles that are exclusive to The Roku Channel. In May 2021, we launched this original exclusive content as Roku Originals, which is original content exclusive to The Roku Channel. Our first Roku Originals consisted of content from the Quibi library, which we acquired in January 2021. We have since greenlit second seasons of some of these shows and added original content that was not part of that acquisition. We also acquired the This Old House franchise in March 2021, and launched advertising-supported video on demand (“AVOD”), ad-supported linear, and Premium Subscription channels for This Old House content on The Roku Channel. In 2021, we also launched the Roku Brand Studio that evolves the advertising product and enhances the streaming experience for our users. Through Roku Brand Studio, Roku helps marketers go beyond the traditional 30-second TV ad spot and offer more innovative ad experiences, such as sponsored ads in our user interface, interactive video ads, branded content series, and more. Roku Originals will continue to play an important part of The Roku Channel’s programming in 2022 and beyond with content investments in original programming planned to be commensurate with the channel’s overall growth.

Monetization: Growing our revenue and gross profit by monetizing user activity

We believe that running relevant display and digital ads enhances the user experience on our platform. We generate platform segment revenue by monetizing our users’ engagement on our platform through a variety of services and capabilities, including sales of subscription services and other commerce transactions, brand sponsorship and promotions, billing services, and video advertising in ad supported channels. Each user on our platform creates multiple revenue opportunities for Roku, whether they are purchasing content, enjoying ad-supported content, opening the Roku home page and seeing a branded takeover of our home screen, or using a Roku remote. We measure monetization of our platform by calculating the average revenue per user (“ARPU”), which we believe represents the inherent value of our business model, and growth in gross profit. In 2021, ARPU (which we measure on a trailing twelve-month basis) increased from \$28.76 as of December 31, 2020 to \$41.03 as of December 31, 2021 and gross profit for the full year grew from \$808.2 million as of December 31, 2020 to \$1,408.6 million as of December 31, 2021.

Our sophisticated and leading streaming platform enables advertisers, including content publishers, brands, and agencies, to reach audiences that are no longer reachable or are increasingly unavailable through advertising on legacy TV. We make it easy for content publishers to distribute and monetize their streaming content through

three primary business models: transaction video on demand (“TVOD”) that includes channels that offer a la carte movie purchases or rentals, subscription video on demand that includes subscriptions to individual video on demand channels and so-called virtual multichannel video programming distribution services, and ad-supported, which includes AVOD channels with on demand content that do not charge a subscription fee to users, as well as free ad-supported streaming TV (“FAST”), which we define as free, ad-supported linear streaming TV. Through Roku Pay, our platform billing solution, we are also able to assist content partners with billing services, including billing users for in-channel purchases like movie rentals, managing subscriptions, and customer invoices. We believe Roku Pay is a key platform capability that simplifies user subscription signups and drives purchase and retention for our content publishers.

Content publishers also have access to our media and entertainment promotional spending campaign tools to help them attract and retain viewers. Content publishers can use a variety of ad placements, including native display ads on the Roku home screen or a screen saver to drive channel downloads, promote a channel’s content, and direct traffic to their channels in order to drive subscriptions or movie and TV show consumption. We also derive revenue from the sale of branded channel buttons on streaming player and Roku TV remote controls that are intended to increase incremental usage of the channel by allowing users to launch straight into the channel from the home screen. Our analytics and reporting assist content publishers with analyzing viewership trends and metrics for specific titles. Using machine learning, we also can help content publishers target new audiences that are more likely to subscribe to their services.

We offer advertisers a unique and effective set of tools to engage with our users and our platform. Advertisers are able to leverage our direct relationship with our users, as well as our advertising capabilities and user data and insights, to serve relevant, targeted advertisements. Roku’s first-party data is a result of our direct relationship with users and is exclusively available in our Oneview ad platform. Advertisers on our platform also can measure both the effectiveness of the ads served and their return on investment. We offer engagement analytics such as ad impressions served, click-through rates, and video completion rates. We work with a wide variety of third-party measurement companies to measure the branding impact of the ads served and audience demographics, validate ad effectiveness, and quantify sales lift from advertising on our platform. Furthermore, we have relationships with third-party providers that focus on transactional or point of sale data, which enables our advertisers to compare the effectiveness of ads served on our platform to advertising on legacy TV. Additional promotional advertising opportunities include content sponsorships to give users the opportunity to experience a free movie or show and sponsored themes on our home screen. We also sell branded content rows within The Roku Channel.

OneView is the ad buying platform built for TV streaming. Advertisers use OneView to set up, make changes, and measure ad campaigns entirely on their own. In a world where all TV ads will be automated and streamed, our software and machine learning provide the best way to reach a Roku user wherever they are -- Roku, other TV streaming devices, desktop, mobile, and more. Advertisers choose OneView because it is the only ad buying platform with Roku data, with ad space from The Roku Channel, and with new Roku ad experiences that go beyond the legacy TV spot.

Business Growth

Investment in Growth

We believe that our future performance will depend on the success of the investments in our business that we have made, and will continue to make, to improve the value for users, content publishers, and advertisers on our platform. We must regularly update and enrich our platform to meet evolving consumer behavior and deliver a superior experience for our users, content publishers, and advertisers. Further, it is important that we remain a

platform for content delivery and invest to provide content publishers with best-in-class publishing tools and actionable audience insights. We must continue to innovate and invest in our advertising capabilities and technology so that we attract and encourage incremental advertising spend on our platform. Accordingly, we plan to continue investing in our business to enhance our competitive differentiation and seed future growth. In particular, these investments will include research and development initiatives to bring new features and technology to our platform; sales and marketing efforts to drive increased scale and engagement of our user base; continuing to invest in both licensed and original content to drive incremental usage of The Roku Channel; and building out our general and administrative infrastructure to support a global scale business.

Advertising Innovation

We are expanding our total addressable market to direct-to-consumer and small/medium businesses (“SMBs”) that currently spend primarily on digital and social media platforms. We are building new advertiser products for SMBs to access the OneView ad platform. In 2021, we announced a new tool that will allow Shopify merchants to easily build, buy, and measure TV streaming advertising campaigns on the Roku platform. Also, in 2021, we acquired Nielsen’s video automatic content recognition and dynamic ad insertion technologies. Roku can now enable TV programmers to replace legacy TV ads with targeted ads in real-time. This means marketers can improve the consumer experience by no longer running the same ad too many times to the same linear TV viewer and content owners can increase ad revenue by bringing Roku data and attribution into legacy TV advertising.

International Markets

The shift from traditional pay TV to TV streaming is a global phenomenon, as it offers consumers better choice and greater control over their entertainment. We believe that the value our business delivers to consumers, content publishers, advertisers, TV brand partners, other device licensees, and retailers is as compelling in international markets as it is in the United States. Today our products are available in 20+ countries while the Roku OS is available in six countries. We are now the #1 TV streaming platform in the United States, Mexico, and Canada by hours streamed. We continue to build our foundation for international expansion by establishing teams and offices around the world and investing in systems and processes that will support international expansion going forward. In 2021, we expanded into Germany with our player business and launched new Roku TV models in the United Kingdom, Brazil, Mexico, Chile, and Peru. In international territories, we will continue to focus on building scale first, increasing customer engagement, and ultimately driving monetization.

Sales and Marketing

We engage in a wide variety of sales and marketing activities to continuously drive active account growth, engagement, and monetization and dedicate significant resources to this area. Our sales and marketing activities are primarily focused on building and expanding relationships with content publishers, advertisers, TV brands, retailers, and service operators, and driving sales of our streaming players and audio products and Roku TV models to consumers through retail distribution channels.

We have dedicated business development teams that develop and maintain relationships, to promote and build awareness of the features and advantages of the Roku platform among content publishers, advertisers, TV brands, and service operators. Our data science team supports our sales and marketing efforts by analyzing data on our platform to increase effectiveness for our content publishers and advertisers as well as for our consumer marketing campaigns. We enter into distribution agreements with our content publishers and license their content through our dedicated content relationship management team. Our relationship with content publishers is typically client-direct. We secure direct access to publishers’ video ad inventory as part of our distribution agreements and through access to programmatic ad exchanges in OneView to serve as an additional channel for content publishers

to monetize their audience. These sales efforts are differentiated and complementary to that of our content publishers. Whereas our publishers typically feature their brand and content in their sale, we focus on delivering a large streaming audience across many channels at once using our own data. We sell advertising to a wide range of advertisers helping them reach their goals across numerous key performance indicators. Our sales teams and products are organized into six groups that specialize in the unique needs of each area: (i) agency holding companies and Fortune 500 brands, (ii) independent agency and mid-market clients, (iii) content publishers and entertainment brands, (iv) performance and direct to consumer brands, (v) international markets, and (vi) local advertising.

We work with our Roku TV brand partners to assist in all phases of the development of Roku TV models, including development, planning, manufacturing, and marketing. Similarly, we work with service operators on the planning and development of their co-branded players.

In the United States, the majority of our streaming players, audio products and Roku TV models are sold through traditional brick and mortar retailers, such as Best Buy, Target, and Walmart, including their online sales platforms, and online retailers such as Amazon, and to a lesser extent our website. We also sell products internationally through distributors and to retailers. Amazon, Best Buy, and Walmart collectively accounted for 69% of our player revenue for both of the years ended December 31, 2021 and 2020. We support retailers with an experienced sales management team and work closely with these retailers to assist with in-store marketing and product mix forecasting. We intend to continue to invest significant resources in our sales and marketing efforts.

Seasonality

We have historically seen seasonality in our business related to advertising and streaming player sales. Our revenue and gross profit are traditionally strongest in the fourth quarter of each fiscal year and represent a high percentage of the total net revenue for such fiscal year due to higher consumer purchases and increased advertising during holiday seasons. Furthermore, in preparation for the fourth quarter holiday season, we recognize significant discounts in the average selling prices of our player sales through retailers in an effort to grow our active accounts, which typically reduce our player gross margin in the fourth quarter.

Research and Development

Our research and development model relies on a combination of in-house staff and out-sourced design and manufacturing partners to cost-effectively improve and enhance our platform, and to develop new players, audio products, TVs, features, and functionality. We work closely with content publishers, advertisers, TV brands, and service operators to understand their current and future needs. We have designed a product development process that captures and integrates their feedback. In addition, we solicit user feedback in the development of new features and enhancements to the Roku platform.

We intend to continue to significantly invest in research and development to bring new devices to market and enhance our platform and capabilities.

Manufacturing

We outsource the manufacturing of our products to our contract manufacturers, using our design specifications. All of our products are manufactured by our contract manufacturers in the People's Republic of China, Southeast Asia, and Brazil. Our contracts do not obligate them to supply products to us in any specific quantity or at any specific price. Our contract manufacturers procure components and assemble our products to demand forecast we establish based upon historical trends and analysis from our sales, operations, and product

management functions. The contract manufacturers ship our products to our third-party warehouses in California, the United Kingdom, Germany, and Brazil where we ship our products directly to retailers, wholesale distributors and to end users.

Government Regulation

Our business and our devices and platform are subject to numerous U.S. federal, U.S. state, and foreign laws and regulations covering a wide variety of subject matters. These laws and regulations include general business regulations and laws, as well as regulations and laws specific to providers of internet-delivered streaming services and internet-connected devices.

For example, in both the United States and abroad, the regulatory framework for privacy and data security issues is rapidly evolving. U.S. federal and state consumer protection regulators generally exercise oversight of consumer privacy protections and the security of online services. And an increasing number of states have passed, or are considering legislation to govern consumer privacy. Likewise, foreign jurisdictions in which we operate impose different, and sometimes more stringent, consumer and privacy protections, compared to the United States. Consumer privacy laws are constantly changing and may become more diverse and restrictive over time, increasing the challenges and costs associated with complying with these laws in all jurisdictions. Privacy laws also may limit the ability of advertisers to fully utilize our platform, which could have a negative impact on our business.

In addition, the internet is a vital component of our business and is subject to a variety of laws and regulations in jurisdictions throughout the world. We historically have relied on the openness and accessibility of the internet to conduct our business, and government regulations that impede the preservation of the open internet could harm our business. Regulators in the United States and abroad continue to evaluate policy changes that could affect the openness of the internet. To the extent regulators allow network operators to restrict the flow of content over the internet, such operators may seek to extract fees from us or our content publishers to deliver our traffic or may otherwise engage in blocking, throttling, or other discriminatory practices with respect to our traffic, which could adversely impact our business.

Finally, our content business is subject to a wide range of government regulations that may vary by jurisdiction. Some nations highly regulate media, including TV streaming. Others have (or may consider) regulations that mandate certain content quotas or local production requirements, for cultural preservation or other reasons. Because our business depends on the creation and production of content, and on the availability of third-party content, delivered over the internet, increased regulation of TV streaming or changes in laws or regulations governing internet transmission of content could adversely affect our business and the attractiveness of our platform. Additionally, these kinds of regulations may make operating in certain jurisdictions more expensive or restrictive.

New laws and regulations, individually or in the aggregate, could increase our cost of doing business, impact our competitive position, or otherwise have an adverse effect on our business. The costs of compliance with these laws and regulations are substantial and are likely to increase in the future. Compliance with existing or future laws and regulations, including, but not limited to, those pertaining to internet and online services, data privacy and security, consumer protection, global trade, environmental protection, employee health and safety, and taxes, could have an adverse impact on our business in subsequent periods. If we fail to comply with these laws and regulations, we may be subject to significant liabilities and other penalties as well as harm to our reputation. For additional information about government regulation applicable to our business and associated risks, see Item 1A, Risk Factors, elsewhere in this Annual Report.

Intellectual Property

Our success depends in part upon our ability to protect our core technology and intellectual property. To establish and protect our proprietary rights, we rely on a combination of intellectual property rights, including patents, trademarks, copyrights, trade secret laws, license agreements, confidentiality procedures, employee disclosure and invention assignment agreements, and other contractual rights.

As of December 31, 2021, we had approximately 750 issued patents and 600 pending applications in the United States and foreign countries. We also license technology from third parties when we believe it will facilitate our product offerings or business. For information about the intellectual property risks applicable to our business, see Item 1A, Risk Factors, elsewhere in this Annual Report.

Competition

The TV streaming industry is highly competitive and, as it continues to evolve, we will continue to face strong competition in every aspect of our business. We compete with much larger companies which have resources and brand recognition that pose significant competitive challenges. In the face of this competition, we believe our success depends on our ability to acquire users by delivering high quality streaming devices at competitive prices, partnering with Roku TV brands to bring co-branded smart TVs to market, and developing and monetizing our streaming platform with compelling content, promotional services, and advertising.

Our competitors include:

- companies that offer TV streaming devices that compete with our streaming players and Roku TV models and companies that license their operating systems for integration into smart TVs and other streaming products;
- TV brands that offer their own TV streaming solutions within their TVs and well as other devices such as game consoles, DVD players, Blu-ray players, and set-top boxes that leverage their own operating systems;
- mobile streaming platforms that enable users to stream content on phones and tablets;
- companies that produce and aggregate TV streaming content with the goal of attracting wide audiences;
- companies that offer advertisers the opportunity to reach consumers on other content and advertising mediums;
- companies that offer users other sources for news and entertainment, including broadcast and cable television networks, newspapers and magazines, social networks, and video games; and
- companies that operate in the same locations as our offices that may be better able attract and retain top talent in engineering, research and development, sales and marketing, operations, and other organizations.

We also compete with other entertainment providers, including other TV streaming companies and content publishers, in seeking high quality content to license for our platform and for talent and programming concepts for original content projects.

As the TV streaming market continues to develop, we may become subject to additional competition as we introduce or develop new products and services, as our existing products and services evolve, or as other companies introduce competing products and services.

Human Capital Management

We believe our success depends on our culture and our ability to attract and retain our employees. As of December 31, 2021, we employed approximately 3,000 full-time employees located in 13 countries. Only our employees in Brazil are represented by a labor union with respect to their employment. The majority of our employees currently are working from home as a result of the COVID-19 pandemic but we expect that most employees will adopt a hybrid work schedule (consisting of both in-person work and working from home) in 2022.

Culture

We want our employees to be proud to work at Roku. Our entrepreneurial, execution-focused culture emphasizes recruiting talented individuals, encouraging teamwork, and expecting our employees to perform at a high level. Across Roku, teams are expected to communicate clearly, in real time. Because our employees are trusted and encouraged to make decisions, our leadership communicates plans, milestones, and strategic context broadly, and our employees are trusted to maintain the confidentiality of such information. Our employees are encouraged to use our broad talent base for diverse points of view when making decisions.

As we grow our business, our goal is to ensure that Roku continues to be a great place to work and thrive. In 2021, we launched our first company-wide employee engagement survey to better understand employee sentiment regarding our strategy, culture, compensation and benefits, leadership, and other dimensions of the employee experience.

Diversity and Inclusion

We are committed to being a diverse and inclusive organization. We follow through on this commitment via our annual pay equity analysis designed to ensure we pay fairly and equitably across gender and ethnicity, year over year; hiring and management trainings that incorporate topics on mitigating unconscious bias; and diverse interview panels that limit questions to those that are legally compliant and objectively tied to applicable job openings.

Our Vice President of Global Talent Management and Inclusion leads a growing team that is focusing on priorities in four key areas: Inclusive Employee Experiences, Inclusive Recruiting, Inclusive Communities & Social Impact, and Inclusive Customer Advocacy.

Inclusive Employee Experiences: Our Employee Resource Group (“ERG”) Program currently supports six ERGs, which are voluntary, employee-led groups intended to foster a diverse and inclusive workplace, build internal community, encourage career growth and networking, and support social impact partnerships. We also regularly hold educational employee-led and expert-led dialogues that cover various diversity and inclusion topics, and we provide diversity and inclusion training and curriculum in the areas of bias, leading diverse teams, and sourcing diverse talent.

Inclusive Recruiting: Every member of our recruiting team is trained on how to source, engage, and recruit qualified diverse candidates. In fact, all recruiters are equipped to discuss a diverse hiring strategy with every hiring manager to ensure we continue to widen the candidate pipeline for all roles. Our University Recruiting and Intern programs weave diversity and inclusion into their strategies so that we are recruiting not only from diverse schools but also diverse clubs and programs across all schools. Our external relationships also are focused on organizations that represent diverse communities, including technical and non-technical women and ethnic minority organizations, as well as professional Veteran’s networks, to enable our hiring managers and recruiters to attend or speak at diverse conferences, share our job descriptions, and tell our employer brand story to a wider audience.

Inclusive Communities & Social Impact: We have developed social impact programs to support employees and Roku in volunteerism, charitable activities, and youth engagement.

Inclusive Customer Advocacy: As a TV streaming platform with both U.S. and international viewers, we believe our customer experiences should reflect the diversity of our customers. In 2021, we launched several “inclusion zones” on the Roku platform that highlight and celebrate diverse stories from various content providers.

Learning and Talent Development

Our Learning and Talent Development function provides our employees with the training and development needed to support our strategic priorities and growth. Our employee development programs begin with a comprehensive New Hire Onboarding experience covering our culture, business, and the resources employees need to increase their speed to productivity. In addition to mandatory training covering Anti-Harassment, Anti-Discrimination, and Privacy, we offer employees a highly encouraged suite of training offerings such as High-Performance Feedback, Effective Meetings, and Communication and Presentation Skills. Managers are provided with development on Expectations for Managers, Interviewing and Hiring, and Performance Management to support new and newly promoted leaders in managing and leading effectively. In addition, all employees have access to on-demand technical and non-technical skill development through LinkedIn Learning. We intend to continue to review, refresh, purchase, and custom-build additional training materials to support our global employees’ performance and development needs.

Compensation and Benefits

Our total compensation program is designed to attract, retain, and reward talented professionals. As a result, we endeavor to pay competitive total compensation that is guided by market rates and tailored to account for the specific needs and responsibilities of a particular position as well as the unique qualifications of the individual employee. In determining each employee’s total compensation, we consider what they would be paid by another employer, what we would have to pay to replace them if they leave Roku, and the amount we would pay to retain them. Generally, we pay employees total compensation that is comprised of salary and equity awards rather than offering specific benefits or perks that might be valued differently by different employees. We do not pay cash bonuses or have performance-based equity awards because our employees are expected to work at the highest level regardless of possible bonus payouts or awards.

We recognize that our employees are most likely to thrive when they have the resources to meet their needs and the time and support to succeed in their professional and personal lives. In support of this, we offer a variety of benefits and wellness offerings to employees around the world.

Available Information

Our website address is www.roku.com. We make available, free of charge through our website, our annual reports on Form 10-K, quarterly reports on Form 10-Q, and current reports on Form 8-K, and amendments to those reports, filed or furnished pursuant to Sections 13(a) or Section 15(d) of the Exchange Act, as soon as reasonably practicable after they have been electronically filed with, or furnished to, the SEC. Investors and others should note that we announce material financial information to our investors using our investor relations website (roku.com/investor), SEC filings, webcasts, press releases, and conference calls. We use these mediums to communicate with investors and the general public about our company, our products and services, and other issues. It is possible that the information we make available may be deemed to be material information. We therefore encourage investors, the media, and others interested in our company to review the information we post on our investor relations website.

The SEC maintains an internet site (www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

Information contained on or accessible through the websites listed above is not incorporated by reference nor otherwise included in this Annual Report, and any references to these websites are intended to be inactive textual references only.

Item 1A. Risk Factors

Our business involves significant risks, some of which are described below. You should carefully consider the risks and uncertainties described below, together with all the other information in this Annual Report, including “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the consolidated financial statements and the related notes. If any of the following risks actually occurs, our business, reputation, financial condition, results of operations, revenue, and future prospects could be seriously harmed. In addition, you should consider the interrelationship and compounding effects of two or more risks occurring simultaneously. Unless otherwise indicated, references to our business being harmed in these risk factors will include harm to our business, reputation, financial condition, results of operations, revenue, and future prospects. In that event, the market price of our Class A common stock could decline, and you could lose part or all of your investment. You should not interpret our disclosure of any of the following risks to imply that such risks have not already materialized.

Risk Factors Summary

Below is a summary of the principal factors that make an investment in our Class A common stock speculative or risky:

Risks Related to Our Business and Industry

- the highly competitive nature of the TV streaming industry that is rapidly evolving;
- our ability to monetize our streaming platform;
- our ability to attract advertisers and advertising agencies to our demand-side advertising platform;
- our ability to develop relationships with TV brands and service operators;
- our ability to establish and maintain relationships with important content publishers;
- popular or new content publishers not publishing their content on our streaming platform;
- maintaining an adequate supply of quality video ad inventory on our platform and selling the available supply;
- content publishers electing not to participate in platform features that we develop;
- irrelevant or unengaging advertising, marketing campaigns, or other promotional advertising on our platform;
- our ability to attract users to and generate revenue from The Roku Channel;
- users signing up for offerings and services outside of our platform;
- the evolution of our industry and the impact of many factors that are outside of our control;
- our and our Roku TV brand partners’ reliance on retail sales channels to sell products;
- our ability to build a strong brand and maintain customer satisfaction and loyalty;
- advertiser or advertising agency delayed payment or failure to pay;
- maintaining adequate customer support levels;
- our ability to manage streaming device and other product introductions and transitions;

- our and our Roku TV brand partners' reliance on contract manufacturers and limited manufacturing capabilities;
- our ability to forecast manufacturing requirements and manage our supply chain and inventory levels;
- decreased availability or increased costs for materials and components used in the manufacturing of our players and Roku TV models;
- our ability to obtain key components from sole source suppliers;
- interoperability of our streaming devices with content publishers' offerings, technologies, and systems;
- detecting hardware errors or software bugs in our products before they are released to users;
- component manufacturing, design, or other defects that render our devices permanently inoperable;
- our ability to obtain necessary or desirable third-party technology licenses;

Risks Related to Operating and Growing Our Business

- our history of operating losses;
- volatility of our quarterly operating results that could cause our stock price to decline;
- our ability to manage our growth;
- our ability to successfully expand our international operations;
- seasonality of our business and its impact on our revenue and gross profit;
- attracting and retaining key personnel and managing succession;
- maintaining systems that can support our growth, business arrangements, and financial rules;
- our ability to successfully complete acquisitions and investments and integrate acquired businesses;
- our ability to comply with the terms of our outstanding credit facility;
- our ability to secure funds to meet our financial obligations and support our planned business growth;

Risks Related to Cybersecurity, Reliability, and Data Privacy

- significant disruptions of information technology systems or data security incidents;
- legal obligations and potential liability or reputational harm related to the protection of personal and confidential information;
- disruptions in computer systems or other services that result in a degradation of our platform;
- changes in how network operators manage data that travel across their networks;

Risks Related to Intellectual Property

- litigation resulting in the loss of important intellectual property rights;
- failure or inability to protect or enforce our intellectual property or proprietary rights;
- our use of open source software;
- our agreements to indemnify certain of our partners if our technology is alleged to infringe on third parties' intellectual property rights;

Risks Related to Macroeconomic Conditions

- the current and future impact of the COVID-19 pandemic, supply chain disruptions, and inflationary pressures on our business;
- natural disasters or other catastrophic events;

Legal and Regulatory Risks

- enactment of or changes to government regulation or laws related to our business;

- changes in U.S. or foreign trade policies, geopolitical conditions, and general economic conditions that impact our business;
- U.S. or international rules (or the absence of rules) that permit internet access network operators to degrade users' internet service speeds or limit internet data consumption by users;
- liability for content that is distributed through or advertising that is served through our platform;
- our ability to maintain effective internal controls over financial reporting;
- the impact of changes in accounting principles;
- compliance with laws and regulations related to the payment of income taxes and collection of indirect taxes;
- changes to U.S. or foreign taxation laws or regulations;
- regulatory inquiries, investigations, and proceedings;

Risks Related to Ownership of Our Class A Common Stock

- the dual class structure of our common stock;
- volatility in the trading price of our Class A common stock;
- potential dilution or a decline in our stock price caused by future sales or issuance of our capital stock or rights to purchase capital stock;
- a decline in our stock prices caused by future sales by existing stockholders;
- dependency on favorable securities and industry analyst reports;
- the significant legal, accounting, and other expenses associated with being a publicly traded company;
- the absence of dividends on our Class A or Class B common stock;
- anti-takeover provisions in our charter and bylaws; and
- the limitations resulting from our selection of the Delaware Court of Chancery and the U.S. federal district courts as the exclusive forums for substantially all disputes between us and our stockholders.

Risks Related to Our Business and Industry

TV streaming is highly competitive and many companies, including large technology companies, content owners and aggregators, TV brands, and service operators, are actively focusing on this industry. If we fail to differentiate ourselves and compete successfully with these companies, it will be difficult for us to attract and retain users and our business will be harmed.

TV streaming is highly competitive and global. Our success depends in part on attracting users to and retaining users on, and the effective monetization of, our streaming platform. To attract and retain users, we need to be able to respond efficiently to changes in consumer tastes and preferences and to offer our users access to the content they love on terms that they accept. Effective monetization requires us to continue to update the features and functionality of our streaming platform for users, content publishers, and advertisers. We also must effectively support popular sources of streaming content that are available on our platform, such as Amazon Prime Video, Disney+, Discovery+, HBO Max, Hulu, Paramount+, Peacock, Netflix, and YouTube. And we must respond rapidly to actual and anticipated market trends in the TV streaming industry.

Large technology companies such as Amazon, Apple, and Google offer TV streaming devices that compete with our streaming players. In addition, Google licenses its Android operating system software for integration into smart TVs and service provider set-top boxes, and Amazon licenses its operating system software for integration into smart TVs and sells Amazon-branded smart TVs. These companies have greater financial resources than we do and can subsidize the cost of their streaming devices or licensing arrangements in order to promote their other products and services, which could make it harder for us to acquire new users, retain existing

users, and increase streaming hours. These companies could also implement standards or technology that are not compatible with our products or that provide a better streaming experience. These companies also have greater resources to promote their brands through advertising than we do.

In addition, many TV brands offer their own TV streaming solutions within their TVs. Other devices, such as game consoles, also incorporate TV streaming functionality. Similarly, some service operators, such as Comcast, offer TV streaming applications and devices as part of their cable service plans and can leverage their existing consumer bases, installation networks, broadband delivery networks, and name recognition to gain traction in the TV streaming market. If consumers of TV streaming content prefer alternative products to our streaming players and our partners' Roku TV models, we may not be able to achieve our expected growth in active accounts, streaming hours, revenue, gross profit or ARPU.

We also compete for streaming hours with mobile streaming applications on smartphones and tablets, and users may prefer to view streaming content on such applications. Increased use of mobile or other platforms for TV streaming could adversely impact the growth of our streaming hours, harm our competitive position, and otherwise harm our business.

We expect competition in TV streaming from the large technology companies and service operators described above, as well as new and growing companies, to increase in the future. This increased competition could result in pricing pressure, lower revenue, and gross profit or the failure of our players, Roku TV models, or our platform to gain or maintain broad market acceptance. To remain competitive and maintain our position as a leading TV streaming platform, we need to continuously invest in our platform, product development, marketing, service and support, and device distribution infrastructure. In addition, evolving TV standards such as 8K and unknown future developments may require further investments in the development of our players, Roku TV models, and our platform. We may not have sufficient resources to continue to make the investments needed to maintain our competitive position. In addition, most of our competitors have longer operating histories, greater name recognition, larger customer bases and significantly greater financial, technical, sales, marketing, and other resources than us, which provide them with advantages in developing, marketing, or servicing new products and offerings. As a result, they may be able to respond more quickly to market demand, devote greater resources to the development, promotion, sales, and distribution of their products or their content, and influence market acceptance of their products better than we can. These competitors may also be able to adapt more quickly to new or emerging technologies or standards and may be able to deliver products and services at a lower cost. Increased competition could reduce our sales volume, revenue, and operating margins, increase our operating costs, harm our competitive position, and otherwise harm our business.

To enhance our users' experience, we also offer audio products, including Roku Streambars, Roku wireless speakers, and Roku wireless subwoofers. As a result, we may face additional competition from makers of TV audio speakers and soundbars, as well as makers of other TV peripheral devices. While sales of our audio products have not generated material amounts of revenue, if these products do not operate as designed or do not enhance the Roku TV or other viewing experience as we intend, our users' overall viewing experience may be diminished, and this may impact the overall demand for Roku TV models or our other products.

Our future growth depends on the acceptance and growth of over-the-top ("OTT") advertising and OTT advertising platforms.

We operate in a highly competitive advertising industry and compete for revenue from advertising with other streaming platforms and services, including digital and social media platforms, as well as traditional media, such as radio, broadcast, cable and satellite TV, and satellite and internet radio. These competitors offer content and other advertising mediums that may be more attractive to advertisers than our streaming platform. These

competitors are often very large and have more advertising experience and financial resources than we do, which may adversely affect our ability to compete for advertisers and may result in lower revenue and gross profit from advertising. If we are unable to increase our revenue from advertising by, among other things, continuing to improve our platform's capabilities to further optimize and measure advertisers' campaigns, increasing our advertising inventory, and expanding our advertising sales team and programmatic capabilities, our business and our growth prospects may be harmed. We may not be able to compete effectively or adapt to any such changes or trends, which would harm our ability to grow our advertising revenue and would harm our business.

Many advertisers continue to devote a substantial portion of their advertising budgets to traditional advertising, such as linear TV, radio, and print, and to advertising through digital and social media platforms. The future growth of our business depends on the growth of OTT advertising and on advertisers increasing their spend on advertising on our platform. Although legacy TV advertisers have shown growing interest in OTT advertising, we cannot be certain that their interest will continue to increase or that they will not revert to legacy TV advertising, especially if our users no longer stream TV or significantly reduce the amount of TV they stream as a result of the COVID-19 pandemic coming to an end, as a result of the launch of new hybrid broadcast standards (such as ATSC 3.0), or for other reasons. In addition, if we are unable to compete with digital and social media platforms to win business from advertisers and agencies who have traditionally advertised on these platforms, such as direct-to-consumer and small or medium-sized businesses, our ability to grow our business may be limited. If advertisers, or their agency relationships, do not perceive meaningful benefits of OTT advertising, the market may develop more slowly than we expect, which could adversely impact our operating results and our ability to grow our business.

Finally, there is political pressure in some countries to limit OTT advertising or impose local content requirements on OTT services. This pressure has been driven by owners of traditional broadcast television services and could pose a threat to our services.

We may not be successful in our efforts to further monetize our streaming platform, which may harm our business.

Our business model depends on our ability to generate platform revenue from advertisers and content publishers. We generate platform revenue primarily from the sale of digital advertising and content distribution services. As such, we are seeking to expand the number of active accounts and increase the number of hours that are streamed across our platform in an effort to create additional platform revenue opportunities. As our user base grows and as we increase the amount of content offered and streamed across our platform, we must effectively monetize our expanding user base and streaming activity. The total number of streaming hours, however, does not correlate with platform revenue on a period-by-period basis, primarily because we do not monetize every hour streamed or every user on our platform. Moreover, streaming hours on our platform are measured whenever a player or a Roku TV is streaming content, whether a viewer is actively watching or not. For example, if a player is connected to a TV, and the viewer turns off the TV, steps away, or falls asleep and does not stop or pause the player, then the particular streaming channel may continue to play content for a period of time determined by the streaming channel. We believe that this also occurs across a wide variety of non-Roku streaming devices and other set-top boxes. Since the first quarter of 2020, all Roku devices include a Roku OS feature that is designed to identify when content has been continuously streaming on a channel for an extended period of time without user interaction. This feature, which we refer to as "Are you still watching," periodically prompts the user to confirm that they are still watching the selected channel and closes the channel if the user does not respond affirmatively. We believe that the implementation of this feature across the Roku platform benefits us, our users, channel partners, and advertisers. Some of our leading channel partners, including Netflix, also have similar features within their channels. This Roku OS feature supplements these channel features. This feature has not had and is not expected to have a material impact on our financial performance.

Our ability to deliver more relevant advertisements to our users and to increase our platform's value to advertisers and content publishers depends on the collection of user engagement data, which may be restricted or prevented by a number of factors. Users may decide to opt out or restrict our ability to collect personal viewing data or to provide them with more relevant advertisements. Content publishers may also refuse to allow us to collect data regarding user engagement or refuse to implement mechanisms we request to ensure compliance with our legal obligations or technical requirements. For example, we are not able to fully utilize program level viewing data from many of our most popular channels to improve the relevancy of advertisements provided to our users. Other channels available on our platform, such as Amazon Prime Video, Apple TV+, Hulu, and YouTube, are focused on increasing user engagement and time spent within their channels by allowing users to purchase additional content and streaming services within their channels, for which we may earn less revenue than activations on or through our platform. If our users spend most of their time within particular channels where we have limited or no ability to place advertisements or leverage user information, or our users opt out from our ability to collect data for use in providing more relevant advertisements, we may not be able to achieve our expected growth in platform revenue or gross profit. If we are unable to further monetize our streaming platform, our business may be harmed.

In order to materially increase the monetization of our streaming platform through the sale of video advertising, we will need our users to stream significantly more ad-supported content. Our efforts to monetize our streaming platform through ad-supported content are still developing and may not continue to grow as we expect. This means of monetization will require us to continue to attract advertising dollars to our streaming platform as well as deliver ad-supported content that appeals to users. Accordingly, there can be no assurance that we will be successful in monetizing our streaming platform through the distribution of ad-supported content.

If we are unable to attract advertisers or advertising agencies to our OneView ad platform or if we are not successful in running a demand-side advertising platform, our business may be harmed.

Through our OneView ad platform, advertisers and advertising agencies can programmatically purchase and manage their OTT, desktop and mobile advertising campaigns. OneView leverages the demand-side platform ("DSP") developed by dataxu, which we acquired in November 2019, and integrates the reach, inventory, and capabilities of our proprietary advertising products and services. The market for programmatic OTT ad buying is an emerging market, and our current and potential advertisers and advertising agencies may not shift to programmatic ad buying from other buying methods as quickly as we expect or at all. If the market for programmatic OTT ad buying deteriorates or develops more slowly than we expect, advertisers and advertising agencies may not use OneView or we may not attract prospective advertisers or advertising agencies to OneView, and our business could be harmed. In addition, we have limited experience running a DSP, and if OneView does not have the functionality or services expected by advertisers or advertising agencies, we may not be able to attract their advertising spend to OneView, or our existing customers may not maintain or increase their spend on OneView. Moreover, our ownership of OneView may negatively impact the ability of OneView to purchase advertising on non-Roku platforms. If we fail to adapt to our rapidly changing industry or to our customers' evolving needs, advertisers and advertising agencies will not adopt OneView, and our business may be harmed. We also may not be able to compete effectively with more established DSPs or be able to adapt to changes or trends in programmatic OTT advertising, which would harm our ability to grow our advertising revenue and harm our business.

Our growth will depend in part on our ability to develop and expand our relationships with TV brand partners in the United States and international markets and, to a lesser extent, service operators.

We have developed, and intend to continue to develop and expand, relationships with TV brand partners and, to a lesser extent, service operators in both the United States and international markets. Our licensing

arrangements are complex and time-consuming to negotiate and complete. Our current and potential partners include TV brands, cable and satellite companies, and telecommunication providers. We continue to invest in the growth and expansion of our Roku TV program both in the United States and international markets. Our licensing program for service operators has historically been primarily focused on international markets and has been decreasing in scale in recent years, as we have shifted the focus of our international growth to the sale of Roku streaming players and expanding our licensing program with TV brand partners.

In the past few years, the sale of Roku TV models by our TV brand partners has materially contributed to our active account growth, to our streaming hours, and to our platform monetization efforts. This growth has primarily been in the United States; however, our Roku TV licensing program has been expanded to certain international markets. We license the Roku OS and our smart TV reference designs to certain TV brand partners to manufacture co-branded smart TVs. We do not typically receive, nor do we typically expect to receive, license revenue from these arrangements, but we expect to incur expenses in connection with these commercial agreements. The primary economic benefits that we derive from these license arrangements have been and will likely continue to be indirect, primarily from growing our active accounts, increasing streaming hours, and generating advertising-related revenue on our platform. If these arrangements do not continue to result in increased active accounts and streaming hours, and if that growth does not in turn lead to successfully monetizing that increased user activity, our business may be harmed.

The loss of a relationship with a TV brand partner or service operator could harm our results of operations, damage our reputation, increase pricing and promotional pressures from other partners and distribution channels, or increase our marketing costs. If we are not successful in maintaining existing and creating new relationships with any of these third parties, or if we encounter technological, content licensing, or other impediments to our development of these relationships, our ability to grow our business could be adversely impacted.

Under these license arrangements, we generally have limited control over the amount and timing of resources these entities dedicate to the relationship. In the past, our TV brand partners have failed to meet their forecasts for distributing licensed streaming devices, and they may fail to meet their forecasts in the future. If our TV brand or service operator partners fail to meet their forecasts for distributing licensed streaming devices or chose to deploy competing streaming solutions within their product lines, our business may be harmed.

We depend on a small number of content publishers for a majority of our streaming hours, and if we fail to maintain these relationships, our business could be harmed.

Historically, a small number of content publishers have accounted for a significant portion of the hours streamed on our platform. In the year ended December 31, 2021, the top three streaming services represented over 50% of all hours streamed in the period. If, for any reason, we cease distributing channels that have historically streamed a large percentage of the aggregate streaming hours on our platform, our streaming hours, active accounts, or streaming device sales may be adversely affected, and our business may be harmed.

If popular or new content publishers do not publish content on our platform, we may fail to retain existing users and attract new users.

We must continuously maintain existing relationships and identify and establish new relationships with content publishers to provide popular streaming channels and popular content. In order to remain competitive, we must consistently meet user demand for popular streaming channels and content, particularly as we launch new players, introduce new Roku TV models, or enter new markets, including international markets. If we are not successful in helping our content publishers launch and maintain streaming channels that attract and retain a significant number of users on our streaming platform or if we are not able to do so in a cost-effective manner,

our business will be harmed. Our ability to successfully help content publishers maintain and expand their channel offerings on a cost-effective basis largely depends on our ability to:

- effectively promote and market new and existing streaming channels;
- minimize launch delays of new and updated streaming channels; and
- minimize streaming platform downtime and other technical difficulties.

In addition, if service operators, including pay TV providers, refuse to grant our users access to stream certain channels or only make content available on devices they prefer, our ability to offer a broad selection of popular streaming channels or content may be limited. If we fail to help our content publishers maintain and expand their audiences on the Roku platform or their channels are not available on our platform, our business may be harmed.

Most of our agreements with content publishers are not long term and can be terminated by the content publishers under certain circumstances. Any disruption in the renewal of such agreements may result in the removal of certain channels from our streaming platform and may harm our active account growth and engagement.

We enter into agreements with all our content publishers, which have varying terms and conditions, including expiration dates. Our agreements with content publishers generally have terms of one to three years and can be terminated before the end of the term by the content publisher under certain circumstances, such as if we materially breach the agreement, become insolvent, enter bankruptcy, commit fraud, or fail to adhere to the content publishers' security or other platform certification requirements. Upon expiration of these agreements, we are required to re-negotiate and renew them in order to continue providing content from these content publishers on our streaming platform. We have in the past been unable, and in the future may not be able, to reach a satisfactory agreement with certain content publishers before our existing agreements have expired. If we are unable to renew such agreements on a timely basis on mutually agreeable terms, we may be required to temporarily or permanently remove certain channels from our streaming platform.

The loss of such channels from our streaming platform for any period of time may harm our business. More broadly, if we fail to maintain our relationships with the content publishers on terms favorable to us, or at all, or if these content publishers face problems in delivering their content across our platform, we may lose channel partners or users and our business may be harmed.

If we are unable to maintain an adequate supply of quality video ad inventory on our platform or effectively sell our available video ad inventory, our business may be harmed.

Our business model depends on our ability to grow video ad inventory on our streaming platform and sell it to advertisers. While The Roku Channel has historically served as a valuable source of video ad inventory for us to sell, there is no guarantee that it will continue to do so in the future. If The Roku Channel is unable to secure content that is appealing to our users and advertisers, or is unable to do so on terms that provide a sufficient supply of ad inventory at reasonable cost, our supply of video ad inventory will be negatively impacted. We are also dependent on our ability to monetize video ad inventory within other ad-supported channels on our streaming platform. We seek to obtain the ability to sell such inventory from the content publishers of such channels. We may fail to attract content publishers that generate a sufficient quantity or quality of ad-supported content hours on our streaming platform or fail to obtain access to a sufficient quantity and quality of ad inventory from the publishers of such content. Our access to video ad inventory in ad-supported streaming channels on our platform varies greatly among channels. Accordingly, we do not have access to a significant portion of the video ad inventory on our platform. For certain channels, including YouTube's ad-supported channel, we have no access

to video ad inventory at this time, and we may not secure access in the future. The amount, quality, and cost of video ad inventory available to us can change at any time. If we are unable to grow and maintain a sufficient supply of quality video ad inventory at reasonable costs to keep up with demand, our business may be harmed.

If our content publishers do not participate in new features that we may introduce from time to time, our business may be harmed.

As our streaming platform and products evolve, we will continue to introduce new features, which may or may not be attractive to our content publishers or meet their requirements. For example, some content publishers have elected not to participate in our integrated advertising framework or have imposed limits on our data gathering for usage within their channels. In addition, our streaming platform utilizes our proprietary Brightscript scripting language in order to allow our content publishers to develop and create channels on our streaming platform. If we introduce new features or utilize a new scripting language in the future, such a change may not comply with certain content publishers' certification requirements. In addition, our content publishers may find other languages, such as HTML5, more attractive to develop for and shift their resources to developing their channels on other platforms. If key content publishers do not find our streaming platform simple and attractive to develop channels for, do not value and participate in all of the features and functionality that our streaming platform offers, or determine that our software developer kit or new features of our platform do not meet their certification requirements, our business may be harmed.

If the advertising and media and entertainment promotional spending campaigns on our platform are not relevant or not engaging to our users, our growth in active accounts and streaming hours may be adversely impacted.

We have made, and are continuing to make, investments to enable advertisers and content publishers to deliver relevant advertising and media and entertainment promotional spending campaigns to our users. Existing and prospective advertisers and content publishers may not be successful in serving ads and media and entertainment promotional spending campaigns that lead to and maintain user engagement. Those ads and campaigns may seem irrelevant, repetitive, or overly targeted and intrusive. We are continuously seeking to balance the objectives of our advertisers and content publishers with our desire to provide an optimal user experience, but we may not be successful in achieving a balance that continues to attract and retain users, advertisers, and content publishers. If the advertising and media and entertainment promotional spending campaigns on our streaming platform are not relevant or are overly intrusive and impede the use of our platform, our users may stop using our platform, which will harm our business.

The Roku Channel may not continue to attract a large number of users or generate significant revenue from advertising.

We operate The Roku Channel, which offers both ad-supported free access for users to a collection of films, television series, live linear television, and other content. We have incurred, and will continue to incur, costs and expenses in connection with the development, expansion, and operation of The Roku Channel, which we monetize primarily through advertising. For example, in 2021, we acquired content rights, including rights to certain projects in development, from the mobile-first video distribution service known as Quibi, and announced that The Roku Channel would become the home of such content. In addition, we acquired the entities comprising the This Old House business, which own and produce the "This Old House" and "Ask This Old House" TV programs and operate related business lines, to further the growth strategy and ad-supported content offerings in The Roku Channel.

If our users do not continue to stream the ad-supported content we make available on The Roku Channel, we will not have the opportunity to monetize The Roku Channel through revenue generated from advertising. In order to attract users to the ad-supported content on The Roku Channel and drive streaming of ad-supported video on The Roku Channel, we must secure rights to stream content that is appealing to our users and advertisers. In part, we do this by directly licensing certain content from content owners, such as television and movie studios. The agreements that we enter into with these content owners have varying terms and provide us with rights to make specific content available through The Roku Channel during certain periods of time. Upon expiration of these agreements, we are required to re-negotiate and renew these agreements with the content owners, or enter into new agreements with other content owners, in order to obtain rights to distribute additional titles or to extend the duration of the rights previously granted. If we are unable to enter into content license agreements on acceptable terms to access content that enables us to attract and retain users of the ad-supported content on The Roku Channel, or if the content we do secure rights to stream (including, for example, the content that we acquired through the Quibi and This Old House transactions) is ultimately not appealing to our users and advertisers, usage of The Roku Channel may decline, and our business may be harmed.

In addition, following the Quibi and This Old House transactions and the launch of our advertising brand studio, we are producing content for distribution on The Roku Channel and other platforms. We have limited experience producing content, and we may not be successful in doing so in a cost-effective manner that is appealing to our users and advertisers and furthers the growth of The Roku Channel. We also take on risks associated with content production, such as completion and key talent risk. Furthermore, if the advertisements on The Roku Channel are not relevant to our users or such advertisements are overly intrusive and impede our users' enjoyment of the available content, our users may not stream content and view advertisements on The Roku Channel, and The Roku Channel may not generate sufficient revenue from advertising to be cost effective for us to operate. In addition, we distribute The Roku Channel on platforms other than our own streaming platform, and there can be no assurance that we will be successful in attracting a large number of users or generating significant revenue from advertising through the distribution of The Roku Channel on such other streaming platforms.

If our users sign up for offerings and services outside of our platform or through other channels on our platform, our business may be harmed.

We earn revenue by acquiring subscribers for certain of our content publishers activated on or through our platform, including Premium Subscriptions on The Roku Channel, which allow our users to pay for content from various content publishers. If users reduce the degree to which they use our platform for these purchases or subscriptions for any reason, and instead increase the degree to which they pay for services directly with content publishers or by other means for which we do not receive attribution, our business may be harmed.

In addition, certain channels available on our platform allow users to purchase additional streaming services from within their channels. The revenue we earn from these transactions is not always equivalent to the revenue we earn from sales of such additional services on a stand-alone basis through our platform. If users increase their spending on such in-channel transactions at the expense of stand-alone purchases through our platform, our business may be harmed.

We operate in a rapidly evolving industry that will be impacted by many factors that are outside of our control, which makes it difficult to evaluate our business and prospects.

TV streaming is a rapidly evolving industry, making our business and prospects difficult to evaluate. The growth and profitability of this industry and the level of demand and market acceptance for our products and streaming platform are subject to a high degree of uncertainty. We believe that the continued growth of streaming as an entertainment alternative will depend on the availability and growth of cost-effective broadband internet

access (including mobile broadband internet access), the quality and reliability of broadband content delivery, broadband service providers' ability to control the delivery speed of different content traveling on their networks, the quality and reliability of new devices and technology, the cost for users relative to other sources of content, as well as the quality and breadth of content that is delivered across streaming platforms. Accordingly, the future evolution of TV streaming as an industry, which is likely to impact our success, is dependent on many of the factors that are outside of our control.

We and our Roku TV brand partners depend on our retail sales channels to effectively market and sell our players and Roku TV models, and if we or our partners fail to maintain and expand effective retail sales channels, we could experience lower player or Roku TV model sales.

To continue to increase our active accounts, we must maintain and expand our retail sales channels. The majority of our players and our TV brand partners' Roku TV models are sold through traditional brick and mortar retailers, such as Best Buy, Target, and Walmart, including their online sales platforms, and online retailers such as Amazon. We also sell players directly through our website and internationally through distributors and retailers such as Coppel in Mexico, Magazine Luiza in Brazil, and MediaMarkt in Germany. As we have only recently expanded to certain international markets, we may not have established a strong reputation or relationships with global retailers as compared to our domestic operations or our competitors in international markets. Amazon, Best Buy, and Walmart in total accounted for 69% of our player revenue for both of the years ended December 31, 2021 and 2020. Our retailers and distributors also sell products offered by our competitors. We have no minimum purchase commitments or long-term contracts with any of these retailers or distributors. If one or several retailers or distributors were to discontinue selling our players or our TV brand partners' Roku TV models, choose not to prominently display those devices in their stores or on their websites, or close or severely limit access to their brick and mortar locations due to COVID-19 restrictions or other concerns, the volume of our streaming devices or our TV brand partners' Roku TV models sold could decrease, which would harm our business. If any of our existing TV brand partners choose to work exclusively with, or divert a significant portion of their business with us to other operating system developers, this may impact our ability to license the Roku OS and our smart TV reference design to TV brands and our ability to continue to grow active accounts. Traditional retailers have limited shelf and end cap space in their stores and limited promotional budgets, and online retailers have limited prime website product placement space. Competition is intense for these resources, and a competitor with more extensive product lines, stronger brand identity and greater marketing resources, such as Amazon or Google, possesses greater bargaining power with retailers. In addition, one of our online retailers, Amazon, sells its own competitive streaming devices and smart TVs, is able to market and promote these products more prominently on its website, and could refuse to offer or promote our devices on its website. Any reduction in our ability to place and promote our devices, or increased competition for available shelf or website placement, could require us to increase our marketing expenditures to maintain our product visibility or result in reduced visibility for our products, which may harm our business. In particular, the availability of product placement during peak retail periods, such as the holiday season, is critical to our revenue growth, and if we are unable to effectively sell our devices during these periods, our business would be harmed.

If our efforts to build a strong brand and maintain customer satisfaction and loyalty are not successful, we may not be able to attract or retain users, and our business may be harmed.

Building and maintaining a strong brand is important to attract and retain users, as potential users have a number of TV streaming choices. Successfully building a brand is a time-consuming and comprehensive endeavor and can be positively and negatively impacted by any number of factors. Certain factors, such as the quality or pricing of our players or our customer service, are within our control. Other factors, such as the quality and reliability of Roku TV models and the quality of the content that our content publishers provide, may be out of our control, yet users may nonetheless attribute those factors to us. Our competitors may be able to achieve and

maintain brand awareness and market share more quickly and effectively than we can. Many of our competitors are larger companies and may have greater resources to devote to the promotion of their brands through traditional advertising, digital advertising or website product placement. If we are unable to execute on building a strong brand, it may be difficult to differentiate our business and streaming platform from our competitors in the marketplace, therefore our ability to attract and retain users may be adversely affected and our business may be harmed.

Our streaming platform allows our users to choose from thousands of channels, representing a variety of content from a wide range of content publishers. Our users can choose and control which channels they download and watch, and they can use certain settings to prevent channels from being downloaded to our streaming devices. While we have policies that prohibit the publication of content that is unlawful, incites illegal activities, or violates third-party rights, among other things, we may distribute channels that include controversial content. Controversies related to the content included on certain channels that we distribute have resulted in, and could in the future result in, negative publicity, cause harm to our reputation and brand, or subject us to claims and may harm our business.

We are subject to payment-related risks and, if our advertisers or advertising agencies do not pay or dispute their invoices, our business may be harmed.

Many of our contracts with advertising agencies provide that if the advertiser does not pay the agency, the agency is not liable to us, and we must seek payment solely from the advertiser, a type of arrangement called sequential liability. Contracting with these agencies, which in some cases have or may develop higher-risk credit profiles, may subject us to greater credit risk than if we were to contract directly with advertisers. This credit risk may vary depending on the nature of an advertising agency's aggregated advertiser base. In addition, typically, we are contractually required to pay advertising inventory data suppliers within a negotiated period of time, regardless of whether our advertisers or advertising agencies pay us on time, or at all. In addition, we typically experience slow payment cycles by advertising agencies as is common in the advertising industry. While we attempt to balance payment periods with our suppliers and advertisers and advertising agencies, we are not always successful. As a result, we can often face a timing issue with our accounts payable on shorter cycles than our accounts receivables, requiring us to remit payments from our own funds, and accept the risk of credit losses.

We may also be involved in disputes with agencies and their advertisers over the operation of our streaming platform, the terms of our agreements or our billings for purchases made by them through our streaming platform or through our DSP. If we are unable to collect or make adjustments to bills, we could incur credit losses, which could have a material adverse effect on our results of operations for the periods in which the write-offs occur. In the future, bad debt may exceed reserves for such contingencies, and our bad debt exposure may increase over time. Any increase in write-offs for bad debt could have a materially negative effect on our business, financial condition and operating results. If we are not paid by our advertisers or advertising agencies on time or at all, our business may be harmed.

The quality of our customer support is important, and if we fail to provide adequate levels of customer support, we could lose users and TV brand partners or other licensees, which would harm our business.

Our users depend on our customer support organization to resolve any issues relating to our devices. A high level of support is critical for the successful marketing and sale of our devices. We currently outsource the majority of our customer support operation to a third-party customer support organization which provides support to end users of our players and audio products. In addition, we train our TV brand partners and service operator licensees to provide first-level customer support to users of Roku TV models and co-branded players. If we do not effectively train, update, and manage our third-party customer support organization to assist our users and

licensees, and if that support organization does not succeed in helping them quickly resolve issues or provide effective ongoing support, it could adversely affect our ability to sell our devices to users and harm our reputation with potential new users and our licensees.

We must successfully manage streaming device and other product introductions and transitions to remain competitive.

We must continually develop new and improved streaming devices and other products that meet changing consumer demands. Moreover, the introduction of a new streaming device or other new product is a complex task, involving significant expenditures in research and development, promotion, and sales channel development. For example, in recent years, we introduced Roku Streambars, Roku wireless speakers, and Roku wireless subwoofers, among other products. Whether users will broadly adopt new streaming devices or other new products is not certain. Our future success will depend on our ability to develop new and competitively priced streaming devices and other new products and add new desirable content and features to our streaming platform. Moreover, we must introduce new streaming devices and other new products in a timely and cost-effective manner, and we must secure production orders for those products from our contract manufacturers. The development of new streaming devices and other new products is a highly complex process, and while our research and development efforts are aimed at solving increasingly complex problems, we do not expect that all of our projects will be successful. The successful development and introduction of new streaming devices and other new products depends on a number of factors, including:

- the accuracy of our forecasts for market requirements beyond near-term visibility;
- our ability to anticipate and react to new technologies and evolving consumer trends;
- our development, licensing, or acquisition of new technologies;
- our timely completion of new designs and development;
- our ability to timely and adequately redesign or resolve design or manufacturing issues;
- our ability to identify and contract with an appropriate manufacturer;
- the ability of our contract manufacturers to cost-effectively manufacture our new products;
- the availability of materials and key components used in manufacturing;
- tariffs, trade, sanctions, and export restrictions by the U.S. or foreign governments, which could impact the pricing, timing and availability of such devices and depress consumer demand, limit the ability of our contract manufacturers to obtain key parts, components, software, and technologies, and lead to shortages;
- the ability of our contract manufacturers to produce quality products and minimize defects, manufacturing mishaps, and shipping delays; and
- our ability to attract and retain world-class research and development personnel.

If any of these or other factors materializes, we may not be able to develop and introduce new products in a timely or cost-effective manner, and our business may be harmed.

We do not have manufacturing capabilities and primarily depend upon a limited number of contract manufacturers, and our operations could be disrupted if we encounter problems with our contract manufacturers.

We do not have any internal manufacturing capabilities and rely on a limited number of contract manufacturers to build our players and audio products. Our contract manufacturers are vulnerable to, among other issues:

- capacity constraints;

- reduced component availability;
- production, supply chain, or shipping disruptions or delays, including from strikes, mechanical issues, quality control issues, natural disasters, and public health crises, such as the ongoing COVID-19 pandemic; and
- the impact of U.S. or foreign tariffs, trade, or sanctions restrictions on components, finished goods, software, other products, or data transfers.

As a result, we have limited control over delivery schedules, manufacturing yields, and costs, particularly when components are in short supply or when we introduce new streaming devices or other products. For example, in 2021, global supply chain disruptions led to increased component costs and shipping costs for our products, which negatively affected our player gross margin. We expect that global supply chain disruptions will continue in 2022, and our player gross margin may continue to be adversely affected.

We also have limited control over our contract manufacturers' quality systems and controls, and therefore must rely on them to manufacture our players and other products to our quality and performance standards and specifications. Delays, component shortages, quality issues, and other manufacturing and supply problems could impair the retail distribution of our players and other products and ultimately our brand. Furthermore, any adverse change in our contract manufacturers' financial or business condition could disrupt our ability to supply our players or other products to our retailers and distributors.

We also rely upon our contract manufacturers to perform some of the development work on our products. The contract manufacturers may be unwilling or unable to successfully complete desired development. Delays in development work by contract manufacturers could delay launch of new or improved products.

Our contracts with our contract manufacturers generally may not contain terms that protect us against development, manufacturing, and supply disruptions or risks. For example, such contracts may not obligate our contract manufacturers to supply our players or other products in any specific quantity or at any specific price. If our contract manufacturers are unable to fulfill our production requirements in a timely manner, if their costs increase because of inflationary pressures, U.S. or international tariffs, sanctions, export or import restrictions, or if they decide to terminate their relationship with us, our order fulfillment may be delayed or terminated, and we would have to attempt to identify, select, and qualify acceptable alternative contract manufacturers. Alternative contract manufacturers may not be available to us when needed or may not be in a position to satisfy our production requirements at commercially reasonable prices, to our quality and performance standards on a timely basis, or at all. Any significant interruption in manufacturing at our contract manufacturers for any reason could require us to reduce our supply of players or other products to our retailers and distributors, which in turn would reduce our revenue, or incur higher freight costs than anticipated, which would negatively impact our player gross margin. In addition, our contract manufacturers' facilities are located in Southeast Asia, the People's Republic of China, and Brazil and may be subject to political, economic, labor, trade, public health, social, and legal uncertainties that may harm or disrupt our relationships with these parties or their ability to perform. We believe that the international location of these facilities increases supply risk, including the risk of supply interruptions, tariffs, and trade restrictions on exports or imports.

The supply of Roku TV models to the market could be disrupted if our Roku TV brand partners encounter problems with their internal operations or contract manufacturers or suppliers.

Certain of our Roku TV brand partners have internal manufacturing capabilities and others primarily rely upon contract manufacturers to build the Roku TV models that they sell to retailers. Regardless of whether their manufacturing capabilities are internal or contracted, our Roku TV brand partners' manufacturers may be vulnerable to capacity constraints and reduced component availability; increases in U.S. tariffs on imports of

Roku TV models; future possible changes in U.S. regulations on exports of U.S. technologies; U.S. restrictions on dealings with certain countries, parties, regions, or imported inputs; foreign tariffs on U.S. parts or components for Roku TV models that are assembled outside of the United States; and supply chain disruptions and shipping delays. Their control over delivery schedules, manufacturing yields, and costs, particularly when components are in short supply, may be limited. For those Roku TV brand partners with contract manufacturers or suppliers, the problems are exacerbated because the contract manufacturer is a third party, and the Roku TV brand partner does not have direct visibility into or control over the operations. Delays, component shortages, and other manufacturing and supply problems (whether due to the ongoing COVID-19 pandemic, the current high demand for consumer electronics and information technology products, or other reasons) could impair the retail distribution of their Roku TV models. Interruptions in the supply of Roku TV models to retailers and distributors at times have affected, and could adversely affect in the future, our active accounts and streaming hours. For example, in 2021, some of our Roku TV brand partners faced supply chain and inventory challenges that negatively impacted their unit sales, which we believe affected our streaming hours and active account growth.

Furthermore, any manufacturing issues affecting the quality or performance of our Roku TV brand partners' Roku TV models could harm our brand and our business.

If we fail to accurately forecast our manufacturing requirements and manage our inventory with our contract manufacturers, we could incur additional costs, experience manufacturing delays, and lose revenue.

We bear risks of excess and insufficient inventories under our contract manufacturing arrangements. For example, our contract manufacturers order materials and components in advance in an effort to meet our projected needs for our products. Lead times for the materials and components that our contract manufacturers order on our behalf through different component suppliers may vary significantly and depend on numerous factors outside of our control, including the specific supplier, contract terms, shipping and air freight, market demand for a component at a given time, and trade and government relations. Lead times for certain key materials and components incorporated into our players or other products are currently lengthy and may require our contract manufacturers to order materials and components many months in advance. If we overestimate our production requirements, our contract manufacturers may purchase excess components and build excess inventory. If our contract manufacturers, at our request, purchase excess components or build excess products, we could be required to pay for these excess components or products. In the past, we have agreed to reimburse our contract manufacturers for purchased components that were not used as a result of our decision to discontinue a certain model of player or the use of particular components. If we incur costs to cover excess supply commitments, this would harm our business.

Conversely, if we underestimate our player or other product requirements, our contract manufacturers may have inadequate material or component inventory, which could interrupt the manufacturing of our players or other products, result in insufficient quantities available to meet demand, and result in delays or cancellation of orders from retailers and distributors. In addition, from time to time we have experienced unanticipated increases in demand that resulted in the need to ship players via air freight, which is more expensive than ocean freight, and adversely affected our player gross margin during such periods of high demand (for example, during end-of-year holidays). Throughout 2021, the COVID-19 pandemic, supply chain disruptions, shipping delays, and sustained high demand for consumer electronics and information technology products created tight component supply conditions and logistical delays for our products and key components, which adversely impacted our player gross margin. If we fail to accurately forecast our manufacturing requirements, our business may be harmed.

Our players and other products incorporate key components from sole source suppliers, and if our contract manufacturers are unable to obtain sufficient quantities of these components on a timely basis, we will not be able to deliver our products to our retailers and distributors.

We depend on sole source suppliers for key components in our players and other products. For example, each of our players may utilize a specific system on chip (or SoC), Wi-Fi silicon product, and Wi-Fi front-end module, each of which may be available from only a single manufacturer and for which we do not have a second source. Although this approach allows us to maximize product performance on lower cost hardware, reduce engineering development and qualification costs, and develop stronger relationships with our strategic suppliers, this also creates supply chain risk. These sole-source suppliers could be constrained by fabrication capacity issues or material supply issues, such as U.S. or foreign tariffs, war or other government or trade relations issues, other export or import restrictions on parts or components for finished products that are used in final assembly of their components (or on the finished products themselves), or shortages of key components. There is also the risk that the strategic supplier may stop producing such components, cease operations, be acquired by or enter into exclusive arrangements with our competitors or other companies, put contract manufacturers on allocation because of the ongoing global semiconductor shortage, or become subject to U.S. or foreign sanctions or export control restrictions or penalties. Such suppliers also have experienced, and may continue to experience, production, shipping, or logistical constraints arising from the COVID-19 pandemic. Such interruptions and delays have forced us to seek similar components from alternative sources, which have not always been available, and have caused us to delay product introductions and incur air freight expense. Switching from a sole-source supplier may require that we adapt our software, and redesign our products to accommodate new chips and components, and may require us to re-qualify our products with regulatory bodies, such as the U.S. Federal Communications Commission (“FCC”), which would be costly and time-consuming.

Our reliance on sole-source suppliers involves a number of additional risks, including risks related to:

- supplier capacity constraints;
- price increases, including increases related to inflationary pressures;
- timely delivery;
- component quality; and
- delays in, or the inability to execute on, a supplier roadmap for components and technologies.

Any interruption in the supply of sole-source components for our products could adversely affect our ability to meet scheduled product deliveries to our retailers and distributors, result in lost sales and higher expenses, and harm our business.

Our players and Roku TV models must operate with various offerings, technologies, and systems from our content publishers that we do not control. If our streaming devices do not operate effectively with those offerings, technologies, and systems, our business may be harmed.

The Roku OS is designed for performance using relatively low-cost hardware, which enables us to drive user growth with our players and Roku TV models offered at a low cost to consumers. However, this hardware must be interoperable with all channels and other offerings, technologies, and systems from our content publishers, including virtual multi-channel video programming distributors. We have no control over these offerings, technologies, and systems beyond our channel certification requirements, and if our players and Roku TV models do not provide our users with a high-quality experience on those offerings on a cost-effective basis or if changes are made to those offerings that are not compatible with our players or Roku TV models, we may be unable to increase active account growth and user engagement or may be required to increase our hardware costs, and our business will be harmed. We plan to continue to introduce new products regularly, and we have

experienced that it takes time to optimize such products to function well with these offerings, technologies and systems. In addition, many of our largest content publishers have the right to test and certify our new products before we can publish their channels on these devices. The certification processes can be time consuming and introduce third-party dependencies into our product release cycles. If content publishers do not certify new products on a timely basis or require us to make changes in order to obtain certifications, our product release plans may be adversely impacted, we may not be able to offer certain products to all TV brand partners or we may not continue to offer certain channels. To continue to grow our active accounts and user engagement, we will need to prioritize development of our streaming devices to work better with new offerings, technologies, and systems. If we are unable to maintain consistent operability of our devices that is on parity with or better than other platforms, our business could be harmed. In addition, any future changes to offerings, technologies, and systems from our content publishers, such as virtual service operators, may impact the accessibility, speed, functionality, and other performance aspects of our streaming devices. We may not successfully develop streaming devices that operate effectively with these offerings, technologies, or systems. If it becomes more difficult for our users to access and use these offerings, technologies, or systems, our business could be harmed.

Our streaming devices are technically complex and may contain undetected hardware errors or software bugs, which could manifest themselves in ways that could harm our reputation and our business.

Our streaming devices and the products of our TV brand partners are technically complex and have contained and may in the future contain undetected software bugs or hardware errors. These bugs and errors can manifest themselves in any number of ways in our devices or our streaming platform, including through diminished performance, security vulnerabilities, data quality in logs or interpretation of data, malfunctions, or even permanently disabled devices. Some errors in our devices may only be discovered after a device has been shipped and used by users and may in some cases only be detected under certain circumstances or after extended use. We also update the Roku OS and our software on a regular basis, and, despite our quality assurance processes, we could introduce bugs in the process of any such update. The introduction of a serious software bug could result in devices becoming permanently disabled. We offer a limited one-year warranty in the United States, although applicable law or our software updates could cause us to be responsible for issues with devices after this period of time. Any defects discovered in our devices after commercial release could result in loss of revenue or delay in revenue recognition, loss of customer goodwill and users, and increased service costs, any of which could harm our business, operating results, and financial condition. We could also face claims for product or information liability, tort or breach of warranty, or other violations of laws or regulations. In addition, our contracts with users contain provisions relating to warranty disclaimers and liability limitations, which may not be upheld. Defending a lawsuit, regardless of its merit, is costly and may divert management's attention and adversely affect the market's perception of Roku and our products. In addition, if our insurance coverage proves inadequate or future coverage is unavailable on acceptable terms or at all, our business could be harmed.

Components used in our products may fail as a result of manufacturing, design, or other defects over which we have no control and render our devices permanently inoperable.

We rely on third-party component suppliers to provide certain functionalities needed for the operation and use of our products. Any errors or defects in such third-party technology could result in errors or defects in our products that could harm our business. If these components have a manufacturing, design, or other defect, they can cause our products to fail and render them permanently inoperable. For example, the typical means by which our users connect their home networks to our players is by way of a Wi-Fi access point in the home network router. If the Wi-Fi receiver in our player fails, then our player cannot detect a home network's Wi-Fi access point, and our player will not be able to display or deliver any content to the TV screen. As a result, we may have to recall and replace these players at our sole cost and expense. Should we have a widespread problem of this kind,

our reputation in the market could be adversely affected, and our replacement of these players would harm our business.

If we are unable to obtain necessary or desirable third-party technology licenses, our ability to develop new streaming players or platform enhancements may be impaired.

We utilize commercially available off-the-shelf technology in the development of our players and streaming platform. As we continue to introduce new features or improvements to our players and our streaming platform, we may be required to license additional technologies from third parties. These third-party licenses may be unavailable to us on commercially reasonable terms, if at all. If we are unable to obtain necessary third-party licenses, we may be required to obtain substitute technologies with lower quality or performance standards, or at a greater cost, any of which could harm the competitiveness of our players, streaming platform, and our business.

Risks Related to Operating and Growing Our Business

We have incurred operating losses in the past, and although we have achieved profitability in recent quarters, we may not be able to maintain or grow our profitability.

We have incurred operating losses in the past, and we may incur operating losses in the future. Although we have achieved profitability in recent quarters, we may not be able to maintain or grow our profitability. As of December 31, 2021, we had an accumulated deficit of \$90.0 million. We expect our operating expenses to increase in the future as we continue to expand our operations and invest in growth and new areas. If our revenue and gross profit do not grow at a greater rate than our operating expenses, we may not be able to maintain and grow our profitability. We expect our profitability to fluctuate in the future for a number of reasons, including without limitation the other risks and uncertainties described herein. Additionally, we may encounter unforeseen operating or legal expenses, difficulties, complications, delays, and other factors that may result in losses in future periods.

Our quarterly operating results may be volatile and are difficult to predict, and our stock price may decline if we fail to meet the expectations of securities analysts or investors.

Our revenue, gross profit, and other operating results could vary significantly from quarter-to-quarter and year-to-year and may fail to match our past performance due to a variety of factors, including many factors that are outside of our control. Factors that may contribute to the variability of our operating results and cause the market price of our Class A common stock to fluctuate include:

- the entrance of new competitors or competitive products or services, whether by established or new companies;
- our ability to retain and grow our active account base, increase engagement among new and existing users, and monetize our streaming platform;
- our ability to maintain effective pricing practices in response to the competitive markets in which we operate or other macroeconomic factors, such as increased taxes or inflationary pressures, such as those the market is currently experiencing, and our ability to control costs, including our operating expenses;
- our revenue mix, which drives gross profit;
- supply of advertising inventory on our advertising platform and advertiser demand for advertising inventory;
- seasonal, cyclical, or other shifts in revenue from advertising or player sales;
- the timing of the launch of new or updated products, channels, or features;
- the addition or loss of popular content or channels;

- the expense and availability of content to license or produce for The Roku Channel;
- the ability of retailers to anticipate consumer demand;
- an increase in the manufacturing or component costs of our players or our TV brand partners' Roku TV models;
- delays in delivery of our players or our partners' Roku TV models, or disruptions in our or our TV brand partners' supply or distribution chains, including any disruptions caused by the COVID-19 pandemic, tariffs, or other trade restrictions or disruptions; and
- an increase in costs associated with protecting our intellectual property, defending against third-party intellectual property infringement allegations, or procuring rights to third-party intellectual property.

Our gross margins vary across our devices and platform offerings. Our player segment has lower gross margins compared to our platform segment (which generates revenue from digital advertising sales and related services, content distribution services, and licensing arrangements). Gross margins on our players vary across models and can change over time as a result of product transitions, pricing and configuration changes, component costs, player returns, and other cost fluctuations. In addition, our gross margin and operating margin percentages, as well as overall profitability, may be adversely impacted as a result of a shift in device, geographic, or sales channel mix, component cost increases, price competition, or the introduction of new streaming devices, including those that have higher cost structures with flat or reduced pricing. We have in the past and may in the future strategically reduce our player gross margin in an effort to increase the number of active accounts and grow our gross profit. As a result, our player revenue may not increase as rapidly as it has historically, or at all, and, unless we are able to continue to increase our platform revenue and grow the number of active accounts, we may be unable to grow gross profit and our business will be harmed. For the year ended December 31, 2021, our player gross margin was negative due to rising component and shipping costs. Though we do not believe that the increased component and shipping costs are permanent, they may continue to impact us in the near future and are expected to cause player gross margin to be negative until such conditions normalize. If a reduction in gross margin does not result in an increase in our active accounts or an increase our platform revenue and gross profit, our financial results may suffer, and our business may be harmed.

If we have difficulty managing our growth in operating expenses, our business could be harmed.

We have experienced significant growth in our research and development, sales and marketing, support services, operations, and general and administrative functions in recent years and expect to continue to expand these activities. Our historical growth has placed, and expected future growth will continue to place, significant demands on our management, as well as our financial and operational resources, to:

- manage a larger organization;
- hire more employees, including engineers with relevant skills and experience;
- expand internationally;
- increase our sales and marketing efforts;
- expand the capacity to manufacture and distribute our players;
- broaden our customer support capabilities;
- support a larger number of TV brand partners and service operators;
- expand and improve the content offering on our platform;
- implement appropriate operational and financial systems; and
- maintain effective financial disclosure controls and procedures.

If we fail to manage our growth effectively, we may not be able to execute our business strategies and our business will be harmed.

We may be unable to successfully expand our international operations, and our international expansion plans, if implemented, will subject us to a variety of risks that may harm our business.

We currently generate the vast majority of our revenue in the United States and have limited experience marketing, selling, licensing, and supporting our devices and running or monetizing our streaming platform outside the United States. In addition, we have limited experience managing the administrative aspects of a global organization. While we intend to continue to explore opportunities to expand our business in international markets in which we see compelling opportunities, we may not be able to create or maintain international market demand for our devices and streaming platform services. Moreover, we face intense competition in international markets, especially because some of our competitors have already successfully introduced their products into new markets we are entering and have greater experience managing a global organization.

In the course of expanding our international operations, we are subject to a variety of risks that could adversely affect our business, including:

- differing legal and regulatory requirements in foreign jurisdictions, including country-specific laws and regulations pertaining to data privacy and data security, consumer protection, tax, telecommunications, trade (including tariffs, quotas, and sanctions), labor, environmental protection, censorship and other content restrictions, and local content and advertising requirements, among others;
- compliance with laws such as the Foreign Corrupt Practices Act, UK Bribery Act, and other anti-corruption laws, U.S. or foreign export controls and sanctions, and local laws prohibiting improper payments to government officials and requiring the maintenance of accurate books and records and a system of sufficient internal controls;
- slower consumer adoption and acceptance of streaming devices and services in other countries;
- different or unique competitive pressures as a result of, among other things, competition with other devices that consumers may use to stream TV or existing local traditional pay and over-the-air TV services and products, including those provided by incumbent TV service providers and local consumer electronics companies;
- greater difficulty supporting and localizing our streaming devices and streaming platform, including delivering support and training documentation in languages other than English;
- our ability to deliver or provide access to popular streaming channels or content to users in certain international markets;
- availability of reliable broadband connectivity in areas targeted for expansion;
- challenges and costs associated with staffing and managing foreign operations;
- differing legal and court systems, including limited or unfavorable intellectual property protection;
- unstable political and economic conditions, social unrest or economic instability, whatever the cause, including due to pandemics, natural disasters, wars, terrorist activity, foreign invasions (such as the potential Russian invasion of Ukraine), tariffs, trade disputes, local or global recessions, diplomatic or economic tensions, long-term environmental risks, or climate change;
- adverse tax consequences, such as those related to changes in tax laws (including increased tax rates, the imposition of digital services taxes, and the adoption of global corporate minimum taxes and anti-base-erosion rules), changes in the interpretation of existing tax laws, and the heightened scrutiny by tax administrators of companies that have cross-border business activities;
- the imposition of customs duties on cross-border data flows for streaming services, in the event that the World Trade Organization fails to extend the current moratorium on such duties;
- the COVID-19 pandemic or any other pandemics or epidemics, which could result in decreased economic activity in certain markets, decreased use of our products or platform, or decreased ability

to import, export, ship, or sell our products to supply such services to existing or new customers in international markets;

- inflationary pressures, such as those the global market is currently experiencing, which may increase costs for materials, supplies, and services;
- fluctuations in currency exchange rates, which could impact the revenue and expenses of our international operations and expose us to foreign currency exchange rate risk;
- restrictions on the repatriation of earnings from certain jurisdictions; and
- working capital constraints.

If we invest substantial time and resources to expand our international operations and are unable to do so successfully and in a timely manner, our business and financial condition may be harmed.

Our revenue and gross profit are subject to seasonality, and if our sales during the holiday season fall below our expectations, our business may be harmed.

Seasonal consumer shopping patterns significantly affect our business. Specifically, our revenue and gross profit are traditionally strongest in the fourth quarter of each fiscal year and represent a high percentage of the total net revenue for such fiscal year due to higher consumer purchases and increased advertising during holiday seasons. Furthermore, in preparation for the fourth quarter holiday season, we recognize significant discounts in the average selling prices of our player sales through retailers in an effort to grow our active accounts, which typically reduce our player gross margin in the fourth quarter.

Given the seasonal nature of advertising and our device sales, accurate forecasting is critical to our operations. We anticipate that this seasonal impact on revenue and gross profit is likely to continue, and any shortfall in expected fourth quarter revenue due to a decline in the effectiveness of our promotional activities, actions by our competitors, disruptions in our supply or distribution chains, tariffs or other restrictions on trade, shipping or air freight delays, or for any other reason, would cause our full year results of operations to suffer significantly. For example, delays or disruptions at U.S. ports of entry have in the past, and may in the future, adversely affect our or our distributors' ability to timely deliver players and Roku TV models to retailers during holiday seasons. A substantial portion of our expenses are personnel-related (including salaries, stock-based compensation, and benefits) and facilities-related, none of which are seasonal in nature. Accordingly, in the event of a revenue shortfall, we would be unable to mitigate the negative impact on gross profit and operating margins, at least in the short term, and our business would be harmed.

If we fail to attract and retain key personnel, effectively manage succession, or hire, develop, and motivate our employees, we may not be able to execute our business strategy or continue to grow our business.

Our success depends in large part on our ability to attract and retain key personnel on our senior management team and in our engineering, research and development, sales and marketing, operations, and other organizations. In particular, our founder, President and Chief Executive Officer, Anthony Wood, is critical to our overall management, as well as the continued development of our devices and streaming platform, our culture, and our strategic direction. We do not have long-term employment or non-competition agreements with any of our key personnel. The loss of one or more of our executive officers or the inability to promptly identify a suitable successor to a key role could have an adverse effect on our business.

Our ability to compete and grow depends in large part on the efforts and talents of our employees. Labor is subject to external factors that are beyond our control, including our industry's highly competitive market for skilled workers and leaders, cost inflation, the COVID-19 pandemic, and workforce participation rates. Our employees, particularly engineers and other product developers, are in high demand, and we devote significant

resources to identifying, hiring, training, successfully integrating, and retaining these employees. Because we face significant competition to attract top talent, we have had to offer, and believe we will need to continue to offer, competitive compensation packages before we can validate the productivity of those employees. In addition, the recent move by companies to offer a remote or hybrid work environment may increase the competition for such employees from employers outside of our traditional office locations. To retain employees, we also may need to increase our employee compensation levels in response to competition. The loss of employees or the inability to hire additional skilled employees necessary to support our growth could result in significant disruptions to our business, and the integration of replacement personnel could be time-consuming and expensive and cause disruptions.

We believe a critical component to our success and our ability to retain our best people is our culture. As we continue to grow, we may find it difficult to maintain our entrepreneurial, execution-focused culture. In addition, many of our employees may be able to receive significant proceeds from sales of our equity in the public markets, which may reduce their motivation to continue to work for us. Moreover, the equity ownership of many of our employees could create disparities in wealth among our employees, which may harm our culture and relations among employees and our business.

We need to maintain operational and financial systems that can support our expected growth, increasingly complex business arrangements, and rules governing revenue and expense recognition, and any inability or failure to do so could adversely affect our financial reporting, billing, and payment services.

We have a complex business that is growing in size and complexity both in the United States and in international jurisdictions. To manage our growth and our increasingly complex business operations, especially as we move into new markets internationally or acquire new businesses, we will need to maintain and may need to upgrade our operational and financial systems and procedures, which requires management time and may result in significant additional expense. Our business arrangements with our content partners, advertisers, Roku TV brand partners, and other licensees, and the rules that govern revenue and expense recognition in our business, are increasingly complex. To manage the expected growth of our operations and increasing complexity, we must maintain operational and financial systems, procedures, and controls and continue to increase systems automation to reduce reliance on manual operations. An inability to do so will negatively affect our financial reporting, billing, and payment services. Our current and planned systems, procedures, and controls may not be adequate to support our complex arrangements and the rules governing revenue and expense recognition for our future operations and expected growth. Delays or problems associated with any improvement or expansion of our operational and financial systems and controls could adversely affect our relationships with our users, content publishers, advertisers, advertisement agencies, Roku TV brand partners, or other licensees; cause harm to our reputation and brand; and result in errors in our financial and other reporting.

We may pursue acquisitions, which involve a number of risks, and if we are unable to address and resolve these risks successfully, such acquisitions could harm our business.

We have in the past and may in the future acquire businesses, products, or technologies to expand our offerings and capabilities, user base, and business. We have evaluated, and expect to continue to evaluate, a wide array of potential strategic transactions; however, we have limited experience completing or integrating acquisitions. Any acquisition could be material to our financial condition and results of operations, and any anticipated benefits from an acquisition may never materialize. Acquisitions could also result in dilutive issuances of equity securities or the incurrence of debt, which could adversely affect our operating results, may cause unfavorable accounting treatment, may expose us to claims and disputes by third parties, including intellectual property claims, and may not generate sufficient financial returns to offset additional costs and expenses related to the acquisitions. In addition, the process of integrating acquired businesses, products, or technologies may

create unforeseen operating difficulties and expenditures, in particular when the acquired businesses, products, or technologies involve areas of operation in which we have limited or no prior experience. Acquisitions of businesses, products, or technologies in international markets would involve additional risks, including those related to integration of operations across different cultures and languages, currency risks, and the particular economic, political, and regulatory risks associated with specific countries. We may not be able to address these risks successfully, or at all, without incurring significant costs, delays, or other operational problems, and if we were unable to address such risks successfully, our business could be harmed.

We have outstanding debt, and our credit facility provides our lender with a first-priority lien against substantially all of our assets and contains financial covenants and other restrictions on our actions that may limit our operational flexibility or otherwise adversely affect our financial condition.

We entered into a credit agreement, dated February 9, 2019 (as amended on May 3, 2019, the “Credit Agreement”) among us, as borrower, certain of our subsidiaries from time to time party thereto, as guarantors, the lenders and issuing banks from time to time party thereto, and Morgan Stanley Senior Funding, Inc., as administrative agent and collateral agent (the “Agent”), providing for (i) a four-year revolving credit facility in the aggregate principal amount of up to \$100.0 million (the “Revolving Credit Facility”), (ii) a four-year delayed draw term loan A facility in the aggregate principal amount of up to \$100.0 million (the “Term Loan A Facility”), and (iii) an uncommitted incremental facility subject to certain conditions. The Credit Agreement contains a number of affirmative and negative covenants, which may restrict our current and future operations, particularly our ability to respond to certain changes in our business or industry or take future actions. The Credit Agreement also contains a financial covenant requiring us to maintain a minimum adjusted quick ratio of at least 1.00 to 1.00, tested as of the last day of any fiscal quarter on the basis of the prior period of our four consecutive fiscal quarters. Pursuant to the Credit Agreement, we granted the Agent a security interest in substantially all of our and our subsidiary guarantors’ assets. In November 2019, we borrowed an aggregate principal amount of \$100.0 million from the Term Loan A Facility. We also had outstanding letters of credit as of December 31, 2021, totaling \$38.0 million against the Revolving Credit Facility. See the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Senior Secured Term Loan A and Revolving Credit Facilities” elsewhere in this Annual Report.

As of December 31, 2021, we were in compliance with all of the covenants of the Credit Agreement. However, if we fail to comply with the covenants, make payments as specified in the Credit Agreement, or undergo any other event of default contained in the Credit Agreement, the Agent could declare an event of default, which would give it the right to terminate the commitments to provide additional loans and declare any borrowings outstanding, together with accrued and unpaid interest and fees, to be immediately due and payable. In addition, the Agent would have the right to proceed against the assets we provided as collateral pursuant to the Credit Agreement. If the outstanding debt under the Credit Agreement is accelerated, we may not have sufficient cash or be able to sell sufficient assets to repay it, which would harm our business and financial condition.

When we borrowed pursuant to the Term Loan A Facility, we chose a variable interest rate based on the one-month U.S. dollar London Interbank Offered Rate (“LIBOR”) as the benchmark for establishing the applicable interest rate. If we borrow pursuant to the Revolving Credit Facility, we are permitted to choose LIBOR as the benchmark for establishing the applicable interest rate as well. LIBOR, which is calculated and published for various currencies and periods by the ICE Benchmark Administration Limited (“IBA”), is in the process of being phased out. The IBA has ceased publication of the one-week and two-month U.S. dollar LIBOR settings, and intends to cease publication of all other U.S. dollar LIBOR settings (including the one-month setting) after June 30, 2023. Accordingly, in the near future LIBOR will cease being a widely used benchmark interest rate. The current and any future reforms and other pressures may cause LIBOR to be replaced with a new benchmark or to perform differently than in the past, including during the transition period. Although our Credit Agreement

will expire in February 2023 (before the cessation of the publication of the one-month U.S. dollar LIBOR setting), the consequences of the LIBOR developments cannot be entirely predicted and could have an adverse impact on the value of our LIBOR-linked financial obligations, such as an increase in the cost of our Credit Agreement indebtedness.

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

We intend to continue to make significant investments to support planned business growth and may require additional funds to respond to business challenges, including the need to develop new devices and enhance our streaming platform, continue to expand the content on our platform, maintain adequate levels of inventory to support our retail partners' demand requirements, improve our operating infrastructure, or acquire complementary businesses, personnel, and technologies. Our primary uses of cash include operating costs such as personnel-related expenses and capital spending. Our future capital requirements may vary materially from those currently planned and will depend on many factors including our growth rate and the continuing market acceptance of our streaming platform, the Roku OS, and players, along with the timing and effort related to the introduction of new platform features, players, hiring of experienced personnel, the expansion of sales and marketing activities, as well as overall economic conditions.

We may need to engage in equity or debt financings to secure additional funds. If we raise additional funds through future issuances of equity or convertible debt securities, our then existing stockholders could suffer 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 we secure could involve additional restrictive covenants relating to our capital raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions. If we were to violate such restrictive covenants, we could incur penalties, increased expenses, and an acceleration of the payment terms of our outstanding debt, which could in turn harm our business.

We may not be able to obtain additional financing on terms favorable to us, 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 may be harmed.

Risks Related to Cybersecurity, Reliability, and Data Privacy

Significant disruptions of our information technology systems or data security incidents could harm our reputation, cause us to modify our business practices, and otherwise adversely affect our business and subject us to liability.

We are dependent on information technology systems and infrastructure to operate our business. In the ordinary course of our business, we collect, store, process, and transmit large amounts of sensitive corporate, personal, and other information, including intellectual property, proprietary business information, user payment card information, other user information, employee information, and other confidential information. It is critical that we do so in a secure manner to maintain the confidentiality, integrity, and availability of such information. Our obligations under applicable laws, regulations, contracts, industry standards, self-certifications, and other documentation may include maintaining the confidentiality, integrity, and availability of personal information in our possession or control, maintaining reasonable and appropriate security safeguards as part of an information security program, and limits on the use or cross-border transfer of such personal information. These obligations

create potential legal liability to regulators, our business partners, our users, and other relevant stakeholders and impact the attractiveness of our subscription service to existing and potential users.

We have outsourced certain elements of our operations (including elements of our information technology infrastructure) to third parties, or may have incorporated technology into our platform, that collects, processes, transmits, and stores our users' or others' personal information (such as payment card information), and as a result, we manage a number of third-party vendors and other partners who may or could have access to our information technology systems (including our computer networks) or to our confidential information. In addition, many of those third parties in turn subcontract or outsource some of their responsibilities to third parties. As a result, our information technology systems, including the functions of third parties that are involved in or have access to those systems, are very large and complex. While all information technology operations are inherently vulnerable to inadvertent or intentional security breaches, incidents, attacks, and exposures, the size, complexity, accessibility, and distributed nature of our information technology systems, and the large amounts of sensitive or personal information stored on those systems, make such systems vulnerable to unintentional or malicious, internal, and external threats on our technology environment. Vulnerabilities can be exploited from inadvertent or intentional actions of our employees, third-party vendors, business partners, or by malicious third parties. For example, despite our efforts to secure our information technology systems and the data contained in those systems, including our efforts to educate or train our employees, we and our third-party vendors have experienced, and remain vulnerable to, data security incidents, including data breaches, phishing attacks, and improper employee access of confidential data. Malicious attacks are increasing in their frequency, levels of persistence, sophistication and intensity, and are being conducted by sophisticated and organized groups and individuals with a wide range of motives (including, but not limited to, industrial espionage) and expertise, including organized criminal groups, "hacktivists," nation states, and others.

Although we have implemented work from home protocols and offer work-issued devices to employees, the actions of our employees while working from home may have a greater effect on the security of our systems and the data we process, including by increasing the risk of compromise to our systems, intellectual property, or data arising from employees' combined personal and private use of devices, accessing our systems or data using wireless networks that we do not control, or the ability to transmit or store company-controlled data outside of our secured network. These risks have been heightened by the dramatic increase in the numbers of our employees who have been and are continuing to work from home as a result of government guidelines and internal policies adopted in response to the COVID-19 pandemic.

In addition to the threat of unauthorized access or acquisition of sensitive or personal information or intellectual property, other threats include the deployment of harmful malware, ransomware attacks, denial-of-service attacks, social engineering, and other means to affect service reliability and threaten the confidentiality, integrity, and availability of information. Some of these external threats may be amplified by the nature of our third-party web hosting, cloud computing, or network-dependent streaming services or suppliers. Our systems regularly experience directed attacks that are intended to interrupt our operations; interrupt our users', content publishers', and advertisers' ability to access our platform; extract money from us; or view or obtain our data (including without limitation user or employee personal information or proprietary information) or intellectual property. We cannot be certain that threat actors will not have a material impact on our systems or services in the future. Our safeguards intended to prevent or mitigate certain threats may not be sufficient to protect our information technology systems and data due to the developing sophistication and means of attack in the threat landscape as well as the impact that third-party vendors and third-party products may have on our cybersecurity. Recent developments in the threat landscape include an increased number of cyber extortion and ransomware attacks, with increases in the amount of ransom demands and the sophistication and variety of ransomware techniques and methodology. Ransomware or other cybersecurity attacks affecting our third-party vendors also may impact our ability to operate our business, such as when our information technology or human resources

vendors experience an outage of their systems, which renders services to downstream customers unavailable. Additionally, our third-party vendors or business partners' information technology systems, or hardware/software provided by such third parties for use in our information technology systems, may be vulnerable to similar threats and our business could be affected by those or similar third-party relationships. Open source software, which may be incorporated into our systems or products, inherently presents a large attack surface and may contain vulnerabilities of which we are not aware and which we cannot control or fully mitigate. For example, the Apache Log4j vulnerability discovered in December 2021 can be exploited by remote code execution, which can allow a bad actor to steal data or take over our systems. We have taken steps to patch this vulnerability by updating our relevant Apache software, but we, and the many other affected organizations, remain vulnerable in light of the widespread use of the Apache Log4i library and difficulty in identifying all instances of this library across an entire enterprise.

We maintain insurance policies to cover certain losses relating to our information technology systems. However, there may be exceptions to our insurance coverage such that our insurance policies may not cover some or all aspects of a security incident. Insurance policies will also not protect against the reputational harms caused by a major security incident. Even where an incident is covered by our insurance, the insurance limits may not cover the costs of complete remediation and redress that we may be faced with in the wake of a security incident. The successful assertion of one or more large claims against us that exceeds our available insurance coverage, or results in changes to our insurance policies (including premium increases or the imposition of large deductible or co-insurance requirements), could have an adverse effect on our business. In addition, we cannot be sure that our existing insurance coverage and coverage for errors and omissions will continue to be available on acceptable terms or that our insurers will not deny coverage as to any future claim. Though it is difficult to determine what harm may directly result from any specific interruption or breach, any failure to maintain performance, reliability, security, and availability of our network infrastructure to the satisfaction of our users, business partners, regulators, or other relevant stakeholders may harm our reputation and our ability to retain existing users and attract new users. Because of our prominence in the TV streaming industry, we believe we may be a particularly attractive target for threat actors. Any attempts by threat actors to disrupt our platform, our streaming devices, website, computer systems, or our mobile apps, if successful, could harm our business, subject us to liability, be expensive to remedy, cause harm to our systems and operations, and damage our reputation. Efforts to prevent threat actors from entering our computer systems or exploiting vulnerabilities in our devices are expensive to implement and may not be effective in detecting or preventing intrusion or vulnerabilities. Such unauthorized access to our data could damage our reputation and our business and could expose us to the risk of contractual damages, litigation, and regulatory fines and penalties that could harm our business. The risk of harm to our business caused by security incidents may also increase as we expand our product and service offerings and as we enter into new markets. Implementing, maintaining, and updating security safeguards requires substantial resources now and will likely be an increasing and substantial cost in the future.

Significant disruptions of our third-party vendors' or commercial partners' information technology systems or other similar data security incidents could adversely affect our business operations or result in the loss, misappropriation, or unauthorized access, use or disclosure of, or the prevention of access to, sensitive or personal information, which could harm our business. In addition, information technology system disruptions, whether from attacks on our technology environment or from computer viruses, natural disasters, terrorism, war, foreign invasions, and telecommunications and electrical failures, could result in a material disruption of our product development and our business operations.

There is no way of knowing with certainty whether we have experienced any data security incidents that have not been discovered. While we have no reason to believe that we have experienced a data security incident that we have not discovered, attackers have become very sophisticated in the way they conceal their unauthorized access to systems, and many companies that have been attacked are not aware that they have been attacked. Any

event that leads to unauthorized access, use, or disclosure of personal information, including but not limited to personal information regarding our users, could disrupt our business, harm our reputation, compel us to comply with applicable federal or state breach notification laws and foreign law equivalents, subject us to time consuming, distracting, and expensive litigation, regulatory investigation and oversight, mandatory corrective action, require us to verify the correctness of database contents, or otherwise subject us to liability under laws, regulations, and contractual obligations, including those that protect the privacy and security of personal information. This could result in increased costs to us and result in significant legal and financial exposure or reputational harm. For example, in the wake of a data breach involving payment card data, we may be subject to substantial penalties and related enforcement for failure to adhere to the technical or operational security requirements of the Payment Card Industry (“PCI”) Data Security Standards (“DSS”) imposed by the PCI Council to protect cardholder data. Penalties arising from PCI DSS enforcement are inherently uncertain as penalties may be imposed by various entities within the payment card processing chain without regard to any statutory or universally mandated framework. Such enforcement could threaten our relationship with our banks, card brands we do business with, and our third-party payment processors.

In addition, any actual or perceived failure by us, our vendors, or our business partners to comply with our privacy, confidentiality, or data security-related legal or other obligations to third parties, or any further security incidents or other unauthorized access events that result in the unauthorized access, release, or transfer of sensitive information (which could include personal information), may result in governmental investigations, enforcement actions, regulatory fines, litigation, or public statements against us by advocacy groups or others, and could cause third parties, including current and potential partners, to lose trust in us (including existing or potential users’ perceiving our platform, system, or networks as less desirable) or we could be subject to claims by third parties that we have breached our privacy- or confidentiality-related obligations, which could materially and adversely affect our business and prospects. There can be no assurance that the limitations of liability in our contracts would be enforceable or adequate or would otherwise protect us from liabilities or damages. Moreover, data security incidents and other inappropriate access can be difficult to detect, and any delay in identifying them may lead to increased harm of the type described above. While we have implemented security measures intended to protect our information technology systems and infrastructure, as well as the personal and proprietary information that we possess or control, there can be no assurance that such measures will successfully prevent service interruptions or further security incidents. Data protection laws around the world often require “reasonable,” “appropriate,” or “adequate” technical and organizational security measures, and the interpretation and application of those laws are often uncertain and evolving, and there can be no assurance that our security measures will be deemed adequate, appropriate, or reasonable by a regulator or court. Moreover, even security measures that are deemed appropriate, reasonable, or in accordance with applicable legal requirements may not be able to protect the information we maintain. In addition to potential fines, we could be subject to mandatory corrective action due to a data security incident, which could adversely affect our business operations and result in substantial costs and reputational harm.

We and our service providers collect, process, transmit, and store personal and confidential information, which creates legal obligations and exposes us to potential liability.

We collect, process, transmit, and store personal or confidential information about our users (and their devices), employees, and partners, and we rely on third-party service providers to collect, process, transmit, and store personal or confidential information of our users (including our users’ payment card data), employees, and partners. We collect such information from individuals located both in the United States and abroad and may store or process such information outside the country in which it was collected. Further, we, our service providers and our business partners use tracking technologies, including cookies, device identifiers, and related technologies, to help us manage and track our users’ interactions with our platform, devices, website, and partners’ content to deliver relevant advertising and personalized content for ourselves and on behalf of our partners on our devices.

We collect information about the interaction of users with our platform, devices, website, advertisements, and content publishers' streaming channels. To deliver relevant advertisements effectively, we must successfully leverage this data, as well as data provided by third parties. Our ability to collect and use such data could be restricted by a number of factors, including users having the ability to refuse consent to or opt out from our, our service providers', or our advertising partners' collection and use of this data, restrictions imposed by advertisers, content publishers, licensors, and service providers, changes in technology, and developments in laws, regulations, and industry standards. For example, certain European Union ("EU") laws and regulations prohibit access to or storage of information on a user's device (such as cookies and similar technologies that we use for advertising) that is not "strictly necessary" to provide a user-requested service or used for the "sole purpose" of a transmission unless the user has provided consent, and users may choose not to provide this consent to collection of information which is used for advertising purposes. Additionally, certain device manufacturers or operating system providers may restrict the deployment of cookies and similar technologies, or otherwise restrict the collection of personal information through these or other tools, via our applications. Any restrictions on our ability to collect or use data could harm our ability to grow our revenue, particularly our platform revenue which depends on engaging the relevant recipients of advertising campaigns.

Various federal, state, and foreign laws and regulations as well as industry standards and contractual obligations govern the collection, use, retention, protection, disclosure, cross-border transfer, localization, sharing, and security of the data we receive from and about our users, employees, and other individuals. The regulatory environment for the collection and use of personal information by device manufacturers, online service providers, content distributors, advertisers, and publishers is evolving in the United States and internationally. Privacy and consumer rights groups and government bodies (including the U.S. Federal Trade Commission ("FTC"), state attorneys general, the European Commission, European and UK data protection authorities, and the Brazilian national data protection authority), have increasingly scrutinized privacy issues with respect to devices that identify or are identifiable to a person (or household or device) and personal information collected through the internet, and we expect such scrutiny to continue to increase. The U.S. federal government, U.S. states, and foreign governments have enacted (or are considering) laws and regulations that could significantly restrict industry participants' ability to collect, use, and share personal information, such as by regulating the level of consumer notice and consent required before a company can place cookies or other tracking technologies. For example, the EU General Data Protection Regulation ("GDPR") imposes detailed requirements related to the collection, storage, and use of personal information related to people located in the EU (or which is processed in the context of EU operations) and places new data protection obligations and restrictions on organizations, and may require us to make further changes to our policies and procedures in the future beyond what we have already done. In addition, in the wake of the United Kingdom's withdrawal from the EU ("Brexit"), the United Kingdom has adopted a framework similar to the GDPR. The EU has recently confirmed that the UK data protection framework as being "adequate" to receive EU personal data. We are monitoring recent developments regarding amendments to the UK data protection framework and the impact this may have on our business.

We made changes to our data protection compliance program to prepare for the GDPR and will continue to monitor the implementation and evolution of data protection regulations, but if we are not compliant with GDPR or other data protection laws or regulations if and when implemented, we may be subject to significant fines and penalties (such as restrictions on personal information processing) and our business may be harmed. For example, under the GDPR, fines of up to 4% of the annual global revenue of a noncompliant company, as well as data processing restrictions, could be imposed for violation of certain of the GDPR's requirements. Data protection laws continue to proliferate throughout the world and such laws likely apply to our business. For example, Brazil's General Data Protection Law ("LGPD") came into effect in August 2020. The LGPD bears many substantive similarities to the GDPR such as extra-territorial reach, enhanced privacy rights for individuals, data transfer restrictions, and mandatory breach notification obligations. It carries penalties of up to 2% of a company's annual revenue in Brazil.

The U.S. data protection legal landscape also continues to evolve, with various states having enacted broad-based data privacy and protection legislation and with states and the federal government continuing to consider additional data privacy and protection legislation. The potential effects of this legislation are far-reaching and may require us to modify our data processing practices and policies and incur substantial costs and expenses in an effort to comply. For example, effective October 2019, Nevada amended its existing Security of Personal Information Law (“SPI Law”) to require, among other things, that certain businesses provide a designated request address to intake requests from consumers to opt out of the sale of their personal data. Effective January 2020, the California Consumer Privacy Act (“CCPA”) gives California residents certain rights with respect to their personal information, such as rights to access, and require deletion of, their personal information, opt out of the sale of their personal information, and receive detailed information about how their personal information is used. The CCPA also provides for civil penalties for violations, as well as a private right of action for data breaches that may increase data breach litigation. The California Privacy Rights Act (“CPRA”), which becomes effective on January 1, 2023 (with a “look-back” to January 1, 2022), builds on the CCPA and among other things, requires the establishment of a dedicated agency to regulate consumer privacy issues. In 2021, Virginia and Colorado adopted laws introducing new privacy obligations for which we may need to take additional steps to comply. We are continuing to assess the impact of new and proposed data privacy and protection laws and proposed amendments to existing laws on our business. Such restrictions could, for example, limit our ability to supply targeted advertising and thus negatively impact our business.

In addition, each U.S. state and most U.S. territories, each EU member state, and the United Kingdom, as well as many other foreign nations, have passed laws requiring notification to regulatory authorities, affected users, or others within a specific timeframe when there has been a security breach involving, or other unauthorized access to or acquisition or disclosure of, certain personal information and impose additional obligations on companies. Additionally, our agreements with certain users or partners may require us to notify them in the event of a security breach. Such statutory and contractual disclosures are costly, could lead to negative publicity, may cause our users to lose confidence in the effectiveness of our security measures, and may require us to expend significant capital and other resources to respond to or alleviate problems caused by the actual or perceived security breach. Compliance with these obligations could delay or impede the development of new products and may cause reputational harm.

As part of our data protection compliance program, we have implemented data transfer mechanisms to provide for the transfer of personal information from the European Economic Area (the “EEA”) or the United Kingdom to the United States. However, there are certain unsettled legal issues regarding the adequacy of data transfers to the United States, the resolution of which may adversely affect our ability to transfer personal information from the EEA to the United States. On July 16, 2020, the European Court of Justice ruled the EU-U.S. Privacy Shield to be an invalid data transfer mechanism, confirmed that the Model Clauses remain valid, and left unaddressed some issues regarding supplementary measures that may need to be taken to support transfers. In 2021, the European Commission published updated versions of the Model Clauses, which must be incorporated into new and existing agreements within prescribed timeframes in order to continue to lawfully transfer personal information outside of the EEA. The United Kingdom is expected to publish final versions of its own Model Clauses in 2022. Updating agreements to incorporate these new Model Clauses for the EEA and United Kingdom may require significant time and resources to implement, including through adjusting our operations, conducting requisite data transfer assessments, and revising our contracts. In addition, cloud service providers upon which our services depend are experiencing heightened scrutiny from EU regulators, which may lead to significant shifts or unavailability of cloud services to transfer personal information outside the EU, which may significantly impact our costs or ability to operate. We continue to assess the available regulatory guidance, determinations, and enforcement actions from EU Data Protection Authorities and the U.S. Department of Commerce on international data transfer compliance for companies, including guidance on specific supplementary measures in addition to the Model Clauses as well as specific data sharing that may be deemed a

cross-border transfer for which appropriate safeguards must be implemented. Our ability to continue to transfer personal information outside of the EU may become significantly more costly and may subject us to increased scrutiny and liability under the GDPR or other legal frameworks, and we may experience operating disruptions if we are unable to conduct these transfers in the future.

We will continue to review our business practices and may find it necessary or desirable to make changes to our personal information processing to cause our transfer and receipt of EEA residents' personal information to conform to applicable European law. The regulation of data privacy in the EU continues to evolve, and it is not possible to predict the ultimate effect of evolving data protection regulation and implementation over time. Member states also have some flexibility to supplement the GDPR with their own laws and regulations and may apply stricter requirements for certain data processing activities.

In addition, some countries are considering or have enacted "data localization" laws requiring that user data regarding users in their respective countries be maintained, stored, or processed in their respective countries. Maintaining local data centers in individual countries could increase our operating costs significantly. We expect that, in addition to the "business as usual" costs of compliance, the evolving regulatory interpretation and enforcement of laws such as the GDPR and CCPA, as well as other domestic and foreign data protection laws, will lead to increased operational and compliance costs and will require us to continually monitor and, where necessary, make changes to our operations, policies, and procedures. Any failure or perceived failure to comply with privacy-related legal obligations, or any compromise of security of user data, may result in governmental enforcement actions, litigation, contractual indemnities, or public statements against us by consumer advocacy groups or others. In addition to potential liability, these events could harm our business.

We publish privacy policies, notices, and other documentation regarding our collection, processing, use, and disclosure of personal information, credit card information, and other confidential information. Although we endeavor to comply with our published policies, certifications, and documentation, we may at times fail to do so or may be perceived to have failed to do so. Moreover, despite our efforts, we may not be successful in achieving compliance if our employees, representatives, agents, vendors, or other third parties fail to comply with our published policies, certifications, and documentation. Such failures can subject us to potential international, local, state, and federal action if they are found to be deceptive, unfair, or misrepresentative of our actual practices.

We have incurred, and will continue to incur, expenses to comply with privacy and security standards and protocols imposed by law, regulation, industry standards, and contractual obligations. Increased regulation of data collection, use, and security practices, including self-regulation and industry standards, changes in existing laws, enactment of new laws, increased enforcement activity, and changes in interpretation of laws, could increase our cost of compliance and operation, limit our ability to grow our business, or otherwise harm our business.

Any significant disruption in our computer systems or those of third parties we utilize in our operations could result in a loss or degradation of service on our platform and could harm our business.

We rely on the expertise of our engineering and software development teams for the performance and operation of the Roku OS, streaming platform, and computer systems. Service interruptions, errors in our software, or the unavailability of computer systems used in our operations could diminish the overall attractiveness of our devices and streaming platform to existing and potential users or otherwise disrupt our business. We utilize computer systems located either in our facilities or those of third-party server hosting providers and third-party internet-based or cloud computing services. Although we generally enter into service level agreements with these parties, we exercise no control over their operations, which makes us vulnerable to any errors, interruptions, or delays that they may experience. In the future, we may transition additional features of our services from our managed hosting systems to cloud computing services, which may require significant

expenditures and engineering resources. If we are unable to manage such a transition effectively, we may experience a loss or degradation in services, operational delays, or inefficiencies until the transition is complete. Upon the expiration or termination of any of our agreements with third-party vendors, we may not be able to replace their services in a timely manner or on terms and conditions, including service levels and cost, that are favorable to us, and a transition from one vendor to another vendor could subject us to operational delays and inefficiencies until the transition is complete. In addition, fires, floods, earthquakes, wars, foreign invasions, terrorist activity, power losses, telecommunications failures, break-ins, and similar events could damage these systems and hardware or cause them to fail completely. As we do not maintain entirely redundant systems, a disrupting event could result in prolonged downtime of our operations, products, or services and could adversely affect our business. Any disruption in the services provided by these vendors could have adverse impacts on our business reputation, customer relations, and operating results.

If any aspect of our computer systems or those of third parties we utilize in our operations fails, it may lead to downtime or slow processing time, either of which may harm the experience of our users. We have experienced, and may in the future experience, service disruptions, outages, and other performance problems due to a variety of factors, including infrastructure changes, human or software errors, and capacity constraints. We expect to continue to invest in our technology infrastructure to maintain and improve the user experience and platform performance. To the extent that we or our third-party service hosting providers do not effectively address capacity constraints, upgrade or patch systems as needed, and continually develop technology and network architecture to accommodate increasingly complex services and functions, increasing numbers of users, and actual and anticipated changes in technology, our business may be harmed.

Changes in how network operators manage data that travel across their networks could harm our business.

Our business relies upon the ability of our users to access high-quality streaming content through the internet. As a result, the growth of our business depends on our users' ability to obtain and maintain high-speed access to the internet at reasonable cost, which relies in part on internet service network operators' continuing willingness to upgrade and maintain their equipment as needed to sustain a robust internet infrastructure as well as their continued willingness to preserve the open and interconnected nature of the internet. We exercise no control over network operators, which makes us vulnerable to any errors, disruptions, or delays in their operations, as well as any decision they may make to prioritize the delivery of certain network traffic at the expense of other traffic. Any material disruption or degradation in internet services could harm our business.

To the extent that the number of internet users continues to increase, network congestion could adversely affect the reliability of our streaming platform. We may also face increased costs of doing business, or decreased demand for our services, if network operators engage in discriminatory practices with respect to streamed video content in an effort to monetize access to their networks or customers by data providers.

Certain laws intended to prevent network operators from engaging in discriminatory practices with respect to streaming video content have been implemented in many countries, including in the EU. In other countries, laws in this area may be nascent or non-existent. Furthermore, favorable laws may change. Given the uncertainty around these laws and the rules that implement them, including changing interpretations, amendments, or repeal, coupled with potentially significant political and economic power of network operators, we could experience discriminatory or anti-competitive practices, such as usage-based pricing, bandwidth caps, and traffic "shaping" or throttling, that could impede our growth, result in a decline in our quality of service, cause us to incur additional expense, or otherwise impair our ability to attract and retain users, all of which could harm our business.

In addition, most network operators that provide consumers with access to the internet also offer consumers multichannel video programming, and some network operators also own streaming services. These network operators have an incentive to use their network infrastructure in a manner adverse to the continued growth and success of other companies seeking to distribute similar video programming. To the extent that network operators are able to provide preferential treatment to their own data and content, as opposed to ours, our business could be harmed.

Risks Related to Intellectual Property

Litigation regarding intellectual property rights could result in the loss of rights important to our devices and streaming platform, cause us to incur significant legal costs, or otherwise harm our business.

Some internet, technology, and media companies, including some of our competitors, own large numbers of patents, copyrights, and trademarks, which they may use to assert claims against us. Third parties have asserted, and may in the future assert, that we have infringed, misappropriated, or otherwise violated their intellectual property rights. As we grow and face increasing competition, the possibility of intellectual property rights claims against us will grow. Plaintiffs who have no relevant product revenue may not be deterred by our own issued patents and pending patent applications in bringing intellectual property rights claims against us. The cost of patent litigation or other proceedings, even if resolved in our favor, has been or could be substantial. Some of our competitors may be better able to sustain the costs of such litigation or proceedings because of their substantially greater financial resources. Patent litigation and other proceedings may also require significant management time and divert management from our business. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could impair our ability to compete in the marketplace. The occurrence of any of the foregoing could harm our business.

As a result of intellectual property infringement claims, or to avoid potential claims, we may choose or be required to seek licenses from third parties. These licenses may not be available on commercially reasonable terms, or at all. Even if we are able to obtain a license, the license would likely obligate us to pay license fees or royalties or both, and the rights granted to us might be nonexclusive, with the potential for our competitors to gain access to the same intellectual property. In addition, the rights that we secure under intellectual property licenses may not include rights to all of the intellectual property owned or controlled by the licensor, and the scope of the licenses granted to us may not include rights covering all of the products and services provided by us and our licensees. Furthermore, an adverse outcome of a dispute may require us to: pay damages, potentially including treble damages and attorneys' fees, if we are found to have willfully infringed a party's intellectual property; cease making, licensing, or using technologies that are alleged to infringe or misappropriate the intellectual property of others; expend additional development resources to redesign our products; enter into potentially unfavorable royalty or license agreements in order to obtain the right to use necessary technologies, content, or materials; and indemnify our partners and other third parties. For example, we have in the past elected to develop and implement specific design changes to address potential risks that certain products could otherwise become subject to exclusion or cease and desist orders arising from patent infringement and other intellectual property claims brought in the U.S. International Trade Commission. In addition, any lawsuits regarding intellectual property rights, regardless of their success, could be expensive to resolve and would divert the time and attention of our management and technical personnel.

If we fail to, or are unable to, protect or enforce our intellectual property or proprietary rights, our business and operating results could be harmed.

We regard the protection of our patents, trade secrets, copyrights, trademarks, trade dress, domain names, and other intellectual property or proprietary 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. We seek to protect our confidential proprietary information, in part, by entering into confidentiality agreements and invention assignment agreements with all of our employees, consultants, contractors, advisors, and any third parties who have access to our proprietary know-how, information, or technology. However, we cannot be certain that we have executed such agreements with all parties who may have helped to develop our intellectual property or who had access to our proprietary information, nor can we be certain that our agreements will not be breached. Any party with whom we have executed such an agreement could potentially breach that agreement and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. We cannot guarantee that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Detecting the disclosure or misappropriation of a trade secret and enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, time-consuming, and could result in substantial costs, and the outcome of such a claim is unpredictable.

Further, the laws of certain foreign countries do not provide the same level of protection of corporate proprietary information and assets such as intellectual property, trademarks, trade secrets, know-how, and records as the laws of the United States. For instance, the legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection. As a result, we may encounter significant problems in protecting and defending our intellectual property or proprietary rights abroad. Additionally, we may also be exposed to material risks of theft or unauthorized reverse engineering of our proprietary information and other intellectual property, including technical data, manufacturing processes, data sets, or other sensitive information. Our efforts to enforce our intellectual property rights in such foreign countries may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop, which could have a material adverse effect on our business, financial condition, and results of operations. Moreover, if we are unable to prevent the disclosure of our trade secrets to third parties, or if our competitors independently develop any of our trade secrets, we may not be able to establish or maintain a competitive advantage in our market, which could harm our business.

We have filed and will in the future file patent applications on inventions that we deem to be innovative. There is no guarantee that our patent applications will issue as granted patents, that the scope of the protection gained will be sufficient or that an issued patent may subsequently be deemed invalid or unenforceable. U.S. patent laws, and the scope of coverage afforded by them, have recently been subject to significant changes, such as the change to “first-to-file” from “first-to-invent” resulting from the Leahy-Smith America Invents Act. This change in the determination of inventorship may result in inventors and companies having to file patent applications more frequently to preserve rights in their inventions, which may favor larger competitors that have the resources to file more patent applications. Another change to the patent laws may incentivize third parties to challenge any issued patent in the United States Patent and Trademark Office (“USPTO”), as opposed to having to bring such an action in U.S. federal court. Any invalidation of a patent claim could have a significant impact on our ability to protect the innovations contained within our devices and platform and could harm our business.

The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment, and other provisions to maintain patent applications and issued patents. We may fail to take the necessary actions and pay the applicable fees to obtain or maintain our patents. Noncompliance with these requirements can result in abandonment or lapse of a patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, competitors might be able to use our technologies and enter the market earlier than would otherwise have been the case.

We pursue the registration of our domain names, trademarks, and service marks in the United States and in certain locations outside the United States. We are seeking to protect our trademarks, patents, and domain

names in an increasing number of jurisdictions, a process that is expensive and time-consuming and may not be successful or which we may not pursue in every jurisdiction in which we conduct business. In particular, our actions to monitor and enforce our trademarks against third parties may not prevent counterfeit versions of our products or products bearing confusingly similar trademarks to ours from entering the marketplace, which could divert sales from us, tarnish our reputation, or reduce the demand for our products.

Litigation may be necessary to enforce our intellectual property or proprietary 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, or diversion of management and technical resources, any of which could adversely affect our business and operating results. If we fail to maintain, protect, and enhance our intellectual property or proprietary rights, our business may be harmed.

Our use of open source software could impose limitations on our ability to commercialize our devices and our streaming platform or could result in public disclosure of competitively sensitive trade secrets.

We incorporate open source software in our streaming platform. From time to time, companies that incorporate open source software into their products and services have faced claims challenging the ownership of open source software or compliance with open source license terms. Therefore, we could be subject to suits by parties claiming ownership of what we believe to be open source software or noncompliance with open source licensing terms. Although we have processes and procedures designed to help monitor our use of open source software, these processes and procedures may not be followed by all of our employees or may fail to identify risks. Additionally, the terms of many open source software licenses have not been interpreted by U.S. courts, and there is a risk that such licenses could be construed in a manner that could impose unanticipated conditions or restrictions on the sale of our devices or impose unanticipated obligations that require disclosure of trade secrets. In such event, we could be required to make our proprietary software generally available to third parties, including competitors, at no cost, to seek licenses from third parties in order to continue offering our devices, to re-engineer our devices, or to discontinue the sale of our devices in the event re-engineering cannot be accomplished on a timely basis or at all, any of which could harm our business.

Under our agreements with many of our content publishers, licensees, distributors, retailers, contract manufacturers, and suppliers, we are required to provide indemnification in the event our technology is alleged to infringe upon the intellectual property rights of third parties.

In certain of our agreements we indemnify our content publishers, licensees, distributors, retailers, manufacturing partners, and suppliers. We have in the past, and may in the future, incur significant expenses defending these partners if they are sued for patent infringement based on allegations related to our technology. If a 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 the devices sold by our licensing partners and Roku TV brand partners 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 the streaming device in question, even if the claim does not pertain to our technology. Liability under our indemnification commitments may not be contractually limited.

Risks Related to Macroeconomic Conditions

The ongoing COVID-19 pandemic has impacted and continues to pose risks to our business, the nature and extent of which are highly uncertain and unpredictable.

Our business has been, and is expected to continue to be, impacted by the ongoing COVID-19 pandemic and resulting economic consequences. The spread of COVID-19 has caused us to take precautionary measures

intended to help minimize the risk of the virus to our employees, including work from home policies, suspending certain business travel, and limiting physical participation in meetings, events, and conferences. We may take further actions as required by government authorities or that we determine are in the best interests of our employees, TV brand partners, content publishers, advertisers, retail and distribution partners, contract manufacturers, services vendors, and supply chain. There is no certainty that such measures will be sufficient to mitigate the risks posed by the COVID-19 pandemic.

The COVID-19 pandemic continued to have a mixed impact on our business in 2021. When staying-at-home restrictions were first issued in the first quarter of 2020, we saw an acceleration in both streaming hours and account activations, which have both since moderated as restrictions have lifted and we believe consumers have increasingly pursued out-of-home entertainment activities. Although we believe the COVID-19 pandemic has accelerated the shift of advertising from legacy TV to streaming TV, certain advertisers with businesses affected by the current global supply chain disruptions have reduced and may continue to reduce their spending on advertising. We also have encountered supply chain disruptions related to our players that have resulted in an increase in component prices and elevated air freight costs to replenish inventory and meet increased demand, and some of our TV brand partners have faced inventory challenges that have negatively impacted their unit sales, which we believe has affected and could continue to affect our streaming hours and active account growth. Additionally, at times during the pandemic some of our retail partners have had to close or severely limit access to their brick and mortar locations, resulting in reduced sale of devices in these locations.

We continue to monitor the situation and take appropriate actions in accordance with the recommendations and requirements of relevant authorities. The extent to which the COVID-19 pandemic may impact our operational and financial performance remains uncertain and will depend on many factors outside our control, including the timing, extent, trajectory, and duration of the pandemic; the emergence infectiousness, and severity of new variants; the development, availability, distribution, acceptance, use, and effectiveness of vaccines, vaccine boosters, and treatments; the imposition of protective public safety measures; the resolution of global supply chain disruptions; and the impact of the pandemic on the global economy and demand for consumer products. Additional future impacts on our business may include, but are not limited to, material adverse effects on demand for our products and services, our supply chain and sales and distribution channels, our ability to execute our strategic plans, and our profitability and cost structure.

To the extent the COVID-19 pandemic adversely affects our business, it may also have the effect of heightening many of the other risks described in this Part I, Item 1A of this Annual Report.

Natural disasters or other catastrophic events could disrupt and impact our business.

Occurrence of any catastrophic event, including an earthquake, flood, tsunami, or other weather event, power loss, internet failure, software or hardware malfunctions, cyber attack, war or foreign invasion (such as the potential Russian invasion of Ukraine), terrorist attack, medical epidemic or pandemic (such as the COVID-19 pandemic), other man-made disasters, or other catastrophic events could disrupt our business operations. Any of these business disruptions could require substantial expenditures and recovery time in order to fully resume operations. In particular, our principal offices are located in California, and our contract manufacturers and some of our suppliers are located in Asia, both of which are regions known for seismic activity, making our operations in these areas vulnerable to natural disasters or other business disruptions in these areas. Our insurance coverage may not compensate us for losses that may occur in the event of an earthquake or other significant natural disaster. In addition, our offices and facilities, and those of our contract manufacturers, suppliers, and TV brand partners, could be vulnerable to the effects of climate change (such as sea level rise, drought, flooding, wildfires, and increased storm severity) that could disrupt our business operations. For example, in California, increasing intensity of drought and annual periods of wildfire danger increase the probability of planned power outages.

Further, acts of terrorism could cause disruptions to the internet or the economy as a whole. If our streaming platform was to fail or be negatively impacted as a result of a natural disaster or other event, our ability to deliver streaming content, including advertising, to our users would be impaired. Disruptions in the operations of our contract manufacturers, suppliers, or TV brand partners as a result of a disaster or other catastrophic event could delay the manufacture and shipment of our products or Roku TV models, which could impact our business. If we are unable to develop adequate plans to ensure that our business functions continue to operate during and after a disaster or other catastrophic event and to execute successfully on those plans in the event of a disaster or catastrophic event, our business would be harmed.

Legal and Regulatory Risks

If government regulations or laws relating to the internet, video, advertising, or other areas of our business change, we may need to alter the manner in which we conduct our business, or our business could be harmed.

We are subject to or affected by general business regulations and laws, as well as regulations and laws specific to the internet and online services, including laws and regulations related to data privacy and security, consumer protection, data localization, law enforcement access to data, encryption, telecommunications, social media, payment processing, taxation, trade, intellectual property, competition, electronic contracts, internet access, net neutrality, advertising, calling and texting, content restrictions, protection of children, and accessibility, among others. We cannot guarantee that we have been or will be fully compliant in every jurisdiction. Litigation and regulatory proceedings are inherently uncertain, and the federal, state, and foreign laws and regulations governing issues such as data privacy and security, payment processing, taxation, net neutrality, liability of providers of online services, video, telecommunications, e-commerce tariffs, and consumer protection related to the internet continue to develop. Moreover, as internet commerce and advertising continue to evolve, increasing regulation by federal, state, and foreign regulatory authorities becomes more likely.

As we develop new services and devices and improve our streaming platform, we may also be subject to new laws and regulations specific to such technologies. For example, in developing our Roku TV reference design, we were required to understand, address, and comply with an evolving regulatory framework for developing, manufacturing, marketing, and selling TVs. If we fail to adequately address or comply with such regulations regarding the manufacture and sale of TVs, we may be subject to fines or sanctions, and our TV brand partners may be unable to sell Roku TV models at all, which could harm our business and our ability to grow our user base.

Laws relating to data privacy and security, data localization, law enforcement access to data, encryption, consumer protection, and similar activities continue to proliferate, often with little harmonization between jurisdictions and limited guidance. A number of bills are pending in the U.S. Congress and other government bodies that contain provisions that would regulate, for example, how companies can use cookies and other tracking technologies to collect, use, and share user information. The CCPA also imposes requirements on certain tracking activity. The EU has laws requiring advertisers or companies like ours to, for example, obtain unambiguous, affirmative consent from users for the placement of cookies or other tracking technologies and the delivery of relevant advertisements. In addition, EU institutions continue to negotiate the draft of the proposed Digital Services Act, legislation intended to update the liability and safety rules for digital platforms, products, and services. If we or the third parties that we work with, such as contract payment processing services, content publishers, vendors, or developers, violate or are alleged to violate applicable privacy or security laws, industry standards, our contractual obligations, or our policies, such violations and alleged violations may also put our users' information at risk and could in turn harm our business and reputation and subject us to potential liability. Any of these consequences could cause our users, advertisers, or publishers to lose trust in us, which could harm

our business. Furthermore, any failure on our part to comply with these laws may subject us to liability and reputational harm.

Our use of data to deliver relevant advertising and other services on our platform places us and our content publishers at risk for claims under various unsettled laws, including the Video Privacy Protection Act (“VPPA”). Some of our content publishers have been engaged in litigation over alleged violations of the VPPA relating to activities on our platform in connection with advertising provided by unrelated third parties. In addition, the FTC has initiated a review of its rules implementing the Children’s Online Privacy Protection Act (“COPPA”), which limits the collection by operators of online services of personal information from children under the age of 13. The review could result in broadening the applicability of COPPA, including the types of information that are subject to these regulations. Changes to the COPPA rules could limit the information that we or our content publishers and advertisers may collect and use and the content of advertisements in relation to certain channel partner content. The CCPA also imposes certain opt in and opt out requirements before certain information about minors can be collected. We and our content publishers and advertisers could be at risk for violation or alleged violation of these and other privacy, advertising, or similar laws.

Changes in U.S. or foreign trade policies, geopolitical conditions, general economic conditions, and other factors beyond our control may adversely impact our business and operating results.

Our business is subject to risks generally associated with doing business abroad, such as U.S. and foreign governmental regulation in the countries in which we operate and the countries in which our contract manufacturers, component suppliers, and other business partners are located. Our operations and performance depend significantly on global, regional, and U.S. economic and geopolitical conditions.

For example, tensions between the United States and China have led to the United States’ imposition of a series of tariffs, sanctions, and other restrictions on imports from China and sourcing from certain Chinese persons or entities, as well as other business restrictions. These and other trade disputes can disrupt supply chains and increase the cost of our products and the components required to manufacture our products, as well as costs for our Roku TV brand partners. This could cause our products and those of our Roku TV brand partners to be more expensive for consumers, which could reduce the demand for or attractiveness of such products. Countries also could adopt other measures, such as controls on imports or exports of goods, technology, or data, which could adversely affect our operations and supply chain and limit our ability to offer our products and services as intended. These kinds of restrictions could be adopted with little to no advanced notice, and we may not be able to effectively mitigate the adverse impacts from such measures. Political uncertainty surrounding trade or other international disputes also could have a negative impact on consumer confidence and willingness to spend money, which could impair our future growth. In particular, given the general deterioration in U.S.-China relations and ongoing tensions on trade, security, and human rights, additional U.S. sanctions, tariffs, and export or import restrictions, as well as Chinese sanctions or retaliatory measures, remain a serious risk.

We cannot predict whether new international trade agreements will be negotiated or existing free trade agreements renegotiated; whether new trade or tariff actions will be announced by the Biden Administration with other U.S. trading partners; or the effect that any such action would have, either positively or negatively, on our industry or our business or licensees. If any new legislation or regulations are implemented, or if existing trade agreements are renegotiated or terminated, or if tariffs are imposed on foreign-sourced or U.S. goods, it may be inefficient and expensive for us to alter our business operations in order to adapt to or comply with such changes, and higher prices could depress consumer demand. Such operational changes could have a material adverse effect on our business, financial condition, results of operations, or cash flows.

Also, various countries, in addition to the United States, regulate the import and export of certain products, commodities, software, and technology, including through import and export licensing requirements, and have enacted laws that could limit our ability to distribute our products or collaborate on technology with our commercial or strategic partners, or could limit the ability of our commercial or strategic partners to implement our products in those countries. Changes in our products or future changes in export and import regulations may create delays in the introduction of our products in international markets, disrupt supply chains, prevent our commercial or strategic partners with international 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. Any changes in U.S. or foreign export or import regulations, customs duties, or other restrictions on intangible goods (such as cross-border data flows) could result in decreased use of our products by, or in our decreased ability to export or sell our products and services to, existing or new customers in U.S. or international markets or hamper our ability to source products, components, and parts from certain suppliers or lead to potential supply chain disruptions and business or reputational harms. Any decreased use of our products or limitation on our ability to export, import, or sell our products or services, or source parts or components, could harm our business. Although we attempt to ensure that we, our retailers, and partners comply with the applicable import, export, and sanctions laws, we cannot guarantee full compliance by all. Actions of our retailers and partners are not within our complete control, and our devices could be re-exported to sanctioned persons or countries, or provided by our retailers to third persons in contravention of our requirements or instructions or the laws. Any such potential violation could have negative consequences, including government investigations or penalties, and our reputation, brand, and revenue may be harmed.

Further, there are many uncertainties around the COVID-19 pandemic, including scientific and health issues, the pace of worldwide vaccinations, the unknown duration and extent of economic disruption, and the impact on the economies of various countries in which we operate or in which our contract manufacturers and suppliers are located. As a result, the COVID-19 pandemic may result in further supply shortages of products for us or our TV brand partners, delays in shipping and transportation services that negatively impact our ability or our TV brand partners' ability to import, export, ship, or sell products to customers in U.S. and international markets, and our ability to market and sell our streaming services internationally. Any limitations or delays on our or our TV brand partners' ability to produce, import, export, ship, or sell our products would harm our business, and could negatively impact our international sales.

In addition, the effects of the United Kingdom's departure from the EU have been and are expected to continue to be far-reaching. Brexit and the perceptions as to its impact may adversely affect business activity and economic conditions. Brexit could also have the effect of disrupting the free movement of goods, services, and people between the United Kingdom and the EU, and some disruptions have already occurred. Brexit could also lead to legal uncertainty and potentially divergent national laws and regulations as the United Kingdom determines which EU laws to replace or replicate. Although the *EU-UK Trade and Cooperation Agreement* on the EU-UK post-Brexit economic relationship took effect on January 1, 2021, it is incomplete, and the full effects of Brexit are uncertain. Given these possibilities and others we may not anticipate, as well as the lack of comparable precedent, the full extent to which our business, results of operations, and financial condition could be adversely affected by Brexit is uncertain.

U.S. or international rules (or the absence of rules) that permit internet access network operators to degrade users' internet speeds or limit internet data consumption by users, including unreasonable discrimination in the provision of broadband internet access services, could harm our business.

Our products and services depend on the ability of our users to access the internet. Laws, regulations, or court rulings that adversely affect the popularity or growth in use of the internet, including decisions that undermine open and neutrally administered internet access, or that disincentivize internet access network

operators' willingness to invest in upgrades and maintenance of their equipment, could decrease customer demand for our service offerings, may impose additional burdens on us, or could cause us to incur additional expenses or alter our business model. Some jurisdictions have adopted regulations governing the provision of internet access service. Substantial uncertainty exists in the United States and elsewhere regarding such provisions. For example, in 2015, the FCC adopted open internet rules to prevent internet access network operators from unreasonably restricting, blocking, degrading, or charging for access to certain products and services offered by us and our content partners. In 2018, the FCC repealed most of those rules. More recently, the Biden Administration signed an executive order encouraging the FCC to readopt comprehensive open internet rules. The FCC therefore could consider adopting additional or modified rules to prevent internet access network operators from unreasonably restricting, blocking, degrading, or charging for data and services. If network operators were to engage in restricting, blocking, degrading, or charging for access, it could impede our growth, result in a decline in our quality of service, cause us to incur additional expense, or otherwise impair our ability to attract and retain users, any of which could harm our business. Several states and foreign countries in which we operate also have adopted or are considering rules governing the provision of internet access.

As we expand internationally, government regulation protecting the non-discriminatory provision of internet access may be nascent or non-existent. In those markets where regulatory safeguards against unreasonable discrimination are nascent or non-existent and where local network operators possess substantial market power, we could experience anti-competitive practices that could impede our growth, cause us to incur additional expenses, or otherwise harm our business. Future regulations or changes in laws and regulations (or their existing interpretations or applications) could also hinder our operational flexibility, raise compliance costs, and result in additional liabilities for us, which may harm our business.

If we are found liable for content that is distributed through or advertising that is served through our platform, our business could be harmed.

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. We rely on the statutory safe harbors, as set forth in the Digital Millennium Copyright Act (the "DMCA") and Section 230 of the Communications Decency Act in the United States, and the E-Commerce Directive in Europe, for protection against liability for various caching, hosting, and linking activities. The DMCA, Section 230, and similar statutes and doctrines on which we rely or may rely in the future are subject to uncertain judicial interpretation and regulatory and legislative amendments. Any legislation or court rulings that limit the applicability of these safe harbors could require us to take a different approach toward content moderation on our platform, which could diminish the depth, breadth, and variety of content that we offer, inhibit our ability to generate advertising, or otherwise adversely affect our business.

Moreover, 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 liabilities and our business could be harmed. If we become liable for these types of claims as a result of the content that is streamed over or the advertisements that are served through our platform, then our business may suffer. Litigation to defend these claims could be costly and the expenses and damages arising from any liability could harm 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 be adversely impacted if copyright holders assert claims, or commence litigation, alleging copyright infringement against the developers of channels that are distributed on our platform. While our platform policies prohibit streaming content on our platform without distribution rights from the copyright holder, and we maintain

processes and systems for the reporting and removal of infringing content, in certain instances our platform has been misused by unaffiliated third parties to unlawfully distribute copyrighted content. If content owners or distributors are deterred from working with us as a consequence, it could impair our ability to maintain or expand our business, including through international expansion plans.

If we fail to maintain effective internal control over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports and the market price of our Class A common stock may be adversely affected.

We are required to maintain internal control over financial reporting and to report any material weaknesses in such internal control. Section 404 of the Sarbanes-Oxley Act of 2002 (“Section 404”) requires that we furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting. This assessment must include disclosure of any material weaknesses identified by our management in our internal control over financial reporting. Our independent registered public accounting firm also attests to the effectiveness of our internal control over financial reporting. If we have a material weakness in our internal control over financial reporting in the future, we may not detect errors on a timely basis, and our financial statements may be materially misstated. If we identify material weaknesses in our internal control over financial reporting, are unable to continue to comply with the requirements of Section 404 in a timely manner, are unable to assert that our internal control over financial reporting is effective, or if our independent registered public accounting firm is unable to express an opinion as to the effectiveness of our internal control over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports, and the market price of our Class A common stock could be adversely affected. In addition, we could become subject to investigations by the SEC, The Nasdaq Global Select Market, or other regulatory authorities, which could require additional financial and management resources.

Our financial results may be adversely affected by changes in accounting principles applicable to us.

U.S. GAAP are subject to interpretation by the Financial Accounting Standards Board, the SEC, and other bodies formed to promulgate and interpret appropriate accounting principles. A change in these principles or interpretations could have a significant effect on our reported results of operations and may even affect the reporting of transactions completed before the announcement or effectiveness of a change. It is difficult to predict the impact of future changes to accounting principles or our accounting policies, any of which could harm our business.

If we fail to comply with the laws and regulations relating to the payment of income taxes and the collection of indirect taxes, we could be exposed to unexpected costs, expenses, penalties, and fees as a result of our noncompliance, which could harm our business.

We are subject to requirements to deduct or withhold income taxes on revenue sourced in various jurisdictions, pay income taxes on profits earned by any permanent establishment (or similar enterprise) of ours that carries on business in various jurisdictions, and collect indirect taxes from our sales in various jurisdictions. The laws and regulations governing the withholding and payment of income taxes and the collection of indirect taxes are numerous, complex, and vary by jurisdiction. A successful assertion by one or more jurisdictions that we were required to withhold or pay income taxes or collect indirect taxes where we did not could result in substantial tax liabilities, fees, and expenses, including substantial interest and penalty charges, which could harm our business.

New legislation that would change U.S. or foreign taxation of international business activities or other tax-reform policies could harm our business.

We earn a portion of our income in foreign countries and, as such, we are subject to tax laws in the United States and numerous foreign jurisdictions. Current economic and political conditions make tax laws and regulations, or their interpretation and application, in any jurisdiction subject to significant change.

Proposals to reform U.S. and foreign tax laws could significantly impact how U.S. multinational corporations are taxed on foreign earnings and could increase the U.S. corporate tax rate. Although we cannot predict whether or in what form these proposals will pass, several of the proposals under consideration, if enacted into law, could have an adverse impact on our effective tax rate, income tax expense, and cash flows.

In addition, both tax policy and tax administration are becoming multilateral. This multilateralism and collaboration among taxing authorities (including the U.S. and many foreign jurisdictions in which we operate) has resulted in proposed new tax measures specifically targeting online commerce, digital services, streaming services, and the remote sale of goods and services. Some of these measures (such as a global corporate minimum tax) require adoption of local legislation consistent with the agreed to multilateral framework. Other measures (such as digital services taxes) have already been implemented but may terminate upon the adoption of multilateral tax rules.

The rapid growth of multilateralism in tax administration means greater sharing of tax information among taxing authorities as well as the likelihood of joint and simultaneous tax audits of companies such as ours who have cross-border business activities in which the tax administrations may have a common or complementary interest. The results of any such audits or related disputes could have an adverse effect on our financial results for the period or periods for which the applicable final determinations are made. For example, we and our subsidiaries are engaged in intercompany transactions across multiple tax jurisdictions. Although we believe we have clearly reflected the economics of these transactions and that the proper local transfer pricing is in place, tax authorities may propose and sustain adjustments that could result in changes that may impact our mix of earnings in countries with differing statutory tax rates.

We have been, are currently, and may in the future be subject to regulatory inquiries, investigations, and proceedings, which could cause us to incur substantial costs or require us to change our business practices in a way that could seriously harm our business.

We have been, are currently, and may in the future be subject to investigations and inquiries from government entities. These investigations and inquiries, and our compliance with any associated regulatory orders or consent decrees, may require us to change our policies or practices, subject us to substantial monetary fines or other penalties or sanctions, result in increased operating costs, divert management's attention, harm our reputation, and require us to incur significant legal and other expenses, any of which could seriously harm our business.

Risks Related to Ownership of Our Class A Common Stock

The dual class structure of our common stock concentrates voting control with those stockholders who held our stock prior to our initial public offering, including our executive officers, employees, and directors and their affiliates, and limits the ability of holders of our Class A common stock to influence corporate matters.

Our Class B common stock has 10 votes per share, and our Class A common stock has one vote per share. Our President and Chief Executive Officer, Anthony Wood, holds and controls the vote of a significant number

of shares of our outstanding common stock, and therefore Mr. Wood will have significant influence over our management and affairs and over all matters requiring stockholder approval, including election of directors and significant corporate transactions, such as a merger or other sale of Roku or our assets, for the foreseeable future. If Mr. Wood's employment with us is terminated, he will continue to have the same influence over matters requiring stockholder approval.

In addition, the holders of Class B common stock collectively will continue to be able to control all matters submitted to our stockholders for approval even if their stock holdings represent less than a majority of the outstanding shares of our common stock. This concentrated control will limit the ability of holders of our Class A common stock to influence corporate matters for the foreseeable future, and, as a result, the market price of our Class A common stock could be adversely affected.

Future transfers by holders of Class B common stock will generally result in those shares converting to Class A common stock, which will have the effect, over time, of increasing the relative voting power of those holders of Class B common stock who retain their shares in the long term. As a result of such transfers, as of December 31, 2021, Mr. Wood controls a majority of the combined voting power of our Class A and Class B common stock even though he only owns 12.0% of the outstanding Class A and Class B common stock. As a board member, Mr. Wood owes a fiduciary duty to our stockholders and must act in good faith in a manner he reasonably believes to be in the best interests of our stockholders. As a stockholder, even a controlling stockholder, Mr. Wood is entitled to vote his shares in his own interests, which may not always be in the interests of our stockholders generally. This concentrated control could delay, defer, or prevent a change of control, merger, consolidation, or sale of all or substantially all of our assets that our other stockholders support, or conversely this concentrated control could result in the consummation of such a transaction that our other stockholders do not support. This concentrated control could also discourage a potential investor from acquiring our Class A common stock, which has limited voting power relative to the Class B common stock and might harm the trading price of our Class A common stock.

We have not elected to take advantage of the "controlled company" exemption to the corporate governance rules for companies listed on The Nasdaq Global Select Market.

The trading price of our Class A common stock has been, and may continue to be, volatile, and the value of our Class A common stock may decline.

The market price of our Class A common stock has been and may continue to be subject to wide fluctuations in response to numerous factors, many of which are beyond our control, including:

- actual or anticipated fluctuations in our financial condition and operating results;
- changes in projected operational and financial results;
- our loss of key content publishers;
- changes in laws or regulations applicable to our devices or platform;
- the commencement or conclusion of legal proceedings that involve us;
- actual or anticipated changes in our growth rate relative to our competitors;
- announcements of new products or services by us or our competitors;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, or joint ventures;
- capital-raising activities or commitments;
- additions or departures of key personnel;
- issuance of new or updated research or reports by securities analysts;

- the use by investors or analysts of third-party data regarding our business that may not reflect our financial performance;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- sales of our Class A common stock, including short selling of our Class A common stock;
- share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- general economic and market conditions; and
- other events or factors, including those resulting from civil unrest, war, foreign invasions, terrorism, or public health crises, or responses to such events.

Furthermore, the stock markets frequently experience extreme price and volume fluctuations that affect the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political, and market conditions such as recessions, elections, interest rate changes, or international currency fluctuations, may negatively impact the market price of our Class A common stock. As a result of such fluctuations, you may not realize any return on your investment in us and may lose some or all of your investment. In the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation or derivative litigation. For example, a stockholder has filed a derivative lawsuit, purportedly on our behalf, against certain members of our Board of Directors and management in the Delaware Court of Chancery. Such litigation could result in substantial costs and divert our management's attention from other business concerns.

Future sales and issuances of our capital stock or rights to purchase capital stock could result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to decline.

We may issue additional securities in the future and from time to time. Future sales and issuances of our capital stock or rights to purchase our capital stock could result in substantial dilution to our existing stockholders. We may sell or issue Class A common stock, convertible securities, and other equity securities in one or more transactions at prices and in a manner as we may determine from time to time. If we sell any such securities in subsequent transactions, investors may be materially diluted. New investors in such subsequent transactions could gain rights, preferences, and privileges senior to those of holders of our Class A common stock.

Future sales of shares by existing stockholders could cause our stock price to decline.

If our existing stockholders sell, or indicate an intention to sell, substantial amounts of our Class A common stock in the public market, the trading price of our Class A common stock could decline. All of our outstanding Class A shares are eligible for sale in the public market, other than shares and stock options exercisable held by directors, executive officers and other affiliates that are subject to volume limitations under Rule 144 of the Securities Act. In addition, we have reserved shares for future issuance under our equity incentive plan. Our directors, employees, and certain contingent workers are subject to our quarterly trading window, which generally opens at the start of the second full trading day after the public dissemination of our annual or quarterly financial results and closes (i) with respect to the first, second, and third quarter of each year, at the end of the fifteenth day of the last month of the such quarter and (ii) with respect to the fourth quarter of each year, at the end of the trading day on the Wednesday before Thanksgiving. These directors, employees, and contingent workers may also sell shares during a closed window period pursuant to trading plans that comply with the requirements of Rule 10b5-1(c)(1) under the Exchange Act. When these shares are issued and subsequently sold, it is dilutive to existing stockholders and the trading price of our Class A common stock could decline.

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

A limited number of equity research analysts provide research coverage of our Class A common stock, and we cannot assure you that such equity research analysts will adequately provide research coverage of our Class A common stock. A lack of adequate research coverage may adversely affect the liquidity and market price of our Class A common stock. If securities or industry analysts cover our company and one or more of these analysts downgrades our stock or issues other unfavorable commentary or research, the price of our Class A common stock could decline. If one or more equity research analysts cease coverage of our company, or fail to publish reports on us regularly, demand for our stock could decrease, which in turn could cause our stock price or trading volume to decline.

We incur costs and demands upon management as a result of complying with the laws and regulations affecting public companies in the United States, which may harm our business.

As a public company listed in the United States, we incur significant legal, accounting, and other expenses. In addition, changing laws, regulations, and standards relating to corporate governance and public disclosure, including SEC and The Nasdaq Global Select Market regulations, may increase legal and financial compliance costs and make some activities more time consuming. These laws, regulations, and standards are subject to varying interpretations and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. We invest resources to comply with evolving laws, regulations, and standards, and this investment may result in increased general and administrative expenses and a diversion of management's time and attention from revenue-generating activities to compliance activities. If, notwithstanding our efforts, we fail to comply with new laws, regulations, and standards, regulatory authorities may initiate legal proceedings against us, and our business may be harmed.

Failure to comply with these rules might also make it more difficult for us to obtain certain types of insurance, including director and officer liability insurance, and we might be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these events could also make it more difficult for us to attract and retain qualified persons to serve on our Board of Directors, on committees of our Board of Directors, or as members of senior management.

We do not intend to pay dividends in the foreseeable future.

We have never declared or paid any cash dividends on our Class A or Class B common stock and do not intend to pay any cash dividends in the foreseeable future. We anticipate that we will retain all of our future earnings to grow our business and for general corporate purposes. Moreover, our outstanding Credit Agreement contains prohibitions on the payment of cash dividends on our capital stock. Accordingly, investors must rely on sales of their Class A common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments.

Provisions of our charter documents and Delaware law may prevent or frustrate attempts by our stockholders to change our management or hinder efforts to acquire a controlling interest in us, and the market price of our Class A common stock may be lower as a result.

There are provisions in our certificate of incorporation and bylaws that may make it difficult for a third party to acquire, or attempt to acquire, control of Roku, even if a change in control was considered favorable by our stockholders.

Our charter documents also contain other provisions that could have an anti-takeover effect, such as:

- establishing a classified Board of Directors so that not all members of our Board of Directors are elected at one time;
- permitting the Board of Directors to establish the number of directors and fill any vacancies and newly created directorships;
- providing that directors may only be removed for cause;
- prohibiting cumulative voting for directors;
- requiring super-majority voting to amend some provisions in our certificate of incorporation and bylaws;
- authorizing the issuance of “blank check” preferred stock that our Board of Directors could use to implement a stockholder rights plan;
- eliminating the ability of stockholders to call special meetings of stockholders;
- prohibiting stockholder action by written consent, which requires all stockholder actions to be taken at a meeting of our stockholders; and
- reflecting our two classes of common stock as described above.

Moreover, because we are incorporated in Delaware, we are governed by Section 203 of the Delaware General Corporation Law, which prohibits a person who owns 15% or more of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner. Any provision in our certificate of incorporation or our bylaws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our Class A common stock and could affect the price that some investors are willing to pay for our Class A common stock.

Our certificate of incorporation provides that the Delaware Court of Chancery and the U.S. federal district courts will be the exclusive forums for substantially all disputes between us and our stockholders, which could limit our stockholders’ ability to obtain a favorable judicial forum for disputes with us or our directors, officers, or employees.

Our certificate of incorporation provides that the Delaware Court of Chancery is the exclusive forum for the following types of actions or proceedings under Delaware statutory or common law:

- any derivative action or proceeding brought on our behalf;
- any action asserting a breach of fiduciary duty;
- any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our certificate of incorporation, or our bylaws; and
- any action asserting a claim against us that is governed by the internal affairs doctrine.

This provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. Furthermore, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all 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 certificate of incorporation provides that the U.S.

federal district courts will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act.

While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions. In such instance, we would expect to vigorously assert the validity and enforceability of the exclusive forum provisions of our certificate of incorporation. This may require significant additional costs associated with resolving such action in other jurisdictions and there can be no assurance that the provisions will be enforced by a court in those other jurisdictions.

These exclusive forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for certain disputes with us or our directors, officers, or other employees, which may discourage lawsuits against us and our directors, officers, and other employees. If a court were to find either exclusive forum provision in our certificate of incorporation to be inapplicable or unenforceable in an action, we may incur further significant additional costs associated with resolving such action in other jurisdictions, all of which could harm our business.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our corporate headquarters are currently located in San Jose, California under a lease that expires in September 2030. We use this space for sales, research and development, and administrative purposes. In addition, we lease various office and shared work spaces throughout the United States and internationally. We believe that our facilities are suitable to meet our current needs.

Item 3. Legal Proceedings

Information with respect to this item may be found in Note 12 to the consolidated financial statements in Item 8 of this Annual Report, which is incorporated herein by reference.

Item 4. Mine Safety Disclosures

None.

PART II

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

Market Information

Our Class A common stock is listed on The Nasdaq Global Select Market under the ticker symbol “ROKU.” Our Class B common stock is not listed or traded on any exchange.

Holdings of Record

As of January 31, 2022, there were 61 stockholders of record of our Class A common stock. There were significantly more beneficial owners of our Class A common stock. As of January 31, 2022, there were 16 stockholders of record of our Class B common stock.

Dividend Policy

We have never declared or paid any dividends on our Class A or Class B common stock. We currently intend to retain all available funds and any future earnings for use in our business and therefore we do not anticipate declaring or paying any cash dividends in the foreseeable future. The terms of our Credit Agreement also restrict our ability to pay dividends, and we may also enter into credit agreements or other borrowing arrangements in the future that will restrict our ability to declare or pay cash dividends on our capital stock.

Sale of Unregistered Securities and Use of Proceeds

None.

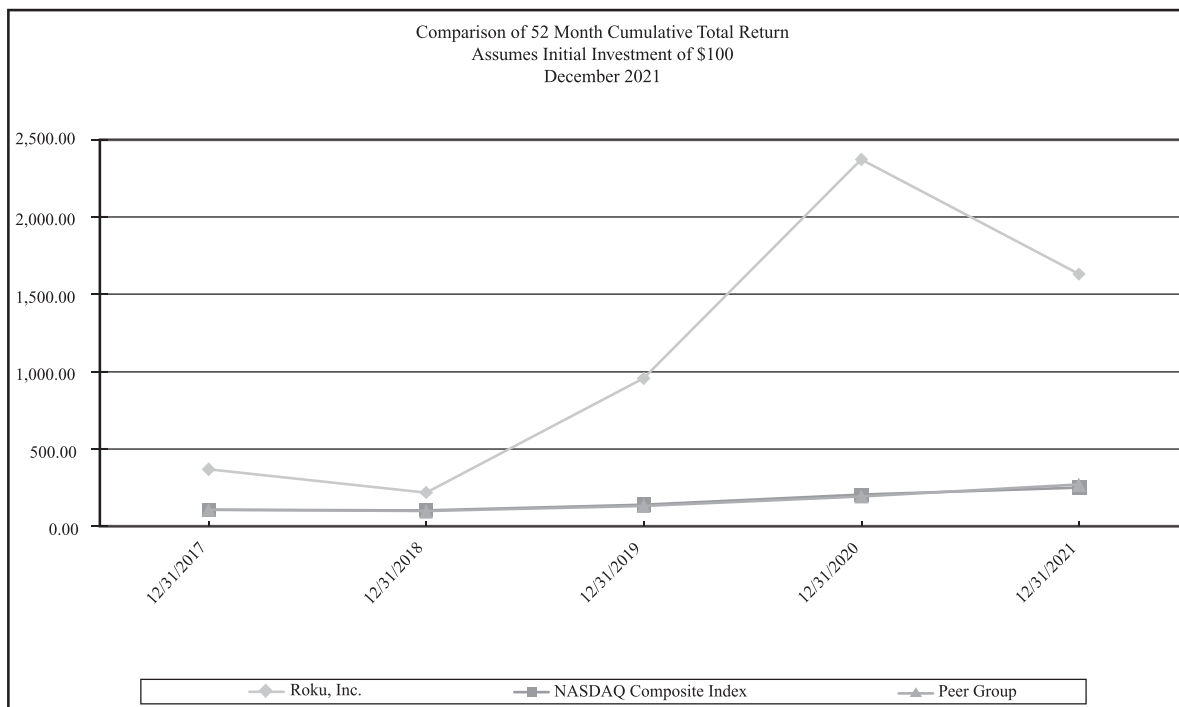
Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

Stock Performance Graphs and Cumulative Total Return

The following graph shows the cumulative total stockholder return of an investment of \$100 in cash from September 29, 2017 (the date our Class A common stock commenced trading on The Nasdaq Global Select Market) through December 31, 2021, for (i) our Class A common stock, (ii) the Nasdaq Composite Index, and (iii) the Peer Group of companies. Because no published index of comparable player and platform companies is currently available, we have used the Peer Group of companies for the purposes of this graph in accordance with the requirements of the SEC. The Peer Group is made up of Alphabet, Inc., Logitech International S.A., Meta Platforms, Inc., Netflix, Inc., Snap, Inc., Twitter, Inc., Yelp, Inc., and Zillow Group, Inc. Not all of the companies included in the Peer Group participate in all the lines of business in which we are engaged, and some of the companies are engaged in lines of business in which we do not participate. Additionally, the market capitalization of some of the companies included in the Peer Group are different from ours.

Pursuant to applicable SEC rules, all values assume reinvestment of the full amount of all dividends, however no dividends have been declared on our Class A common stock or Class B common stock to date. The stockholder return shown on the graph below is not necessarily indicative of future performance, and we do not make or endorse any predictions as to future stockholder returns.



Company / Index	Dec-17	Dec-18	Dec-19	Dec-20	Dec-21
Roku, Inc.	\$370	\$219	\$956	\$2,371	\$1,630
Nasdaq Composite Index	\$107	\$104	\$142	\$206	\$252
Peer Group	\$107	\$98	\$134	\$193	\$270

Source: Prepared by Zacks Investment Research, Inc. Used with permission. All rights reserved. Copyright 1980-2021.
Index Data: Copyright NASDAQ OMX, Inc. Used with permission. All rights reserved.

The information under “Stock Performance Graphs and Cumulative Total Return” is not deemed to be “soliciting material” or “filed” with the SEC or subject to Regulation 14A or 14C, or to the liabilities of Section 18 of the Exchange Act and is not to be incorporated by reference in any filing of the Company under the Securities Act, or the Exchange Act, whether made before or after the date of this Annual Report and irrespective of any general incorporation language in those filings.

Equity Compensation Plan Information

The following table summarizes information about our equity compensation plans as of December 31, 2021.

Plan Category	Number of securities to be issued upon exercise of outstanding options and awards	Weighted-average exercise price of outstanding options (1)	Number of securities remaining available for future issuances under equity compensation plans (excluding securities)
	(a)	(b)	(c)
	(in thousands, except per share amount)		
Equity compensation plans approved by security holders (2)	9,460	\$ 51.87	32,100
Equity compensation plans not approved by security holders	—	—	—
Total	9,460	\$ 51.87	32,100

- (1) Restricted stock units have been excluded for purposes of computing weighted-average exercise prices in column (b) as they do not have an exercise price.
- (2) The number of securities remaining available for future issuance in column (c) includes 27,011 shares of Class A common stock available for issuance under our 2017 Equity Incentive Plan (the “2017 Plan”) and 5,089 shares of Class A common stock available for issuance under our 2017 Employee Stock Purchase Plan. The number of shares authorized for issuance under the 2017 Plan is subject to an annual increase.

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 consolidated financial statements and related notes included in Item 8 of this Annual Report. In addition to historical financial information, the following discussion contains forward-looking statements that reflect our plans, estimates, beliefs, and expectations, and involve risks and uncertainties. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this Annual Report, particularly in the section titled Item 1A. Risk Factors and the Note Regarding Forward-Looking Statements.

This section of this Annual Report generally discusses fiscal years 2021 and 2020 and year-to-year comparisons between those years. Discussions of fiscal year 2019 and year-to-year comparisons between fiscal years 2020 and 2019 that are not included in this Annual Report can be found in Management’s Discussion and Analysis of Financial Condition and Results of Operations in Part II, Item 7 of our Annual Report for the fiscal year ended December 31, 2020 filed with the SEC on February 26, 2021.

Overview

We operate in two reportable segments: the platform segment and the player segment. Platform revenue is generated from the sale of digital advertising and related services including our OneView ad platform, content distribution services (such as subscription and transaction revenue shares, media and entertainment promotional spending, the sale of Premium Subscriptions, and the sale of branded channel buttons on remote controls), and licensing arrangements with service operators and TV brands.

Player revenue is generated primarily from the sale of streaming players and audio products. We expect to continue to manage the average selling prices (“ASP”) of our streaming players to increase our active accounts. We expect that the trade off from player gross profit or loss to grow active accounts will result in increased platform revenue and platform gross profit.

COVID-19 Update

The widespread global impact from the COVID-19 pandemic continued through 2021. Governmental authorities have put in place various precautionary measures and promoted vaccination programs to slow down the spread of the virus. The impact of the pandemic continues to vary by geography as well as over time as different variants of the virus surface. The majority of our workforce continues to work from home to protect the health and safety of our employees, and business travel continues to be curtailed. We evaluate and refine our return to office strategy by geography as circumstances change. We expect that most employees will adopt a hybrid work schedule (consisting of both in-person work and working from home) in 2022.

The COVID-19 pandemic, and the resulting precautionary measures, have caused, and are expected to continue to cause, economic uncertainty both in the United States and globally as well as significant volatility in, and disruption to, financial markets and supply chains. Global supply chain disruptions have resulted in shipping delays, increased shipping costs, component shortages, and increases in component prices. In addition, some of our TV brand partners have faced inventory challenges that have negatively impacted their unit sales.

The COVID-19 pandemic has accelerated the shift of TV viewing away from legacy TV to streaming TV. During the year ended December 31, 2021, we continued to see an increase in the number of active accounts, but

the growth rate was slower than in the prior year. Active accounts increased to 60.1 million as of December 31, 2021, growing 17% year-over-year. Streaming hours for the year ended December 31, 2021 increased to 73.2 billion, growing 25% year-over-year.

We have largely been able to maintain an inventory of our players, audio products, and accessories in stock at retailers and online stores throughout the COVID-19 pandemic. However, like many companies, we have been negatively affected by the constraints in the global supply chain, which have resulted in shortages of certain components, increased component costs, shipping constraints, and increased shipping costs. Player unit sales were down in the second half of 2021, year-over-year, due to the demand spike in the second half of 2020 because of the COVID-19 pandemic. In 2021, we insulated our customers from the rising player-related costs and prioritized account acquisition growth, which strategically supports our Average Revenue per User (“ARPU”) growth. The increasing component costs put additional constraints on our player gross margin resulting in a gross loss in the player segment for the year ended December 31, 2021. Though we do not believe that the cost constraints and supply chain issues are permanent, they may continue to impact us in the near future, and we expect player gross margin to be negative until such conditions normalize.

Our platform segment continues to perform well, with platform revenue increasing to \$2,284.9 million for the year ended December 31, 2021, reflecting year-over-year growth of 80%. Our ARPU grew to \$41.03, up 43% year-over-year. Almost every major media company has reorganized around streaming and, as a result, our content distribution business has benefited as our active accounts growth was accompanied by continued consumer demand for both ad-supported and subscription services, and increased media and entertainment promotional spending by our content partners. We believe advertising budgets will continue to shift from legacy TV to streaming TV and that we will benefit from this shift due to our advanced advertising capabilities. During the fourth quarter of 2021, however, certain advertising verticals experienced supply chain disruptions that negatively impacted product availability and resulted in reduced advertising spend. While we have experienced an increase in TV streaming during the COVID-19 pandemic and our business generally has benefited, there can be no assurance that these patterns will continue into 2022.

Key Performance Metrics

The key performance metrics we use to evaluate our business, measure our performance, develop financial forecasts and make strategic decisions are gross profit, active accounts, streaming hours, and ARPU.

Gross Profit

We use gross profit as the primary metric to measure the performance of our business because we have two revenue segments that have different margin profiles, and we aim to maximize our higher margin platform revenue from our active accounts as they stream content on our platform. Substantially all of our gross profit is generated from our platform segment.

Our gross profit was \$1,408.6 million and \$808.2 million for the years ended December 31, 2021 and 2020, respectively, reflecting an increase of 74%.

Active Accounts

We believe that the number of active accounts is a relevant measure to gauge the size of our user base. We define active accounts as the number of distinct user accounts that have streamed content on our platform within the last 30 days of the period. Users who streamed content from The Roku Channel only on non-Roku platforms are not included in this metric. The number of active accounts also does not correspond to the number of unique individuals who actively utilize our platform, or the number of devices associated with an account. For

example, a single account may be used by more than one individual, such as a family, and one account may be used on multiple streaming devices.

We had 60.1 million and 51.2 million active accounts as of December 31, 2021 and 2020, respectively reflecting an increase of 17%.

Hours Streamed

We believe the number of streaming hours on our platform is an effective measure of user engagement and that the growth in the number of hours of content streamed across our platform reflects our success in addressing the growing user demand for TV streaming. We define streaming hours as the aggregate amount of time streaming devices stream content on our platform in a given period. Hours streamed from The Roku Channel on non-Roku platforms are not included in this metric. We report streaming hours on a calendar basis.

Additionally, we believe that over time, increasing user engagement on our streaming platform increases our platform monetization because we earn platform revenue from various forms of user engagement, including advertising, as well as revenue shares from subscriptions and transactional video on-demand. However, our revenue from content publishers is not tied to the hours streamed on their streaming channels, and the number of streaming hours does not correlate to revenue earned from such content publishers or ARPU on a period-by-period basis. Moreover, streaming hours on our platform are measured whenever a Roku player or a Roku TV is streaming content, whether a viewer is actively watching or not. For example, if a Roku player is connected to a TV, and the viewer turns off the TV, steps away, or falls asleep and does not stop or pause the player, then the particular streaming channel may continue to play content for a period of time determined by the streaming channel. We believe that this also occurs across a wide variety of non-Roku streaming devices and other set-top boxes.

Since the first quarter of 2020, all of our devices include a Roku OS feature that is designed to identify when content has been continuously streaming on a channel for an extended period of time without user interaction. This feature, which we refer to as “Are you still watching,” periodically prompts the user to confirm that they are still watching the selected channel and closes the channel if the user does not respond affirmatively. We believe that the implementation of this feature across the Roku platform benefits us, our customers, channel partners, and advertisers. Some of our leading channel partners, including Netflix, also have implemented similar features within their channels. This Roku OS feature supplements these channel features. This feature has not had and is not expected to have a material impact on our future financial performance.

We streamed 73.2 billion and 58.7 billion hours during the years ended December 31, 2021 and 2020, respectively reflecting an increase of 25%.

Note About Our Streaming Hours Adjustments

To calculate and report our streaming hours, we utilize data from event logs generated by the firmware running on the Roku devices that are recorded in a central database. The event information (play, pause, stop, time counts, etc.) is generated by the firmware running on the Roku streaming devices, and event data is transmitted to our central database at regular intervals when a device is connected to the internet. Pause time is not intended to be included in streaming hours.

During the second quarter of 2020 we discovered that some pause time was inadvertently included in the streaming hours information recorded in our central database. Upon discovering these errors in the log data, we promptly reviewed and analyzed the issue utilizing our firmware, data engineering and core analytics teams. We

concluded that certain past Roku OS releases inadvertently caused the logging errors. The error rates varied over time and across different types of devices and firmware versions. As a result, we reported higher streaming hours and streaming hours growth rates for the affected periods than we would have if all pause time had been excluded from streaming hours as we had intended. Neither these logging errors, nor the resulting adjustments that we made to our streaming hours calculations, has had any impact on our financial results, and do not require us to revise any of our previously reported key operating metrics other than streaming hours.

The affected log data was for the periods from February 2016 to August 2020. After adjusting for logging errors, we estimate that our streaming hours were, on average, approximately 0.5% lower than previously reported for the period January 2017 through September 2018, and approximately 5.8% lower for the period October 2018 through March 2020.

By the end of August 2020, we fully deployed a software update that addressed the root cause of the pause time logging errors and prevented them from continuing.

The roll out of the “Are you still watching” feature had no impact on the adjustments we made to our streaming hours calculations. While our revenue from content publishers is not based on the hours streamed on their streaming channels, and the number of streaming hours does not directly correlate to revenue earned from such content publishers or ARPU on a period-by-period basis; we believe that the growth in the number of hours of content streamed across our platform reflects our success in addressing the growing user demand for TV streaming. After adjusting our streaming hours as discussed above, our estimated year-over-year streaming hour growth rates for fiscal year 2018 versus fiscal year 2017, fiscal year 2019 versus fiscal year 2018, and the first quarter of 2020 versus the first quarter of 2019 were 60.5%, 59.3%, and 46.8%, respectively. The estimated year-over-year streaming hour growth rate for the second quarter of 2020 versus the second quarter of 2019 was 65%.

The following table presents the estimated impacts on streaming hours (in billions) for periods from January 1, 2017 through March 31, 2020 and streaming hours growth rates on a year-over-year (“YoY”) basis by quarter for periods from January 1, 2018 through March 31, 2020 and annually for fiscal year 2018 and 2019. Revised streaming hours for 2016 are not estimated and therefore revised 2017 YoY growth rates are not available.

Quarter	Published SHs	Revised SHs	SHs % Delta	Published YoY	Revised YoY
2017 Q1	3.3B	3.2B	(0.5)%	63.4%	NA
2017 Q2	3.5B	3.5B	(0.4)%	60.0%	NA
2017 Q3	3.8B	3.8B	(0.4)%	57.8%	NA
2017 Q4	4.3B	4.3B	(0.2)%	55.3%	NA
2018 Q1	5.1B	5.1B	(0.5)%	56.0%	56.1%
2018 Q2	5.5B	5.4B	(0.5)%	57.2%	57.0%
2018 Q3	6.2B	6.1B	(0.7)%	62.7%	62.1%
2018 Q4	7.3B	7.1B	(2.2)%	68.6%	65.2%
2019 Q1	8.9B	8.4B	(5.4)%	74.1%	65.5%
2019 Q2	9.4B	8.8B	(6.0)%	72.1%	62.6%
2019 Q3	10.3B	9.6B	(6.5)%	67.6%	57.9%
2019 Q4	11.7B	10.9B	(6.3)%	60.2%	53.7%
2020 Q1	13.2B	12.3B	(7.0)%	49.3%	46.8%

Year	Published SHs	Revised SHs	SHs % Delta	Published YoY	Revised YoY
2017	14.8B	14.8B	(0.4)%	58.8%	NA
2018	24.0B	23.7B	(1.1)%	61.7%	60.5%
2019	40.3B	37.8B	(6.1)%	67.8%	59.3%

Average Revenue per User

We measure our platform monetization progress with ARPU, which we believe represents the inherent value of our business. We define ARPU as our platform revenue for the trailing four quarters divided by the average of the number of active accounts at the end of the current period and the end of the corresponding period in the prior year. ARPU measures the rate at which we are monetizing our active account base and the progress of our platform business.

ARPU was \$41.03 as of December 31, 2021 as compared to \$28.76 as of December 31, 2020.

Components of Results of Operations

Revenue

Platform Revenue

We generate platform revenue from digital advertising sales and related services including our OneView ad platform, content distribution services (such as subscription and transaction revenue sharing arrangements, media and entertainment promotional spending, the sale of Premium Subscriptions, and the sale of branded channel buttons on remote controls), and licensing arrangements with service operators and TV brands. Our ad inventory includes video ad inventory from AVOD content in The Roku Channel, native display ads on our home screen and screen saver, as well as ad inventory we obtain through our content distribution agreements with publishers. To supplement supply, we re-sell video inventory that we purchase from content publishers and, to a

lesser extent, directly sell third-party inventory on a revenue share basis. To date, we have generated most of our platform revenue in the United States.

Player Revenue

We generate player revenue primarily from the sale of streaming players through consumer retail distribution channels, including major brick and mortar retailers, such as Best Buy and Walmart, and online retailers, including Amazon. We generate most of our player revenue in the United States. In our international markets, we primarily sell our players through wholesale distributors which, in turn, re-sell to retailers. We currently distribute our players in various countries in North America, South America, and Europe.

Player revenue also includes the sale of our audio products, including wireless speakers, smart soundbars and wireless subwoofers.

Cost of Platform Revenue

Cost of platform revenue primarily consists of costs associated with acquiring advertising inventory and amortization costs of content, both licensed and produced. Cost of platform revenue also includes other costs such as payment processing fees, allocated expenses associated with the delivery of our services that primarily include costs of third-party cloud services and salaries, benefits, and stock-based compensation for our platform operations personnel, and amortization of acquired developed technology.

Cost of Player Revenue

Cost of player revenue is comprised mostly of manufacturing costs for streaming players and audio products payable to our third-party contract manufacturers and technology licenses or royalty fees. Cost of player revenue also includes inbound and outbound freight, duty and logistics costs, third-party packaging, inventory reserves, and allocated overhead costs related to facilities and customer support, and salaries, benefits, and stock-based compensation for operations personnel.

Operating and Other Expenses

Research and Development

Research and development expenses consist primarily of personnel-related costs, including salaries, benefits, and stock-based compensation for our development teams as well as outsourced development fees. In addition, research and development expenses include allocated facilities and overhead costs. We expect research and development expenses to increase in absolute dollars as we continue to invest in the development of our platform and player products and services.

Sales and Marketing

Sales and marketing expenses consist primarily of personnel-related costs, including salaries, benefits, commissions, and stock-based compensation for our employees engaged in sales and sales support, marketing, communications, data science and analytics, business development, product management, and partner and customer support functions. Sales and marketing expenses also include marketing, retail and merchandising costs, and allocated facilities and overhead expenses. We expect sales and marketing expenses to increase in absolute dollars in future periods as we focus on growing active accounts, platform and player revenue, and expanding our business internationally.

General and Administrative

General and administrative expenses consist primarily of salaries, benefits, and stock-based compensation for our finance, legal, information technology, human resources, and other administrative personnel. General and administrative expenses also include outside legal, accounting, and other professional service fees as well as allocated facility expenses. We expect our general and administrative expenses to increase due to the expansion of our business and related infrastructure.

Other Income (Expense), Net

For the years ended December 31, 2021 and 2020, other income (expense), net consists of interest income on cash and cash equivalents, income recognized related to non-cash consideration associated with the delivery of services as part of a strategic commercial arrangement, interest expense that includes interest on our debt and amortization of deferred debt costs, foreign currency re-measurement, and transaction gains and losses.

Income Tax (Benefit) Expense

Our income tax (benefit) expense consists primarily of income taxes in certain foreign jurisdictions where we conduct business and state income taxes in the United States. We have a valuation allowance for U.S. and Netherlands deferred tax assets, including net operating loss carryforwards. U.S. deferred tax assets include tax credits related primarily to research and development. We expect to maintain this valuation allowance for the foreseeable future.

Results of Operations

The following table sets forth selected consolidated statements of operations data as a percentage of total revenue for each of the periods indicated.

	Years Ended December 31,		
	2021	2020	2019
Net Revenue:			
Platform	83 %	71 %	66 %
Player	17 %	29 %	34 %
Total net revenue	100 %	100 %	100 %
Cost of Revenue:			
Platform	30 %	28 %	23 %
Player	19 %	27 %	33 %
Total cost of revenue	49 %	55 %	56 %
Gross Profit (Loss):			
Platform	53 %	43 %	43 %
Player	(2)%	2 %	1 %
Total gross profit	51 %	45 %	44 %
Operating Expenses:			
Research and development	17 %	20 %	24 %
Sales and marketing	16 %	17 %	16 %
General and administrative	9 %	10 %	10 %
Total operating expenses	42 %	47 %	50 %
Income (Loss) from Operations	9 %	(2)%	(6)%
Other Income (Expense), Net:			
Interest expense	— %	— %	— %
Other income (expense), net	— %	— %	1 %
Total other income (expense), net	— %	— %	1 %
Income (Loss) Before Income Taxes	9 %	(2)%	(5)%
Income tax benefit	— %	— %	— %
Net Income (Loss)	9 %	(2)%	(5)%

Comparison of Years Ended December 31, 2021 and 2020

Net Revenue

	Years Ended December 31,		Change \$	Change %
	2021	2020		
<i>(in thousands, except percentages)</i>				
Platform	\$ 2,284,925	\$ 1,267,744	\$ 1,017,181	80 %
Player	479,659	510,644	(30,985)	(6)%
Total net revenue	<u>\$ 2,764,584</u>	<u>\$ 1,778,388</u>	<u>\$ 986,196</u>	<u>55 %</u>

Platform

Platform revenue increased by \$1,017.2 million, or 80%, during the year ended December 31, 2021 as compared to the year ended December 31, 2020, primarily attributable to higher content distribution services, including higher revenue from media and entertainment promotional spending and Premium Subscriptions, as well as higher advertising revenue which includes revenue from our OneView ad platform.

Player

Player revenue decreased by \$31.0 million, or 6%, during the year ended December 31, 2021 as compared to the year ended December 31, 2020, primarily due to a decrease in both the volume of streaming players sold and average selling prices, offset by a slight increase in revenue from the sale of audio products and accessories. During the year ended December 31, 2021, the volume of streaming players sold decreased by 4% and the average selling price of players decreased by 7% as compared to the year ended December 31, 2020. The decrease in the volume of players sold is due to the slowdown in growth in the year ended December 31, 2021 as compared to the year ended December 31, 2020 when the growth was aided by the COVID-19 pandemic. The decrease in the average selling price is due to higher promotions during the year ended December 31, 2021 as compared to the year ended December 31, 2020 where the volume was aided by the COVID-19 pandemic and required fewer promotions.

Cost of Revenue

	Years Ended December 31,		Change \$	Change %
	2021	2020		
<i>(in thousands, except percentages)</i>				
Cost of Revenue:				
Platform	\$ 823,924	\$ 503,177	\$ 320,747	64 %
Player	532,060	466,992	65,068	14 %
Total cost of revenue	<u>\$ 1,355,984</u>	<u>\$ 970,169</u>	<u>\$ 385,815</u>	<u>40 %</u>
Gross Profit (Loss):				
Platform	\$ 1,461,001	\$ 764,567	\$ 696,434	91 %
Player	(52,401)	43,652	(96,053)	(220)%
Total gross profit	<u>\$ 1,408,600</u>	<u>\$ 808,219</u>	<u>\$ 600,381</u>	<u>74 %</u>

Platform

The cost of platform revenue increased by \$320.7 million, or 64%, during the year ended December 31, 2021 as compared to the year ended December 31, 2020. This increase is primarily driven by higher advertising inventory costs, higher content amortization costs, Premium Subscription costs, and credit card processing fees totaling \$303.1 million. Platform costs increased an additional \$15.3 million due to increases in cloud services costs for supporting the platform and higher personnel costs.

Gross profit for platform revenue increased by \$696.4 million, or 91%, during the year ended December 31, 2021 as compared to the year ended December 31, 2020, primarily driven by the overall growth in our platform revenue.

Player

The cost of player revenue increased by \$65.1 million, or 14%, during the year ended December 31, 2021 as compared to the year ended December 31, 2020. The increase is primarily due to higher product costs of \$35.6 million, an increase in freight costs of \$15.0 million, an increase in overhead costs such as cloud services, outsourced consulting services, and personnel costs totaling to \$9.4 million, higher royalty expenses of \$5.7 million, and an increase in inventory reserves of \$2.8 million offset by a reduction in other manufacturing related costs of \$3.3 million.

Gross profit for player revenue decreased by \$96.1 million, or 220%, during the year ended December 31, 2021 as compared to the year ended December 31, 2020, resulting in a gross loss for fiscal year 2021. The increase in costs was driven primarily by higher direct manufacturing costs for player products and accessories as a result of disruptions in the global supply chain driving component prices higher, combined with reduced player revenue in 2021 as compared to 2020. We believe that the cost increases and supply chain issues will continue in the near future, and we expect to incur negative gross margin in the player segment until such conditions normalize.

Operating Expenses

	Years Ended December 31,			
	2021	2020	Change \$	Change %
<i>(in thousands, except percentages)</i>				
Research and development	\$ 461,602	\$ 355,784	\$ 105,818	30 %
Sales and marketing	455,601	299,457	156,144	52 %
General and administrative	256,297	173,231	83,066	48 %
Total operating expenses	<u>\$ 1,173,500</u>	<u>\$ 828,472</u>	<u>\$ 345,028</u>	<u>42 %</u>

Research and development

Research and development expenses increased by \$105.8 million, or 30%, during the year ended December 31, 2021 as compared to the year ended December 31, 2020. The increase is primarily due to increases in personnel-related costs of \$84.3 million, as a result of increased engineering headcount and related stock-based compensation, and higher consulting, professional services, and cloud services costs of \$17.4 million.

Sales and marketing

Sales and marketing expenses increased by \$156.1 million, or 52%, during the year ended December 31, 2021 as compared to the year ended December 31, 2020. The increase is primarily due to increases in personnel-related costs of \$91.4 million related to increased headcount and related stock-based compensation in sales and sales support, product management, marketing, and business analytics to support efforts to grow our business. Sales and marketing expenses also include an increase of \$44.7 million mainly due to increases in advertising expenses to promote the Roku brand, marketing, retail and merchandising costs, and general sales promotions, an increase of \$9.5 million in professional services and consulting fees, and an increase in facilities costs of \$8.3 million due to expansion of office spaces.

General and administrative

General and administrative expenses increased by \$83.1 million, or 48%, during the year ended December 31, 2021 as compared to the year ended December 31, 2020. The increase is primarily due to increases in personnel-related costs of \$50.0 million related to increased headcount and related stock-based compensation, an increase of \$28.3 million related to higher legal expenses, consulting, and professional services fees, and a net increase of \$4.8 million related to higher general overhead, business taxes, and similar costs offset by recoveries of credit losses.

Other Income (Expense), Net

	Years Ended December 31,			
	2021	2020	Change \$	Change %
(in thousands, except percentages)				
Interest expense	\$ (2,980)	\$ (3,432)	\$ 452	(13)%
Other income (expense), net	4,467	5,233	(766)	(15)%
Total other income (expense), net	<u>\$ 1,487</u>	<u>\$ 1,801</u>	<u>\$ (314)</u>	<u>(17)%</u>

Other income (expense), net

Total other income (expense), net, decreased by \$0.3 million, or 17%, during the year ended December 31, 2021 as compared to the year ended December 31, 2020. The decrease was primarily driven by foreign exchange losses of \$2.5 million and lower interest income of \$1.4 million from a decline in interest rates, which impacted our investment yields. This was offset by \$3.1 million of other income recognized related to non-cash consideration associated with the delivery of services for a strategic commercial arrangement and decreased interest expense of \$0.5 million.

Income Tax Benefit

	Years Ended December 31,			
	2021	2020	Change \$	Change %
(in thousands, except percentages)				
Income tax benefit	<u>\$ (5,798)</u>	<u>\$ (945)</u>	<u>\$ (4,853)</u>	<u>514 %</u>

Income tax benefit

Income tax benefit increased by \$4.9 million during the year ended December 31, 2021 as compared to the year ended December 31, 2020, driven primarily by stock-based compensation excess tax benefits, increased losses in a foreign jurisdiction with no valuation allowance, and a tax rate change in a foreign jurisdiction.

Liquidity and Capital Resources

As of December 31, 2021, we had cash and cash equivalents of \$2,146.0 million. Less than 1% of our cash was held outside the United States in accounts held by our foreign subsidiaries, which are used to fund foreign operations.

Our primary sources of cash are receipts from platform and player revenue and proceeds from equity sales, including equity issued pursuant to our employee equity incentive plans. The primary uses of cash are costs of revenue, including costs to acquire advertising inventory, costs to license and produce content, third-party manufacturing costs, as well as operating expenses including payroll-related expenses, consulting and professional service fees, and facility and marketing expenses. Other uses of cash include purchases of property and equipment and mergers and acquisitions.

As our business and workforce continue to expand, we expect to continue to incur expenses for facility and building related costs for our office locations in the United States and internationally. In addition, we expect to continue our investments in purchases of computer systems and other property and equipment. We have pursued merger and acquisition activities, such as the acquisition of the Nielsen AVA business, the This Old House business, and content rights from Quibi, and we may pursue additional merger and acquisition activities in the future, including the acquisition of rights to programming and content assets. These activities can materially impact our liquidity and capital resources.

We believe our existing cash and cash equivalents balance, cash flow from operations, and our undrawn available balance under our Credit Agreement will be sufficient to meet our working capital, capital expenditures, and material cash requirements from known contractual obligations for the next twelve months and beyond. Our future capital requirements, the adequacy of available funds, and cash flows from operations could be affected by various risks and uncertainties, including, but not limited to, those detailed in Part I, Item 1A, Risk Factors in this Annual Report and the effects of the COVID-19 pandemic. While the pandemic has not severely impacted our liquidity and capital resources to date, it has contributed to disruption and volatility in local economies and in capital and credit markets, which could adversely affect our liquidity and capital resources in the future.

We may attempt to raise additional capital through the sale of equity securities or other financing arrangements. If we raise additional funds by issuing equity, the ownership of our existing stockholders will be diluted. Our Credit Agreement expires in February 2023. If we raise additional financing by the incurrence of additional indebtedness, we may be subject to fixed payment obligations and also to restrictive covenants.

At-the-Market Offering

On March 2, 2021, we entered into an Equity Distribution Agreement with Morgan Stanley & Co. LLC, Citigroup Global Markets Inc., and Evercore Group L.L.C., as our sales agents, pursuant to which we could offer and sell from time-to-time shares of our Class A common stock for aggregate gross proceeds of up to \$1,000.0 million. In March 2021, we sold approximately 2.6 million shares of Class A common stock at an average selling price of \$379.26 per share, for aggregate gross proceeds of \$1,000.0 million and incurred issuance costs of \$10.4 million.

Senior Secured Term Loan A and Revolving Credit Facilities

On February 19, 2019, we entered into a Credit Agreement with Morgan Stanley Senior Funding, Inc. (as amended on May 3, 2019, the “Credit Agreement”), which provides for (i) a four-year revolving credit facility in the aggregate principal amount of up to \$100.0 million (the “Revolving Credit Facility”), (ii) a four-year delayed draw term loan A facility in the aggregate principal amount of up to \$100.0 million (the “Term Loan A Facility”), and (iii) an uncommitted incremental facility subject to certain conditions (together with the Revolving Credit Facility and the Term Loan A Facility, collectively, the “Credit Facility”).

For our current borrowings, we have elected a Eurodollar borrowing with interest at a rate equal to the adjusted one-month LIBOR rate plus an applicable margin of 1.75% based on our secured leverage ratio. The borrowings under the facility mature or have to be repaid in full by February 2023. Our obligations under the Credit Agreement are secured by substantially all of our assets. The Credit Agreement contains customary representations and warranties, customary affirmative and negative covenants, a financial covenant that is tested quarterly and requires us to maintain a certain adjusted quick ratio of at least 1.00 to 1.00, and customary events of default. As of December 31, 2021, we were in compliance with all of the covenants of the Credit Agreement. See Note 10 to the consolidated financial statements in Item 8 of this Annual Report for additional details regarding the Credit Agreement.

We had outstanding letters of credit of \$38.0 million and \$30.8 million as of December 31, 2021 and 2020, respectively, against the Revolving Credit Facility.

Cash Flows

The following table summarizes our cash flows for the periods presented (in thousands):

	<u>Years Ended December 31,</u>	
	<u>2021</u>	<u>2020</u>
Consolidated Statements of Cash Flows Data:		
Cash flows provided by operating activities	\$ 228,081	\$ 148,192
Cash flows used in investing activities	\$ (176,819)	\$ (81,324)
Cash flows provided by financing activities	\$ 1,003,147	\$ 509,048

Cash Flows from Operating Activities

Our operating activities provided cash of \$228.1 million for the year ended December 31, 2021. Our net income of \$242.4 million for the year ended December 31, 2021 was adjusted by non-cash charges of \$355.7 million comprised mainly of stock-based compensation, amortization of content assets, depreciation and amortization on property and equipment and intangible assets, and amortization of operating right-of-use assets. The changes in our operating assets and liabilities used cash of \$370.0 million mainly from an increase in accounts receivable primarily driven by an increase in revenue, an increase in content assets, an increase in contract assets from revenue recognized from customers, payments made for operating lease liabilities, and a decrease in deferred revenue offset by inflows from an increase in accounts payable and accrued liabilities and a decrease in inventory balances. These changes are mainly due to overall growth in the business combined with the timing of receipts from customers and payments to vendors.

Cash Flows from Investing Activities

Our investing activities for the year ended December 31, 2021 included cash outflows of \$176.8 million comprised of \$136.8 million for the acquisition of businesses, mainly the Nielsen AVA business and This Old House, and \$40.0 million for purchases of property and equipment and expenditures on leasehold improvements.

Cash Flows from Financing Activities

Our financing activities provided cash of \$1,003.1 million for the year ended December 31, 2021. The cash was received mainly from proceeds from an at-the-market offering of \$989.6 million, net of issuance costs, and proceeds from the exercise of employee stock options of \$18.5 million. These inflows were offset by \$5.0 million of repayments made on borrowings.

Material Cash Requirements from Known Contractual Obligations

Our material cash requirements from known contractual obligations as of December 31, 2021 consisted of:

- Principal payments related to our Term Loan A Facility that are included in our consolidated balance sheets and the related periodic interest payments. For additional information regarding the terms of the debt and interest payable, see Note 10 to the consolidated financial statements in Item 8 of this Annual Report.

- Commitments to purchase finished goods from our contract manufacturers and other inventory related items. Consistent with industry practices, we enter into firm, non-cancelable, and unconditional purchase commitments with our contract manufacturers to acquire products through a combination of purchase orders, supplier contracts, and open orders based on projected demand information. Our contract manufacturers source components and build our products based on these demand forecasts. Changes to projected demand or in the subsequent sales mix of our products may result in us being committed to purchase excess inventory to satisfy these commitments. For additional information regarding manufacturing purchase commitments, see Note 12 to the consolidated financial statements in Item 8 of this Annual Report.
- Commitments to license content from content publishers under contractual arrangements. For additional information regarding licensed content commitments, see Note 12 to the consolidated financial statements in Item 8 of this Annual Report.
- Operating lease liabilities that are included in our consolidated balance sheets and liabilities related to the lease arrangements that have not yet commenced. For additional information regarding our lease liabilities, see Note 9 to the consolidated financial statements in Item 8 of this Annual Report.

The contractual commitments discussed above are associated with agreements that are enforceable and legally binding. Obligations under contracts that we can cancel without a significant penalty are not included above.

In addition, we have \$66.2 million of unrecognized income tax benefits, for which we are unable to reasonably predict the timing of settlement of liabilities. These income tax benefits are not recognized in our consolidated balance sheets as of December 31, 2021.

Critical Accounting Policies and Estimates

Our financial statements are prepared in accordance with generally accepted accounting principles in the United States. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, expenses, and related disclosures. These estimates and assumptions are affected by management’s application of accounting policies, as well as uncertainty in the current economic environment due to the ongoing COVID-19 pandemic. We evaluate our estimates and assumptions on an ongoing basis.

The critical accounting policies requiring estimates, assumptions, and judgments that we believe have the most significant impact on our financial statements are described below.

Revenue Recognition

Our contracts with customers often include promises to transfer multiple products and services to a customer. Determining whether products and services are considered distinct performance obligations requires significant judgment.

Judgment is required to determine the stand-alone selling price (“SSP”) for each distinct performance obligation. For performance obligations routinely sold separately, the SSP is determined by evaluating such stand-alone sales. For those performance obligations that are not routinely sold separately, we determine SSP using information that may include market conditions and other observable inputs.

To the extent platform services are part of multiple element arrangements, revenue recognition of each performance obligation in the estimated transaction price of a contract is based on the expected value for which a significant reversal of revenue is not expected to occur. The estimate of the variable consideration is based on the assessment of historical, current, and forecasted performance noted and expected from the performance obligation.

For the sale of third-party goods and services, we evaluate whether we are the principal, and report revenue on a gross basis, or an agent, and report revenue on a net basis. In this assessment, we consider if we obtain control of the specified goods or services before they are transferred to the customer, as well as other indicators such as the party primarily responsible for fulfillment, inventory risk, and discretion in establishing price.

Our player revenue includes allowances for returns and sales incentives in the estimated transaction price. The estimates for returns and sales incentives are based on historical experience and anticipated performance. We provide unspecified upgrades and updates to our player end users. We record the allocated value of these as deferred revenue and recognize it ratably on a time elapsed basis over the estimated economic life of the associated players. Shipping charges billed to customers are included in revenue and the related shipping costs are included in cost of revenue.

Business Combinations

We recognize, separately from goodwill, identifiable assets and liabilities acquired in a business combination at fair value on the date of acquisition. We use our best estimates and assumptions to accurately assign fair value to the tangible and identifiable intangible assets acquired and liabilities assumed at the acquisition date as well as the useful lives of those acquired intangible assets. Examples of critical estimates in valuing certain of the intangible assets and goodwill we have acquired include, but are not limited to, future expected cash inflows and outflows, expected technology life cycle, attrition rates of customers, and discount rates. We estimate the useful lives of the intangible assets based on the expected period over which we anticipate generating economic benefit from the asset. Unanticipated events and circumstances may occur that may affect the accuracy or validity of such assumptions, estimates or actual results.

While we use our best estimates and assumptions as part of the purchase price allocation process to accurately value assets and liabilities acquired, these estimates are inherently uncertain and subject to refinement. During the measurement period, which may be up to one year from the acquisition date, we record adjustments to consideration transferred, and the assets and liabilities acquired, with the corresponding offset to goodwill to the extent we identify adjustments to the preliminary purchase price allocation. Upon the conclusion of the measurement period or final determination of the values of consideration transferred, and assets and liabilities assumed, whichever comes first, any subsequent adjustments are recorded to the consolidated statements of operations.

Impairment of Intangible Assets

We identify intangible assets acquired in a business combination and determine their fair value. The determination involves certain judgments and estimates. These judgments include, but are not limited to, the cash flows that an asset is expected to generate in the future and the appropriate discount rate. We amortize purchased-intangible assets on a straight-line basis over the estimated useful life of the assets. We review purchased-intangible assets whenever events or changes in circumstances indicate that the useful life is shorter than we had originally estimated, or that the carrying amount of the asset group to which it relates may not be recoverable. If such facts and circumstances indicate an asset group's carrying amount may not be recoverable, we assess the recoverability of purchased-intangible assets by comparing the projected undiscounted net cash flows associated

with the asset group against their respective carrying amounts. Impairment, if any, is based on the excess of the carrying amount over the fair value of these asset groups. If the useful life of the asset is shorter than originally estimated, we accelerate the rate of amortization and amortize the remaining carrying value over the new shorter useful life.

Allowances for Sales Returns and Sales Incentives

Accounts receivable are stated at invoice value less estimated allowances that include allowance for sales returns and sales incentives. We perform an ongoing analysis of various factors including our historical experience, promotional programs, claims to date, and other business factors to determine the allowances for sales returns and sales incentives. If our estimates regarding accounts receivable allowances differ from the actual results, the losses or gains could be material.

Provision for Income Taxes

We account for income taxes in accordance with authoritative guidance, which requires the use of the asset and liability method. Under this method, deferred income tax assets and liabilities are determined based upon the difference between the consolidated financial statement carrying amounts and the tax basis of assets and liabilities and are measured using the enacted tax rate expected to apply to taxable income in the years in which the differences are expected to be reversed.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. A valuation allowance is provided when it is more likely than not that the deferred tax assets will not be realized. We have established a full valuation allowance to offset U.S. and Netherlands net deferred tax assets due to the uncertainty of realizing future tax benefits from our net operating loss carry-forwards and other deferred tax assets. Our valuation allowance is attributable to the uncertainty of realizing future tax benefits from U.S. and Netherlands net operating losses and other deferred tax assets. In order to assess the likelihood that we will recover our deferred tax assets against future sources of taxable income, we review the level of positive and negative evidence of future taxable income which is a critical estimate.

Recent Accounting Pronouncements

The recent accounting pronouncements adopted during the year ended December 31, 2021 and those not yet adopted are discussed and included in Note 2 to the consolidated financial statements in Item 8 of this Annual Report. They are incorporated herein by reference.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Fluctuation Risk

Our exposure to interest rate risk relates to the interest income generated by cash, cash equivalents, and interest expense on the Credit Facility. The primary objective of our investment policy is to preserve principal while maximizing income without significantly increasing risk. We do not believe that an increase or decrease in interest rates of 100 basis points would have a material effect on our operating results or financial condition. As of December 31, 2021, borrowings under the Term Loan A Facility totaled \$90.0 million with an effective interest rate of 2.0%. If the amount outstanding under our Term Loan A Facility remains at this level for an entire year and interest rates increased or decreased by 100 basis points, our annual interest expense would increase or decrease, respectively, by an additional \$0.9 million.

Foreign Currency Exchange Rate Risk

Most of our revenue is generated within the United States and we have minimal foreign currency risk related to our revenue. In addition, most of our operating expenses are denominated in the U.S. dollar, resulting in minimal foreign currency risks. In the future, if our international revenue increases or more of our expenses are denominated in currencies other than the U.S. dollar, our exposure to foreign currency risk will likely be more significant. For any of the periods presented, we did not enter into any foreign exchange contracts. However, in the future, we may enter into derivatives or other financial instruments in an attempt to hedge our foreign currency exchange risk.

Item 8. Financial Statements and Supplementary Data

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	Page
Report of Independent Registered Public Accounting Firm (PCAOB ID 34)	83
Consolidated Balance Sheets	86
Consolidated Statements of Operations	87
Consolidated Statements of Comprehensive Income (Loss).....	88
Consolidated Statements of Stockholders' Equity	89
Consolidated Statements of Cash Flows	90
Notes to Consolidated Financial Statements	92

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Roku, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Roku, Inc. and subsidiaries (the "Company") as of December 31, 2021 and 2020, the related consolidated statements of operations, comprehensive income (loss), stockholders' equity, 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.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 18, 2022, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

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

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

Critical Audit Matter

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

Revenue Recognition - Variable Consideration Determination of Content Distribution Services and Branded Channel Buttons – Refer to Note 2 to the financial statements

Critical Audit Matter Description

As part of the Company’s revenue recognition for its arrangements with content publishers, management is required to estimate variable consideration from transactional revenue sharing related to content distribution services and the sale of branded channel buttons on remote controls.

Variable consideration related to content distribution services and sale of branded channel buttons on remote controls (“content publisher arrangements”) is included in the estimated transaction price based on the expected value for which a significant reversal of revenue is not expected to occur. For content distribution services, the estimate of the variable consideration is based on management’s assessment of historical, current, and forecasted performance of the publisher’s content applications. For the sale of branded channel buttons on remote controls, the estimate of the variable consideration is based on management’s assessment of historical, current, and forecasted player sales volumes.

We identified the revenue forecasts relating to content publisher arrangements as a critical audit matter due to the significant judgment necessary to estimate variable consideration and transaction prices. Such estimates required a high degree of auditor judgment and an increased extent of effort relative to evaluating the reasonableness of management’s estimates and assumptions related to the forecasts of variable consideration.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to management’s forecast used in the determination of future variable consideration included the following, among others:

- We tested the effectiveness of controls over management’s forecasting process related to content distribution services and sale of branded channel buttons on remote controls.
- We selected a sample of revenue arrangements with variable consideration and performed the following:
 - Obtained contractual documents for each selection, including master agreements and other related documents.
 - Analyzed the contractual documents to determine if all arrangement terms that may have an impact on revenue recognition were identified and properly considered in the evaluation of the accounting for the contract, including terms and conditions for transactional revenue sharing.
 - Performed inquiries with applicable individuals in the Company’s finance, operations, and sales departments regarding the estimates for content distribution services and sales of branded channel buttons on remote controls.
 - Tested management’s accuracy of forecasting by comparing the historical forecasts of consideration to actual consideration received.
 - Evaluated changes from prior period forecasts to current period forecasts, when applicable.
 - Tested the mathematical accuracy of the compilation of the forecasts.
 - We considered the existence of contradictory evidence based on reading of internal communication to management, Company press releases, industry reports, publicly available information related to publishers’ content applications as well as our observations and inquires as to the changes within the business.

/s/ DELOITTE & TOUCHE LLP

San Jose, California

February 18, 2022

We have served as the Company's auditor since 2008.

ROKU, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except par value)

	As of December 31,	
	2021	2020
Assets		
Current Assets:		
Cash and cash equivalents	\$ 2,146,043	\$ 1,092,815
Accounts receivable, net of allowances of \$56,827 and \$41,236 as of December 31, 2021 and 2020, respectively	752,393	523,852
Inventories	50,276	53,895
Prepaid expenses and other current assets	105,795	27,078
Total current assets	3,054,507	1,697,640
Property and equipment, net	177,567	155,197
Operating lease right-of-use assets	345,660	266,197
Intangible assets, net	84,126	62,181
Goodwill	161,519	73,058
Other non-current assets	258,766	16,269
Total Assets	\$ 4,082,145	\$ 2,270,542
Liabilities and Stockholders' Equity		
Current Liabilities:		
Accounts payable	\$ 124,921	\$ 112,314
Accrued liabilities	549,055	347,668
Current portion of long-term debt	9,883	4,874
Deferred revenue, current portion	45,760	55,465
Total current liabilities	729,619	520,321
Long-term debt, non-current portion	79,985	89,868
Deferred revenue, non-current portion	28,726	21,283
Operating lease liability, non-current portion	394,724	307,936
Other long-term liabilities	82,485	3,119
Total Liabilities	1,315,539	942,527
Commitments and contingencies (Note 12)		
Stockholders' Equity:		
Common stock, \$0.0001 par value;	14	13
1,150,000 (Class A - 1,000,000 and Class B - 150,000) shares authorized as of December 31, 2021 and 2020;		
135,137 (Class A - 118,767 and Class B - 16,370) shares and 128,004 (Class A - 110,645 and Class B - 17,359) shares issued and outstanding as of December 31, 2021 and 2020, respectively		
Additional paid-in capital	2,856,572	1,660,379
Accumulated other comprehensive income	41	29
Accumulated deficit	(90,021)	(332,406)
Total stockholders' equity	2,766,606	1,328,015
Total Liabilities and Stockholders' Equity	\$ 4,082,145	\$ 2,270,542

See accompanying Notes to Consolidated Financial Statements.

ROKU, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)

	Years Ended December 31,		
	2021	2020	2019
Net Revenue:			
Platform	\$ 2,284,925	\$ 1,267,744	\$ 740,776
Player	479,659	510,644	388,145
Total net revenue	<u>2,764,584</u>	<u>1,778,388</u>	<u>1,128,921</u>
Cost of Revenue:			
Platform	823,924	503,177	262,655
Player	532,060	466,992	371,042
Total cost of revenue	<u>1,355,984</u>	<u>970,169</u>	<u>633,697</u>
Gross Profit (Loss):			
Platform	1,461,001	764,567	478,121
Player	(52,401)	43,652	17,103
Total gross profit	<u>1,408,600</u>	<u>808,219</u>	<u>495,224</u>
Operating Expenses:			
Research and development	461,602	355,784	265,011
Sales and marketing	455,601	299,457	178,855
General and administrative	256,297	173,231	116,417
Total operating expenses	<u>1,173,500</u>	<u>828,472</u>	<u>560,283</u>
Income (Loss) from Operations	<u>235,100</u>	<u>(20,253)</u>	<u>(65,059)</u>
Other Income (Expense), Net:			
Interest expense	(2,980)	(3,432)	(2,366)
Other income (expense), net	4,467	5,233	6,506
Total other income (expense), net	<u>1,487</u>	<u>1,801</u>	<u>4,140</u>
Income (Loss) Before Income Taxes	236,587	(18,452)	(60,919)
Income tax benefit	(5,798)	(945)	(982)
Net Income (Loss)	<u>\$ 242,385</u>	<u>\$ (17,507)</u>	<u>\$ (59,937)</u>
Net income (loss) per share — basic	<u>\$ 1.83</u>	<u>\$ (0.14)</u>	<u>\$ (0.52)</u>
Net income (loss) per share — diluted	<u>\$ 1.71</u>	<u>\$ (0.14)</u>	<u>\$ (0.52)</u>
Weighted-average common shares outstanding — basic	<u>132,710</u>	<u>123,978</u>	<u>115,218</u>
Weighted-average common shares outstanding — diluted	<u>141,668</u>	<u>123,978</u>	<u>115,218</u>

See accompanying Notes to Consolidated Financial Statements.

ROKU, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(in thousands)

	Years Ended December 31,		
	2021	2020	2019
Net Income (Loss)	\$ 242,385	\$ (17,507)	\$ (59,937)
Other comprehensive gain, net of tax:			
Unrealized gain on short-term investments, net of tax	—	—	17
Foreign currency translation adjustment	12	—	29
Other comprehensive gain, net of tax	12	—	46
Comprehensive Net Income (Loss)	\$ 242,397	\$ (17,507)	\$ (59,891)

See accompanying Notes to Consolidated Financial Statements

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

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Accumulate d Deficit	Total Stockholders' Equity
	Shares	Amount				
Balance-December 31, 2018	109,770	\$ 11	\$ 498,553	\$ (17)	\$ (253,896)	\$ 244,651
Vesting of early exercised stock options	—	—	86	—	—	86
Share repurchases	(2)	—	—	—	—	—
Issuance of common stock pursuant to equity incentive plans	6,169	1	28,181	—	—	28,182
Issuance of common stock in connection with at-the-market offerings, net of issuance costs of \$6,400	3,389	—	330,539	—	—	330,539
Issuance of common stock in connection with acquisition	571	—	69,684	—	—	69,684
Stock-based compensation expense	—	—	85,175	—	—	85,175
Unrealized gain on short-term investments	—	—	—	17	—	17
Foreign currency translation adjustment	—	—	—	29	—	29
Net loss	—	—	—	—	(59,937)	(59,937)
Balance-December 31, 2019	119,897	12	1,012,218	29	(313,833)	698,426
Vesting of early exercised stock options	—	—	38	—	—	38
Issuance of common stock pursuant to equity incentive plans	4,107	1	16,805	—	—	16,806
Issuance of common stock in connection with at-the-market offering, net of issuance costs of \$6,800	4,000	—	497,242	—	—	497,242
Stock-based compensation expense	—	—	134,076	—	—	134,076
Adoption of ASU 2016-13	—	—	—	—	(1,066)	(1,066)
Net loss	—	—	—	—	(17,507)	(17,507)
Balance-December 31, 2020	128,004	13	1,660,379	29	(332,406)	1,328,015
Vesting of early exercised stock options	—	—	4	—	—	4
Issuance of common stock pursuant to equity incentive plans	4,496	1	18,531	—	—	18,532
Issuance of common stock in connection with at-the-market offering, net of issuance costs of \$10,400	2,637	—	989,615	—	—	989,615
Stock-based compensation expense	—	—	188,043	—	—	188,043
Foreign currency translation adjustment	—	—	—	12	—	12
Net income	—	—	—	—	242,385	242,385
Balance-December 31, 2021	135,137	\$ 14	\$ 2,856,572	\$ 41	\$ (90,021)	\$ 2,766,606

See accompanying Notes to Consolidated Financial Statements.

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

	Years Ended December 31,		
	2021	2020	2019
Cash flows from operating activities:			
Net income (loss)	\$ 242,385	\$ (17,507)	\$ (59,937)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation and amortization	42,621	36,206	15,669
Stock-based compensation expense	187,532	134,076	85,175
Amortization of right-of-use assets	31,024	28,743	22,328
Amortization of content assets	95,570	22,392	2,914
Provision for (recoveries of) doubtful accounts	(904)	3,801	704
Other items, net	(101)	524	1,101
Changes in operating assets and liabilities:			
Accounts receivable	(221,768)	(196,046)	(110,225)
Inventories	3,619	(4,181)	(14,129)
Prepaid expenses and other current assets	(67,240)	(3,450)	(9,934)
Deferred cost of revenue	—	—	1,143
Other non-current assets	(102,957)	(1,128)	(3,060)
Accounts payable	8,428	6,410	9,409
Accrued liabilities	38,279	103,218	74,512
Operating lease liabilities	(20,083)	12,999	11,658
Other long-term liabilities	(1,100)	618	(3,024)
Deferred revenue	(7,224)	21,517	(10,597)
Net cash provided by operating activities	<u>228,081</u>	<u>148,192</u>	<u>13,707</u>
Cash flows from investing activities:			
Purchase of property and equipment	(40,041)	(82,382)	(77,180)
Purchase of business, net of cash acquired	(136,778)	—	(68,132)
Proceeds from escrows associated with acquisition	—	1,058	—
Purchase of intangible assets	—	—	(7,428)
Purchases of short-term investments	—	—	(12,365)
Sales/maturities of short-term investments	—	—	54,810
Net cash used in investing activities	<u>(176,819)</u>	<u>(81,324)</u>	<u>(110,295)</u>
Cash flows from financing activities:			
Proceeds from borrowings, net of issuance costs	—	69,325	99,608
Repayments of borrowings	(5,000)	(74,325)	—
Proceeds from equity issued under incentive plans	18,532	16,806	28,181
Proceeds from equity issued under at-the-market offerings, net of offering costs	989,615	497,242	330,539
Net cash provided by financing activities	<u>1,003,147</u>	<u>509,048</u>	<u>458,328</u>
Net increase in cash, cash equivalents and restricted cash	1,054,409	575,916	361,740
Effect of exchange rate changes on cash, cash equivalents and restricted cash	12	—	29
Cash, cash equivalents and restricted cash —Beginning of period	1,093,249	517,333	155,564
Cash, cash equivalents and restricted cash —End of period	<u>\$ 2,147,670</u>	<u>\$ 1,093,249</u>	<u>\$ 517,333</u>
Cash, cash equivalents and restricted cash at end of period:			
Cash and cash equivalents	2,146,043	1,092,815	515,479
Restricted cash, current	—	434	1,854
Restricted cash, non-current	1,627	—	—
Cash, cash equivalents and restricted cash —End of period	<u>\$ 2,147,670</u>	<u>\$ 1,093,249</u>	<u>\$ 517,333</u>

Years Ended December 31,

	2021	2020	2019
Supplemental disclosures of cash flow information:			
Cash paid for interest	\$ 2,578	\$ 3,470	\$ 3,095
Cash paid for income taxes	\$ 1,363	\$ 1,014	\$ 759
Supplemental disclosures of non-cash investing and financing activities:			
Non-cash consideration for business combination	\$ 21,400	\$ —	\$ —
Services to be received as part of a business combination	\$ 6,500	\$ —	\$ —
Issuance of common stock for business combinations	\$ —	\$ —	\$ 69,684
Unpaid portion of property and equipment purchases	\$ 3,073	\$ 1,242	\$ 10,762
Unpaid portion of acquisition related expenses	\$ —	\$ —	\$ 2,190
Unpaid portion of purchased intangibles	\$ —	\$ —	\$ 400
Unpaid portion of at-the-market offering costs	\$ —	\$ —	\$ 144

See accompanying Notes to Consolidated Financial Statements.

ROKU, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. THE COMPANY

Organization and Description of Business

Roku, Inc. (the “Company” or “Roku”), was formed in October 2002 as Roku LLC under the laws of the State of Delaware. On February 1, 2008, Roku LLC was converted into Roku, Inc., a Delaware corporation. The Company operates in two reportable segments and generates platform revenue from the sale of digital advertising and related services including the OneView ad platform, content distribution services (such as subscription and transaction revenue shares, media and entertainment promotional spending, the sale of Premium Subscriptions, and the sale of branded channel buttons on remote controls), and licensing arrangements with service operators and TV brands and player revenue from the sale of streaming players and audio products.

2. SIGNIFICANT ACCOUNTING POLICIES AND BASIS OF PRESENTATION

Basis of Presentation and Principles of Consolidation

The consolidated financial statements, which include the accounts of Roku, Inc. and its wholly-owned subsidiaries, have been prepared in conformity with accounting principles generally accepted in the United States (“U.S. GAAP”). All intercompany accounts and transactions have been eliminated in consolidation.

Reclassification of Prior Year Presentation

Certain prior period amounts in the consolidated balance sheets and notes to consolidated financial statements have been reclassified to conform to current period presentation.

Use of Estimates

The preparation of the Company’s consolidated financial statements in accordance with U.S. GAAP requires management to make certain estimates, judgments, and assumptions that affect the reported amounts of assets, liabilities, net revenue, and expenses. Significant items subject to such estimates and assumptions include:

- revenue recognition: determining the nature and timing of satisfaction of performance obligations, variable consideration, determining the stand-alone selling prices of performance obligations, gross versus net revenue recognition, and evaluation of customer versus vendor relationships;
- the impairment of intangible assets;
- valuation of assets acquired and liabilities assumed in connection with business combinations;
- useful lives of tangible and intangible assets;
- allowances for sales returns and sales incentives; and
- the valuation of deferred income tax assets.

The Company bases its estimates on historical experience and on various other assumptions that the Company believes to be reasonable under the circumstances. Actual results may differ from the Company’s estimates and assumptions.

Comprehensive Income (Loss)

Comprehensive income for the year ended December 31, 2021 includes foreign currency translation adjustments. Comprehensive loss is equal to the net loss for the year ended December 31, 2020. Comprehensive

loss for the year ended December 31, 2019 includes unrealized gains on the Company's short-term investments and foreign currency translation adjustments. Income taxes on the unrealized gains are not material.

Foreign Currency

The Company uses the U.S. dollar as the functional currency for most of its foreign subsidiaries. Monetary assets and liabilities of these subsidiaries are remeasured into U.S. dollars from the local currency at rates in effect at period-end and non-monetary assets and liabilities are remeasured at historical rates. Revenue and expenses are remeasured at average exchange rates in effect during each period. Foreign currency gains or losses from re-measurement and transaction gains or losses are recorded as Other income (expense), net in the consolidated statements of operations. The Company recorded a foreign currency loss of \$1.2 million, gain of \$1.3 million, and loss of \$0.2 million during the years ended December 31, 2021, 2020, and 2019, respectively.

For those foreign subsidiaries where the local currency is designated as the functional currency, the Company records translation of their assets and liabilities into U.S. dollars at the balance sheet dates as translation adjustments and includes them as a component of Accumulated other comprehensive income (loss).

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with an original maturity of three months or less at the date of purchase to be cash equivalents. Two financial institutions managed 30% and 27% of cash and cash equivalents as of December 31, 2021 and 46% and 26% as of December 31, 2020.

Accounts Receivable, net

Accounts receivable are typically unsecured and are derived from revenue earned from customers. They are stated at invoice value less estimated allowances for sales returns, sales incentives, doubtful accounts, and other miscellaneous allowances. The Company performs ongoing credit evaluations of its customers to determine allowances for potential credit losses and doubtful accounts. The Company considers historical experience, ongoing promotional activities, historical claim rates, and other factors to determine the allowances for sales returns and sales incentives.

Allowance for Sales Returns: Allowance for sales returns consist of the following activities (in thousands):

	<u>Years Ended December 31,</u>		
	<u>2021</u>	<u>2020</u>	<u>2019</u>
Beginning balance	\$ 5,912	\$ 6,550	\$ 7,335
Add: Charged to revenue	16,181	14,594	15,541
Less: Utilization of sales return reserve	(16,078)	(15,232)	(16,326)
Ending balance	<u>\$ 6,015</u>	<u>\$ 5,912</u>	<u>\$ 6,550</u>

Allowance for Sales Incentives: Allowance for sales incentives consisted of the following activities (in thousands):

	Years Ended December 31,		
	2021	2020	2019
Beginning balance	\$ 30,838	\$ 19,476	\$ 13,750
Add: Charged to revenue	90,530	68,315	65,676
Less: Utilization of sales incentive reserve	(72,957)	(56,953)	(59,950)
Ending balance	<u>\$ 48,411</u>	<u>\$ 30,838</u>	<u>\$ 19,476</u>

Allowance for Doubtful Accounts: Allowance for doubtful accounts consisted of the following activities (in thousands):

	Years Ended December 31,		
	2021	2020	2019
Beginning balance	\$ 4,181	\$ 1,140	\$ 686
Impact of adoption of ASU 2016-13	—	1,066	—
Adjusted beginning balance	\$ 4,181	\$ 2,206	\$ 686
Provision for (recoveries of) doubtful accounts	(904)	3,801	704
Adjustments for recovery and write-off	(1,119)	(1,826)	(250)
Ending balance	<u>\$ 2,158</u>	<u>\$ 4,181</u>	<u>\$ 1,140</u>

The Company did not have any customer that accounted for more than 10% of its accounts receivable, net balance as of December 31, 2021. Customer H accounted for 11% of the accounts receivable, net balance as of December 31, 2020.

Business Combinations

The Company determines whether a transaction meets the definition of a business combination before applying the acquisition method of accounting to that transaction. The Company allocates the fair value of the purchase consideration of its acquisitions to the tangible and intangible assets acquired and liabilities assumed, based on their estimated fair values. The excess of the fair value of purchase consideration over the fair values of identifiable assets and liabilities is recorded as goodwill. The operating results of acquired businesses are included in the Company's consolidated statements of operations from their effective acquisition date. Acquisition-related expenses and certain acquisition restructuring and other related charges are recognized separately from the business combination and are expensed as incurred. Contingent consideration classified as a liability is recognized at fair value as of the acquisition date with subsequent fair value adjustments recorded in the consolidated statements of operations.

While the Company uses its best estimates and assumptions to accurately value assets acquired and liabilities assumed at the acquisition date, estimates are inherently uncertain and subject to refinement. As a result, during the measurement period, which may be up to one year from the acquisition date, the Company may record adjustments to consideration transferred, and the assets acquired and liabilities assumed with the corresponding offset to goodwill. In addition, uncertain tax positions and tax-related valuation allowances are initially recorded in connection with a business combination as of the acquisition date. The Company continues to collect

information and reevaluates these estimates and assumptions and records any adjustments to the Company's preliminary estimates with a corresponding offset to goodwill during the measurement period. Upon the conclusion of the measurement period or final determination of the values of consideration transferred, and assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded to the consolidated statements of operations.

Intangible Assets

Intangible assets acquired through business combinations are recorded at their fair values as of the acquisition date. Intangible assets are amortized using the straight-line method over their estimated useful lives. The Company evaluates the estimated remaining useful lives of its intangible assets annually and when events or changes in circumstances warrant a revision to the remaining periods of amortization.

Impairment Assessments

The Company evaluates goodwill for possible impairment at least annually during the fourth quarter of each fiscal year or more often, if and when circumstances indicate that goodwill may be impaired. This includes but is not limited to significant adverse changes in the business climate, market conditions, or other events that indicate that it is more likely than not that the fair value of a reporting unit is less than its carrying value. In performing its annual assessment, the Company can opt to perform a qualitative assessment to test a reporting unit's goodwill for impairment or it can directly perform a quantitative assessment. Based on the Company's qualitative assessment, if it is determined that the fair value of the reporting unit is, more likely than not, less than its carrying amount, then the quantitative assessment is performed. Any excess of the reporting unit's carrying amount over its fair value is recorded as an impairment loss, limited to the total amount of goodwill allocated to the reporting unit.

The Company reviews long-lived assets and intangible assets with finite lives for impairment when events or changes in business circumstances indicate that the carrying amount of the asset or asset group may not be fully recoverable or that the useful lives of the asset or asset group are no longer appropriate. The Company assesses these asset or asset groups for impairment based on their estimated undiscounted future cash flows. If the carrying value of the asset or asset group exceeds the estimated future undiscounted cash flows, the Company recognizes an impairment loss based on the excess of the carrying amount over the fair value of the asset group.

The Company did not recognize any impairment for goodwill or intangible assets in any periods reported. The impairments of operating right-of-use assets during the years ended December 31, 2021, 2020, and 2019 were not material.

Content Assets

The Company records content assets as Other non-current assets. The amortization expense for licensed content is recorded based on the pattern of monetization of such content which is primarily straight-line. The amortization of produced content is recorded over the applicable content life cycle based upon the ratio of current period revenue to the estimated total revenue to be earned.

Licensed and produced content assets are primarily monetized together as a unit, referred to as a film group. The film group is evaluated for impairment whenever an event occurs, or circumstances change, indicating the fair value is less than the carrying value. The Company reviews various qualitative factors and indicators to assess whether the film group is impaired. The Company did not recognize any impairment of content assets in any periods reported.

Revenue Recognition

Revenue is recognized upon transfer of control of promised goods or services to customers in an amount that reflects the consideration the Company expects to receive in exchange for those goods or services. The Company's contracts include various product or services or a combination of both, which are generally capable of being distinct and are accounted for as separate performance obligations. The Company's contracts often contain multiple distinct performance obligations.

The Company estimates the transaction price of a contract based on the expected value for which a significant reversal of revenue is not expected to occur. The estimate of the variable consideration is based on the assessment of historical, current, and forecasted performance noted and expected from the performance obligation.

In arrangements with multiple performance obligations, the estimated transaction price of each contract is allocated to each distinct performance obligation based on relative stand-alone selling price ("SSP"). For performance obligations routinely sold separately, the SSP is determined by evaluating such stand-alone sales. For those performance obligations that are not routinely sold separately, the Company determines SSP based on market conditions and other observable inputs.

When the Company sells third-party goods and services, it evaluates whether the Company is the principal, and reports revenue on a gross basis, or an agent, and reports revenue on a net basis. In this assessment, the Company considers if it obtains control of the specified goods or services before they are transferred to the customer, as well as other indicators such as the party primarily responsible for fulfillment, inventory risk, and discretion in establishing price.

Revenue is recorded net of taxes collected from customers which are subsequently remitted to the relevant government authority. The Company does not capitalize any cost associated with contract acquisition because it applies a practical expedient and expenses commissions when incurred as most direct contract acquisition costs relate to contracts that are recognized over a period of one year or less. Sales commissions are included in Sales and marketing expenses in the consolidated statements of operations. The as-invoiced practical expedient is applied when the amount of consideration the Company has a right to invoice corresponds directly with the value to the customer of the entity's performance completed to date.

Nature of Products and Services

Platform segment:

The Company generates platform revenue from the sale of digital advertising and related services including the OneView ad platform, content distribution services (such as subscription and transaction revenue shares, media and entertainment promotional spending, the sale of Premium Subscriptions, and sale of branded channel buttons on remote controls), and licensing arrangements with service operators and TV brands.

The Company sells digital advertising to advertisers directly or through advertising agencies and to content publishers for their media and entertainment promotions via various campaign tools. Advertising arrangements include video and display advertising delivered through advertising impressions. Advertising arrangements include multiple performance obligations as they contain distinct advertising products or services. For such arrangements, the Company allocates revenue to each distinct performance obligation based on their relative SSP. The Company also generates revenue from customers using its ad platform. For such arrangements, it charges a platform fee, which is a percentage of a customer's advertising inventory spend during the month, along with data and any add-on features purchased through the platform. The Company recognizes revenue on either a gross or net basis for digital advertising based on its determination as to whether it is acting as the principal in the revenue

generation process or as an agent. Where the Company is the principal, it controls the advertising inventory before it is transferred to its customers. This is further supported by the Company being primarily responsible to its customers for the fulfillment and having a level of discretion in establishing pricing. Advertising arrangements comprised of multiple performance obligations are recognized either at a point in time or over time depending on the nature of the distinct performance obligation.

The Company's content distribution revenue sharing arrangements include cash or non-cash consideration. The revenue sharing arrangements generally apply to new subscriptions for accounts that sign up for new services and at the time of a movie rental or purchase. Revenue is recognized on a net basis as the Company is deemed to be the agent between content publishers and end users. Revenue is recognized on a time elapsed basis, by day, as the services are delivered over the contractual distribution term. Non-cash consideration is usually in the form of advertising inventory, the fair value of which is determined based on relevant internal and third-party data.

The Company sells monthly subscriptions for premium content on The Roku Channel for varying fees for different content. Revenue from such Premium Subscription fees is recognized on a gross basis over the service period as the Company is deemed to be the principal in the relationship with the end user. The Company obtains control of the content before transferring to the end user and has latitude in establishing pricing. The Company pays fixed fees per subscriber or fixed percentage of revenue share to the providers of premium content on The Roku Channel based on the contractual arrangement and recognizes that in Cost of revenue, platform.

The Company sells branded channel buttons on remote controls of streaming devices that provide one-touch access to a publisher's content. The Company typically receives a fixed fee per button for each unit sold over a defined distribution period. Revenue is recognized on a time elapsed basis, by day, over the distribution term.

The Company licenses the Roku OS, including updates and upgrades, to TV brands and service operators. The licensing revenue is recognized at a point in time, when the Company makes the intellectual property available and the control transfers to the customer. The revenue allocated to unspecified upgrades and updates is recognized on a time elapsed basis, by day, over the service period. Professional services revenue is recognized as services are provided or accepted. Hosting fees are recognized on a time elapsed basis, by day, over the service period.

Player segment:

The Company sells the majority of its streaming players and audio products to retail distribution channels in the U.S. including brick and mortar and online retailers, as well as through the Company's website. Player revenue primarily consists of hardware, embedded software, and unspecified upgrades and updates on a when and if-available basis. The hardware and embedded software are considered as one performance obligation and revenue is recognized at a point in time when the control transfers to the customer. Unspecified upgrades and updates are available to customers on a when-and-if available basis. The Company records the allocated value of the unspecified upgrades and updates as deferred revenue and recognizes it as player revenue ratably on a time elapsed basis over the estimated economic life of the associated players products.

The Company's player revenue includes allowances for sales returns and sales incentives in the estimated transaction price. These estimates are based on historical experience and anticipated performance. Shipping charges billed to customers are included in Player revenue and the related shipping costs are included in Cost of revenue, player.

Leases

The Company determines if an arrangement contains a lease at its inception. Operating leases are included in operating lease right-of-use (“ROU”) assets, accrued liabilities, and operating lease liability in our consolidated balance sheets. ROU assets represent the Company’s right to use an underlying asset for the lease term and lease liabilities represent its obligation to make lease payments arising from the lease. ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As the rate implicit in the lease is not readily determinable, the Company uses its incremental borrowing rate based on the information available at the commencement date in determining the present value of future lease payments. The Company takes into consideration its credit rating and the length of the lease when calculating the incremental borrowing rate. The Company considers the options to extend or terminate the lease in determining the lease term, when it is reasonably certain to exercise one of the options. The Company combines lease and non-lease components into a single lease component for its real estate and equipment leases.

Fair Value of Financial Instruments

The Company defines fair value as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The Company applies fair value accounting for all assets and liabilities that are recognized or disclosed at fair value in the consolidated financial statements. The carrying amounts reported in the consolidated financial statements for cash and cash equivalents, accounts receivable, accounts payable, and accrued liabilities approximate their fair values due to their short-term nature. The carrying amount of debt approximates fair value due to its variable interest rates.

Inventories

The Company’s inventories consist primarily of finished goods and are stated at the lower of cost or net realizable value with cost determined on a first-in, first-out basis. Provisions are made if the cost of the inventories exceeds their net realizable value. The Company evaluates inventory levels and purchase commitments for excess and obsolete products, based on management’s assessment of future demand and market conditions.

Property and Equipment

Property and equipment are recorded at cost and depreciated using the straight-line method over their estimated useful lives of the assets, generally ranging between eighteen months and five years. Leasehold improvements are amortized over the shorter of the lease term or their estimated useful lives, which range from five to ten years.

The Company capitalizes costs to develop its internal-use software. Costs that relate to the planning and post-implementation phases of development are expensed as incurred. Costs are capitalized when preliminary efforts are successfully completed, management has authorized and committed to funding the project, and it is probable that the project will be completed and will be used as intended. Costs incurred for enhancements that are expected to result in additional material functionality are capitalized. During the years ended December 31, 2021, 2020, and 2019, the Company capitalized internal-use software development costs of \$0.5 million, \$2.2 million, and \$0.1 million, respectively. Capitalized costs are amortized using the straight-line method over the estimated useful life of the asset, which is generally two to three years, beginning when the asset is ready for its intended use. During the years ended December 31, 2021, 2020, and 2019, the Company amortized expenses of \$1.0 million, \$0.5 million, and \$1.6 million, respectively.

Deferred Revenue

The Company's deferred revenue reflects fees received in advance that will be recognized as revenue over time or as services are rendered. Deferred revenue balances consist of the amount of player revenue allocated to unspecified upgrades and updates on a when-and-if available basis, licensing and services fees received from service operators and TV brands, and advance payments from advertisers and content publishers where performance obligations are not yet fulfilled. Deferred revenue expected to be realized within one year is classified as a current liability and the remaining is recorded as a non-current liability.

Advertising Costs

Advertising costs are expensed when incurred and are included in Sales and marketing expense in the consolidated statements of operations. The Company incurred advertising costs of \$35.2 million, \$7.1 million, and \$7.3 million for the years December 31, 2021, 2020, and 2019, respectively.

Stock-Based Compensation

The Company measures compensation expense for all stock-based awards, including restricted stock units and stock options granted to employees, based on the estimated fair value of the award on the date of grant. For restricted stock units, the grant date fair value is based on the closing market price of the Company's Class A common stock on the date of grant. The fair value of each stock option is estimated using the Black-Scholes option pricing model. The Company accounts for forfeitures as they occur. Stock-based compensation is recognized on a straight-line basis over the requisite vesting period.

The Black-Scholes option pricing model used to fair value stock options include the following assumptions:

- *Fair Value of Our Common Stock.* The Company uses the closing market price of its Class A common stock as reported on The Nasdaq Global Select Market on the date of grant.
- *Expected Term.* The expected term of employee stock options represents the weighted-average period that the stock options are expected to remain outstanding. The Company uses the simplified calculation of the expected term, which reflects weighted-average time to vest and the contractual life of the stock options granted, in absence of its own historical exercise data.
- *Volatility.* The expected volatility is derived from an average of the historical volatilities of several peer companies which are similar in size and operational and economic activities.
- *Risk-free Rate.* The risk-free interest rate is based on the yields of U.S. Treasury securities with maturities similar to the expected term for each of our stock options.
- *Dividend Yield.* The expected dividend is assumed to be zero as the Company has never paid dividends and has no current plans to pay any dividends on its common stock.

Income Taxes

The Company accounts for income taxes using an asset and liability approach. Deferred tax assets and liabilities are determined based on the difference between the consolidated financial statement and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts that are more likely than not to be realized.

Recently Adopted Accounting Standards

On January 1, 2021, the Company adopted the guidance issued in Accounting Standards Update (“ASU”) 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*. The ASU simplifies the accounting for income taxes by removing certain exceptions to the general principles and also simplifies areas such as franchise taxes, step-up in tax basis of goodwill, separate entity financial statements, and interim recognition of enactment of tax laws or rate changes. The adoption did not have a material impact on the Company’s consolidated financial statements.

In March 2020, the Financial Accounting Standards Board (“FASB”) issued ASU 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting*. This guidance provides optional expedients and exceptions for applying U.S. GAAP to contract modifications, hedging relationships, and other transactions that reference the London Interbank Offered Rate (“LIBOR”) that is expected to be discontinued, subject to meeting certain criteria. The guidance is effective as of March 12, 2020 through December 31, 2022. The Company made a policy election in the second quarter of 2020 to elect a different reference rate for the Credit Agreement (as defined below) when LIBOR is discontinued.

On January 1, 2020, the Company adopted the guidance in ASU 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, using the modified retrospective adoption method and recorded a cumulative-effect adjustment to the beginning balance of accumulated deficit of approximately \$1.1 million. The measurement of credit losses for newly recognized financial assets and subsequent changes in the allowance for credit losses are recorded in the statements of operations. This impact mainly relates to credit losses recognized on the Company’s doubtful accounts. As the Company did not have any available-for-sale debt securities as of the adoption date, there was no additional impact to accumulated deficit.

On January 1, 2020, the Company adopted the guidance in ASU 2019-02, *Entertainment—Films—Other Assets—Film Costs (Subtopic 926-20) and Entertainment—Broadcasters—Intangibles—Goodwill and Other (Subtopic 920-350): Improvements to Accounting for Costs of Films and License Agreements for Program Materials*, in order to align the accounting for production costs of an episodic television series with the accounting for production costs of films by removing the content distinction for capitalization. ASU 2019-02 required that an entity reassess estimates of the use of a film in a film group and account for any changes prospectively. In addition, ASU 2019-02 required that an entity test films and license agreements for program material for impairment at a film group level when the film or license agreements are predominantly monetized with other films and license agreements. There was no material impact to the Company’s consolidated financial statements.

Recent Accounting Standards Not Yet Adopted

In October 2021, the FASB issued ASU 2021-08, *Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers*, to require companies to apply Accounting Standards Codification, Revenue from Contracts with Customers (Topic 606) to recognize and measure contract assets and contract liabilities from contracts with customers acquired in a business combination. The guidance is effective for fiscal years beginning after December 15, 2022, including interim reporting periods within those fiscal years, with early adoption permitted. The Company expects to adopt ASU 2021-08 in the first quarter of fiscal 2022. The Company believes that the adoption of this guidance will not have a material impact on the financial statements.

3. REVENUE

The Company's disaggregated revenue is represented by the two reportable segments discussed in Note 17.

The contract balances include the following (in thousands):

	As of December 31,		
	2021	2020	2019
Accounts receivable, net	\$ 752,393	\$ 523,852	\$ 332,673
Contract assets (included in Prepaid expenses and other current assets)	46,952	7,431	3,588
Deferred revenue, current portion	45,760	55,465	39,861
Deferred revenue, non-current portion	28,726	21,283	15,370
Total deferred revenue	\$ 74,486	\$ 76,748	\$ 55,231

Accounts receivable are recorded at the amount invoiced, net of an allowance for sales returns, sales incentives, and doubtful accounts. Payment terms can vary by customer and contract.

The timing of revenue recognition may differ from the timing of invoicing to customers. Contract assets are created when invoicing occurs subsequent to revenue recognition. Contract assets are transferred to accounts receivable when the right to invoice becomes unconditional. The Company's contract assets are current in nature and are included in Prepaid expenses and other current assets. Contract assets increased by \$39.5 million during the year ended December 31, 2021 and by \$3.8 million during the year ended December 31, 2020 primarily due to an increase in the growth of platform revenue combined with the timing of billing which falls into a subsequent period.

Deferred revenue reflects consideration invoiced prior to the completion of performance obligations and revenue recognition. Deferred revenue decreased by approximately \$2.3 million during the year ended December 31, 2021 primarily due to the timing of fulfillment of performance obligations related to content arrangements offset by an increase in deferred revenue from advertising arrangements due to growth in the platform business and an increase in the deferral period of player revenue for its unspecified upgrades. Deferred revenue increased by approximately \$21.5 million during the year ended December 31, 2020 due to the increase in estimated values of content publisher and licensing partner arrangements and change in the timing of fulfillment of performance obligations of approximately \$12.4 million, and higher growth in the player segment, resulting in a net increase in deferred revenue related to unspecified upgrades and updates of approximately \$8.4 million.

Revenue recognized during the year ended December 31, 2021 from amounts included in the total deferred revenue as of December 31, 2020 was \$56.2 million. Revenue recognized during the year ended December 31, 2020 from amounts included in the total deferred revenue as of December 31, 2019 was \$42.9 million.

Revenue allocated to remaining performance obligations represents estimated contracted revenue that has not yet been recognized which includes unearned revenue and amounts that will be invoiced and recognized as revenue in future periods. Estimated contracted revenue was \$1,148.3 million as of December 31, 2021 of which the Company expects to recognize approximately 43% over the next 12 months and the remainder thereafter.

The Company recognized \$28.6 million and \$14.4 million during the years ended December 31, 2021 and 2020, respectively, from performance obligations that were satisfied in previous periods due to the changes in the estimated transaction price of its revenue contracts.

The Company did not have any customer that accounted for more than 10% of its total net revenue as of December 31, 2021. Customer C accounted for 12% and 14% of the total net revenue during the years ended December 31, 2020 and 2019, respectively.

4. BUSINESS COMBINATIONS

Nielsen's Advanced Video Advertising Business

On February 28, 2021, the Company entered into an Asset and Stock Purchase Agreement (the "ASPA") to purchase the Advanced Video Advertising ("AVA") business from Nielsen Holdings PLC ("Nielsen"). The AVA business consists primarily of video automatic content recognition and dynamic ad insertion technologies. On April 15, 2021, the Company closed the transaction, acquiring from Nielsen the AVA business, consisting of certain assets and liabilities and all of the equity interests in a subsidiary associated with the AVA business (the "Acquisition"). In conjunction with the Acquisition, the Company and Nielsen entered into a strategic commercial arrangement under which the parties will provide certain advertising measurement solutions to each other. The Company acquired Nielsen's AVA business to accelerate its launch of an end-to-end linear ad replacement solution and to further integrate Nielsen's ad and content measurement products into the Company's ad platform.

The total purchase consideration for Nielsen's AVA business was \$53.4 million, which consisted of (i) \$38.5 million paid in cash and (ii) \$21.4 million of non-cash consideration related to obligations to deliver services to Nielsen, offset by (iii) \$6.5 million of services to be received from Nielsen. The obligations to deliver services to Nielsen were recorded at fair value using the incremental cash flow method. The services to be delivered to Nielsen are recognized within Other income (expense), net in the consolidated statements of operations over the six year service period. The services to be received from Nielsen represent contract terms that the Company entered into for future goods and services that were recorded at fair value using the incremental cash flow method. These services are recognized as Cost of revenue, platform in the consolidated statements of operations over the six year service period.

In addition, there are earn-out conditions in the ASPA which may trigger an additional payment to Nielsen. As of December 31, 2021, no contingent consideration conditions have been triggered. The Company incurred \$3.9 million in acquisition-related expenses and has recorded them in General and administrative expenses in the consolidated statements of operations.

During the fourth quarter of 2021, the Company obtained additional information regarding facts and circumstances in existence as of the acquisition date. As a result, the Company recorded a measurement period adjustment in the fourth quarter of 2021 consisting of a \$6.0 million increase to purchase consideration, \$4.2 million decrease to intangible assets acquired, \$4.5 million increase to other long-term liabilities, and \$14.7 million increase to goodwill.

The allocation of the purchase consideration to tangible and intangible assets acquired and liabilities assumed, reflecting measurement period adjustments through December 31, 2021, is based on estimated fair values and is as follows (in thousands):

	<u>Fair Values</u>
Assets acquired	
Cash and cash equivalents	\$ 3,057
Prepaid expenses and other current assets	85
Property and equipment, net	584
Intangible assets:	
Developed technology	11,000
IPR&D technology	7,500
Goodwill	36,790
Operating lease right-of-use assets	1,235
Other non-current assets	1,905
Total assets acquired	<u>62,156</u>
Liabilities assumed	
Accounts payable and accrued liabilities	(1,168)
Operating lease liabilities, non-current portion	(830)
Other long-term liabilities	(6,767)
Total liabilities assumed	<u>(8,765)</u>
Total purchase consideration	<u><u>\$ 53,391</u></u>

The excess of the total consideration over the tangible assets, intangible assets, and liabilities assumed is recorded as goodwill. Goodwill is primarily attributable to expected synergies in advertising offerings and cross-selling opportunities. The majority of the goodwill recorded is deductible for tax purposes.

The fair value of the developed technology has been estimated using the relief-from-royalty method. The key valuation assumptions include the Company's estimates of expected future earnings and royalty rate. The Company amortizes the fair value of the developed technology on a straight-line basis over its useful life. The fair value of the in-process research and development ("IPR&D") technology has been estimated using the multi-period-excess-earnings method. The key valuation assumptions include the Company's estimates of expected future revenue and margin. Once the project reaches technological feasibility, the Company will amortize the fair value of the IPR&D technology on a straight-line basis over its useful life.

The valuation of the intangible assets acquired from Nielsen's AVA business along with their estimated useful lives, is as follows (in thousands, except years):

	<u>Estimated Fair Value</u>	<u>Estimated Weighted-Average Useful Lives (in years)</u>
Developed technology	\$ 11,000	5.9
IPR&D technology	7,500	
Estimated fair value of acquired intangible assets	<u>\$ 18,500</u>	5.9

The operations of Nielsen’s AVA business are included in the Company’s operating results beginning on the date of acquisition. The revenue, cost of revenue, and gross profit recorded by the Company in its consolidated statements of operations from the acquisition date to December 31, 2021 are not material.

This Old House

On March 19, 2021, the Company acquired all outstanding shares of TOH Intermediate Holdings, LLC (“This Old House”), a home improvement media business, according to the terms and conditions of the Equity Purchase Agreement. The Company acquired the This Old House business because the Company believes the content aligns with The Roku Channel’s ad-supported growth strategy.

The total purchase consideration for This Old House was \$97.8 million, paid entirely in cash. The Company incurred \$2.4 million in acquisition-related expenses that are recorded in General and administrative expenses in the consolidated statements of operations.

The allocation of the purchase consideration to tangible and intangible assets acquired and liabilities assumed, reflecting measurement period adjustments through December 31, 2021, is based on estimated fair values and is as follows (in thousands):

	<u>Fair Values</u>
Assets acquired	
Cash and cash equivalents	\$ 7
Accounts receivable	5,830
Prepaid expenses and other current assets	7,310
Property and equipment, net	307
Intangible assets:	
Tradename	20,000
Customer relationships	700
Goodwill	46,671
Operating lease right-of-use assets	5,498
Other non-current assets	23,487
Total assets acquired	<u>109,810</u>
Liabilities assumed	
Accounts payable and accrued liabilities	(2,747)
Deferred revenue, current portion	(4,146)
Operating lease liabilities, non-current portion	(4,262)
Deferred revenue, non-current portion	(816)
Other long-term liabilities	(28)
Total liabilities assumed	<u>(11,999)</u>
Total purchase consideration	<u><u>\$ 97,811</u></u>

Other non-current assets include \$22.5 million of content assets acquired. The fair value of the content assets has been estimated using the income approach. Amortization expense related to the content assets is recorded on an accelerated basis according to the pattern of monetization.

The excess of the total consideration over the tangible assets, identifiable intangible assets, and assumed liabilities is recorded as goodwill. Goodwill is primarily attributable to expected synergies in the advertising offerings as the Company brings more free ad-supported content to the users. The goodwill recorded is deductible for tax purposes.

The fair value of the tradename has been estimated using the relief-from-royalty method. The key valuation assumptions include the Company's estimates of expected future revenue and royalty rate. The Company amortizes the fair value of the tradename on a straight-line basis over its useful life.

The valuation of the intangible assets acquired from This Old House along with their estimated useful lives, is as follows (in thousands, except years):

	Estimated Fair Value	Estimated Weighted-Average Useful Lives (in years)
Tradename	\$ 20,000	10.0
Customer relationships	700	4.0
Estimated fair value of acquired intangible assets	<u>\$ 20,700</u>	9.8

The operations of This Old House were included in the Company's operating results beginning on the date of acquisition. The Company recorded platform revenue of \$18.7 million, cost of revenue, platform, of \$11.8 million and gross profit of \$6.9 million in its consolidated statements of operations from the acquisition date to December 31, 2021.

5. GOODWILL AND INTANGIBLE ASSETS

Goodwill

Goodwill represents the excess of purchase consideration in a business combination over the fair value of tangible and intangible assets acquired net of the liabilities assumed. All goodwill relates to the platform segment.

The following table reflects the carrying value of goodwill (in thousands):

	Carrying Value
Balance as of December 31, 2019	\$ 74,116
Adjustments:	
Dataxu working capital adjustment	(1,058)
Balance as of December 31, 2020	\$ 73,058
Additions:	
This Old House acquisition	46,671
Nielsen AVA business acquisition	36,790
Other immaterial acquisition	5,000
Balance as of December 31, 2021	<u>\$ 161,519</u>

Goodwill is evaluated for impairment annually. No impairment was recognized during the years ended December 31, 2021, 2020, and 2019.

Intangible Assets

The following table is the summary of Company's intangible assets (in thousands):

	As of December 31, 2021			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted-Average Useful Lives (in years)
Developed technology	\$ 73,367	\$ (25,350)	\$ 48,017	5.9
Customer relationships	14,100	(7,395)	6,705	4.0
Tradename	20,400	(1,966)	18,434	9.8
Patents	4,076	(606)	3,470	14.0
Intangible assets subject to amortization	\$ 111,943	\$ (35,317)	\$ 76,626	6.7
IPR&D technology	7,500	—	7,500	
Total Intangible assets	\$ 119,443	\$ (35,317)	\$ 84,126	

	As of December 31, 2020			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted-Average Useful Lives (in years)
Developed technology	\$ 62,367	\$ (13,439)	\$ 48,928	5.9
Customer relationships	13,400	(3,908)	9,492	4.0
Tradename	400	(400)	—	0.5
Patents	4,076	(315)	3,761	14.0
Total Intangible assets	\$ 80,243	\$ (18,062)	\$ 62,181	6.0

The Company recorded expenses of \$17.3 million, \$14.5 million, and \$2.8 million for amortization of intangible assets during the years ended December 31, 2021, 2020, and 2019, respectively. During the years ended December 31, 2021, 2020, and 2019, the Company recorded amortization of developed technology in Cost of revenue, platform and Research and development expenses. The Company recorded amortization of customer relationships and tradenames in Sales and marketing expenses, and recorded amortization of patents in General and administrative expenses in the consolidated statements of operations.

As of December 31, 2021, the estimated future amortization expense for intangible assets for the next five years and thereafter is as follows (in thousands):

Year Ending December 31,	
2022	\$ 17,745
2023	17,066
2024	14,275
2025	12,571
2026	4,074
Thereafter	10,895
Total	\$ 76,626

6. BALANCE SHEET COMPONENTS

Accounts Receivable, net: Accounts receivable, net consisted of the following (in thousands):

	As of December 31,	
	2021	2020
Accounts receivable, gross	\$ 809,220	\$ 565,088
Less: Allowances		
Allowance for sales returns	6,015	5,912
Allowance for sales incentives	48,411	30,838
Allowance for doubtful accounts	2,158	4,181
Other allowances	243	305
Total allowances	56,827	41,236
Accounts Receivable, net	\$ 752,393	\$ 523,852

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

	As of December 31,	
	2021	2020
Computers and equipment	\$ 38,473	\$ 30,859
Leasehold improvements	182,229	144,013
Internal-use software	7,274	6,744
Office equipment and furniture	20,829	19,661
Property and equipment, gross	248,805	201,277
Accumulated depreciation and amortization	(71,238)	(46,080)
Property and Equipment, net	\$ 177,567	\$ 155,197

Depreciation and amortization expense, for property and equipment assets, for the years ended December 31, 2021, 2020, and 2019 was \$25.4 million, \$21.7 million, and \$12.8 million, respectively.

Accrued Liabilities: Accrued liabilities consisted of the following (in thousands):

	As of December 31,	
	2021	2020
Payments due to content publishers	\$ 165,894	\$ 106,576
Accrued cost of revenue	142,014	98,285
Marketing, retail and merchandising costs	47,428	43,645
Operating lease liability, current	37,116	35,647
Content liability, current	70,462	6,165
Other accrued expenses	86,141	57,350
Total Accrued Liabilities	\$ 549,055	\$ 347,668

Deferred Revenue: Deferred revenue consisted of the following (in thousands):

	As of December 31,	
	2021	2020
Platform, current	\$ 22,240	\$ 27,587
Player, current	23,520	27,878
Total deferred revenue, current	<u>45,760</u>	<u>55,465</u>
Platform, non-current	9,324	9,909
Player, non-current	19,402	11,374
Total deferred revenue, non-current	<u>28,726</u>	<u>21,283</u>
Total Deferred Revenue	<u>\$ 74,486</u>	<u>\$ 76,748</u>

Other Long-term Liabilities: Other Long-term liabilities consisted of the following (in thousands):

	As of December 31,	
	2021	2020
Content liability, non-current	\$ 51,211	\$ 1,380
Other long-term liabilities	31,274	1,739
Total Other long-term liabilities	<u>\$ 82,485</u>	<u>\$ 3,119</u>

7. CONTENT ASSETS

Content assets, net recorded as part of Other non-current assets consisted of the following (in thousands):

	As of December 31,	
	2021	2020
Licensed content, net	\$ 199,290	\$ 7,907
Produced content:		
Released, less amortization	20,030	—
Completed, not released	881	—
In production	<u>3,512</u>	<u>—</u>
Total produced content, net	<u>24,423</u>	<u>\$ —</u>
Total Content Assets, net	<u>\$ 223,713</u>	<u>\$ 7,907</u>

On January 8, 2021, the Company entered into an agreement with the mobile-first video distribution service known as Quibi to acquire certain content rights. The transaction was accounted for as an asset acquisition. As discussed in Note 4, the Company also acquired content assets as part of the This Old House acquisition. The increase of \$215.8 million in content assets during the year ended December 31, 2021 includes content assets acquired from Quibi and This Old House, programming content licensed from various other content publishers, as well as content produced during the year.

Amortization of content assets is included in Cost of revenue, platform in the consolidated statements of operations and is reflected in the table below (in thousands):

	Years Ended December 31,	
	2021	2020
Licensed content	\$ 84,133	\$ 22,392
Produced content	11,437	—
Total amortization costs	<u>\$ 95,570</u>	<u>\$ 22,392</u>

The following table reflects the amortization expense for the next three years for content assets, net (in thousands):

Year Ending December 31,	Licensed content	Produced content	Total
2022	\$ 86,584	\$ 4,055	\$ 90,639
2023	38,861	4,202	43,063
2024	23,293	3,951	27,244
Total	<u>\$ 148,738</u>	<u>\$ 12,208</u>	<u>\$ 160,946</u>

8. FAIR VALUE DISCLOSURE

The Company's financial assets measured at fair value are as follows (in thousands):

	As of December 31, 2021		As of December 31, 2020	
	Fair Value	Level 1	Fair Value	Level 1
Assets:				
Cash and cash equivalents:				
Cash	\$ 1,130,172	\$ 1,130,172	\$ 1,021,022	\$ 1,021,022
Money market funds	1,015,871	1,015,871	71,793	71,793
Restricted cash, current	—	—	434	434
Restricted cash, non-current	1,627	1,627	—	—
Total assets measured and recorded at fair value	<u>\$ 2,147,670</u>	<u>\$ 2,147,670</u>	<u>\$ 1,093,249</u>	<u>\$ 1,093,249</u>

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in the principal market (or most advantageous market, in the absence of a principal market) for the asset or liability in an orderly transaction between market participants at the measurement date. Further, the Company maximizes the use of observable inputs and minimizes the use of unobservable inputs in measuring fair value, and utilizes a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. The three levels of inputs used to measure fair value are as follows:

Level 1—Quoted prices in active markets for identical assets or liabilities.

Financial assets and liabilities measured using Level 1 inputs include cash equivalents including restricted cash, accounts receivable, prepaid expenses, accounts payable, and accrued liabilities.

The Company considers all highly liquid investments purchased with an original or remaining maturity of three months or less at the date of purchase to be cash equivalents. The Company measured money market funds

of \$1,015.9 million and \$71.8 million as cash equivalents as of December 31, 2021 and 2020, respectively, using Level 1 inputs.

Level 2—Observable inputs other than quoted prices included within Level 1, including quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; and inputs other than quoted prices that are observable or are derived principally from, or corroborated by, observable market data by correlation or other means.

The Company did not have any Level 2 instruments as of December 31, 2021 and 2020.

Level 3—Unobservable inputs that are supported by little or no market activity, are significant to the fair value of the assets or liabilities and reflect the Company’s own assumptions about the assumptions market participants would use in pricing the asset or liability developed based on the best information available in the circumstances.

The Company did not have any Level 3 instruments as of December 31, 2021 and 2020.

Assets and liabilities that are measured at fair value on a non-recurring basis

Non-financial assets such as goodwill, intangible assets, property and equipment, operating lease right-of-use assets, and content assets are evaluated for impairment and adjusted to fair value using Level 3 inputs, only when impairment is recognized.

9. LEASES

The Company has entered into operating leases primarily for office real estate. The leases have remaining terms ranging from one year to 10 years and may include options to extend or terminate the lease. The depreciable life of ROU assets is limited by the expected lease term.

The components of lease expense are as follows (in thousands):

	Years Ended December 31,		
	2021	2020	2019
Operating lease cost (1)	\$ 46,410	\$ 42,127	\$ 27,596
Variable lease cost	15,080	12,116	4,928
Net operating lease cost	\$ 61,490	\$ 54,243	\$ 32,524

(1) Operating lease cost is presented net of sublease income. Sublease income for the years ended December 31, 2021, 2020, and 2019 was not material.

Supplemental cash flow information related to leases is as follows (in thousands):

	Years Ended December 31,		
	2021	2020	2019
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash outflows from operating leases	\$ 51,657	\$ 30,664	\$ 17,721
Right-of-use assets obtained in exchange for lease obligations:			
Operating leases	\$ 110,845	\$ 12,031	\$ 267,048

Supplemental balance sheet information related to leases is as follows (in thousands, except lease term and discount rate):

	As of December 31,	
	2021	2020
Operating lease right-of-use assets	\$ 345,660	\$ 266,197
Included in accounts payable and accrued liabilities:		
Operating lease liability, current	37,116	35,647
Operating lease liability, non-current	394,724	307,936
Total operating lease liability	<u>\$ 431,840</u>	<u>\$ 343,583</u>
Weighted-average remaining lease term:		
Operating leases (in years)	8.38	9.05
Weighted-average discount rate:		
Operating leases	3.98 %	4.60 %

Future lease payments under operating leases as of December 31, 2021 are as follows (in thousands):

Year Ending December 31,	Operating Leases
2022	\$ 52,636
2023	63,548
2024	62,162
2025	61,649
2026	60,044
Thereafter	218,954
Total future lease payments	<u>518,993</u>
Less: imputed interest	(79,073)
Less: expected tenant improvement allowance	(8,080)
Total	<u>\$ 431,840</u>

As of December 31, 2021, the Company's commitment relating to operating leases that have not yet commenced was \$198.4 million. These operating leases will commence starting in fiscal year 2022 with lease terms of approximately two to 12 years.

10. DEBT

The Company's outstanding debt as of December 31, 2021 and 2020 is as follows (in thousands):

	As of December 31,			
	2021		2020	
	Amount	Effective Interest Rate	Amount	Effective Interest Rate
Term Loan A Facility	\$ 90,000	2.0 %	\$ 95,000	2.0 %
Less: Debt issuance costs	(132)		(258)	
Net carrying amount of debt	<u>\$ 89,868</u>		<u>\$ 94,742</u>	

The carrying amount of debt approximates fair value due to its variable interest rates. The interest expense for the years ended December 31, 2021 and 2020 relating to the Credit Agreement is \$2.2 million and \$2.6 million, respectively.

Senior Secured Term Loan A and Revolving Credit Facilities

On February 19, 2019, the Company entered into a Credit Agreement with Morgan Stanley Senior Funding, Inc. (as amended on May 3, 2019, the "Credit Agreement"), which provides for (i) a four-year revolving credit facility in the aggregate principal amount of up to \$100.0 million (the "Revolving Credit Facility"), (ii) a four-year delayed draw term loan A facility in the aggregate principal amount of up to \$100.0 million (the "Term Loan A Facility"), and (iii) an uncommitted incremental facility, subject to the satisfaction of certain financial and other conditions, in the amount of up to (v) \$50.0 million, plus (w) 1.0x of the Company's EBITDA for the most recently completed four fiscal quarter period, plus (x) an additional amount at the Company's discretion, so long as, on a pro forma basis at the time of incurrence, the Company's secured leverage ratio does not exceed 1.50 to 1.00, plus (y) voluntary prepayments of the Revolving Credit Facility and Term Loan A Facility to the extent accompanied by concurrent reductions to the applicable Credit Facility (together with the Revolving Credit Facility and the Term Loan A Facility, collectively, the "Credit Facility").

On November 18, 2019, the Company borrowed the Term Loan A facility in the aggregate principal amount of \$100.0 million. In March 2020, the Company borrowed the available balance of \$69.3 million from the Revolving Credit Facility. For both borrowings, the Company elected an interest rate equal to the adjusted one-month LIBOR rate plus an applicable margin of 1.75% based on the Company's secured leverage ratio. In May 2020, the Company repaid the outstanding balance on the Revolving Credit Facility.

Loans under the Term Loan A Facility amortize in equal quarterly installments beginning on March 31, 2020, in an aggregate annual amount equal to (i) on or prior to December 31, 2021, 1.25% of the drawn principal amount of the Term Loan Facility or \$1.25 million and (ii) thereafter, 2.50% of the drawn principal amount of the Term Loan Facility or \$2.5 million, with the remaining balance payable on the maturity date of the Term Loan A Facility in February 2023. The Revolving Credit Facility may be borrowed, repaid, and reborrowed until the fourth anniversary of the Closing Date in February 2023, at which time all outstanding balances of the Revolving Credit Facility are due to be repaid.

The Company had outstanding letters of credit against the Revolving Credit Facility of \$38.0 million and \$30.8 million as of December 31, 2021 and 2020, respectively.

The Company's obligations under the Credit Agreement are secured by substantially all of its assets. In the future, certain of its direct and indirect subsidiaries may be required to guarantee the Credit Agreement. The Company may prepay, and in certain circumstances would be required to prepay, loans under the Credit Agreement without payment of a premium. The Credit Agreement contains customary representations and warranties, customary affirmative and negative covenants, a financial covenant that is tested quarterly and requires the Company to maintain a certain adjusted quick ratio of at least 1.00 to 1.00, and customary events of default.

As of December 31, 2021, the Company was in compliance with all of the covenants of the Credit Agreement.

11. STOCKHOLDERS' EQUITY

Preferred Stock

The Company has 10 million shares of undesignated preferred stock authorized but not issued with rights and preferences determined by the Company's Board of Directors at the time of issuance of such shares. As of December 31, 2021 and 2020, there were no shares of preferred stock issued and outstanding.

Common Stock

The Company has two classes of authorized common stock, Class A common stock and Class B common stock. Holders of Class A common stock are entitled to one vote for each share of Class A common stock held on all matters submitted to a vote of stockholders and holders of Class B common stock are entitled to ten votes for each share of Class B common stock held on all matters submitted to a vote of stockholders. Except with respect to voting, the rights of the holders of Class A and Class B common stock are identical. Shares of Class B common stock are voluntarily convertible into shares of Class A common stock at the option of the holder and are generally automatically converted into shares of the Company's Class A common stock upon sale or transfer. Shares issued in connection with exercises of stock options, vesting of restricted stock units, or shares purchased under the employee stock purchase plan are generally automatically converted into shares of the Company's Class A common stock.

At-the-Market Offerings

On March 2, 2021, the Company entered into an Equity Distribution Agreement with Morgan Stanley & Co. LLC, Citigroup Global Markets Inc., and Evercore Group L.L.C., as its sales agents, pursuant to which the Company could offer and sell from time-to-time shares of its Class A common stock for aggregate gross proceeds of up to \$1,000.0 million. In March 2021, the Company sold approximately 2.6 million shares of Class A common stock at an average selling price of \$379.26 per share, for aggregate gross proceeds of \$1,000.0 million and incurred issuance costs of \$10.4 million.

On May 13, 2020, the Company entered into an Equity Distribution Agreement with Morgan Stanley & Co. LLC and Citigroup Global Markets Inc., as its sales agents, pursuant to which the Company sold an aggregate of 4.0 million shares of the Company's Class A common stock at an average selling price of \$126.01 per share, for aggregate gross proceeds of \$504.0 million and incurred issuance costs of \$6.8 million.

On November 19, 2019, the Company entered into an Equity Distribution Agreement with Citigroup Global Markets Inc., as its sales agent, pursuant to which the Company sold an aggregate of 1.0 million shares of the Company’s Class A common stock at an average selling price of \$153.99 per share, for aggregate gross proceeds of \$154.0 million and incurred issuance costs of \$2.8 million.

On May 16, 2019, the Company entered into an Equity Distribution Agreement with Morgan Stanley & Co. LLC, as its sales agent, pursuant to which the Company sold an aggregate of 1.0 million shares of the Company’s Class A common stock at an average selling price of \$82.90 per share, for aggregate gross proceeds of \$82.9 million and incurred issuance costs of \$1.6 million.

On March 12, 2019, the Company entered into an Equity Distribution Agreement with Citigroup Global Markets Inc., as its sales agent, pursuant to which the Company sold approximately 1.4 million shares of the Company’s Class A common stock at an average selling price of \$72.00 per share, for aggregate gross proceeds of \$100.0 million and incurred issuance costs of \$2.0 million.

Common Stock Reserved For Issuance

At December 31, 2021, the Company’s common stock reserved for issuance in the future is as follows (in thousands):

	<u>As of December 31, 2021</u>
Common stock awards granted under equity incentive plans	9,460
Common stock awards available for issuance under the 2017 Employee Stock Purchase Plan *	5,089
Common stock awards available for issuance under the 2017 Equity Incentive Plan	<u>27,011</u>
Total reserved shares of common stock	<u><u>41,560</u></u>

* The Company has not issued any common stock pursuant to the 2017 Employee Stock Purchase Plan.

Equity Incentive Plans

The Company has two equity incentive plans, the 2008 Equity Incentive Plan (the “2008 Plan”) and the 2017 Equity Incentive Plan (the “2017 Plan”). The 2017 Plan became effective September 2017 in connection with the Company’s initial public offering (“IPO”). No additional equity grants have been made pursuant to the 2008 Plan subsequent to the IPO. The 2017 Plan provides for the grant of incentive stock options to the Company’s employees and for the grant of non-statutory stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards, performance stock awards, performance cash awards, and other forms of equity compensation to the Company’s employees, directors, and consultants.

Restricted stock units granted under the 2017 Plan are subject to continuous service. Stock options granted under the 2017 Plan generally are granted at a price per share equivalent to the fair market value on the date of grant. Recipients of option grants who possess more than 10% of the combined voting power of the Company are subject to certain limitations, and incentive stock options granted to such recipients are at a price no less than 110% of the fair market value at the date of grant.

Restricted Stock Units

Restricted stock unit activity for the year ended December 31, 2021 is as follows (in thousands, except per share data):

	Number of Shares	Weighted-Average Grant Date Fair Value Per Share
Balance, December 31, 2020	4,355	\$ 92.91
Awarded	983	348.62
Released	(1,655)	81.95
Forfeited	(397)	135.44
Balance, December 31, 2021 - Outstanding	<u>3,286</u>	<u>\$ 169.76</u>

The grant date fair value of restricted stock units granted during the years ended December 31, 2021, 2020, and 2019 was \$342.6 million, \$210.1 million, and \$195.2 million, respectively.

The fair value of restricted stock units that vested during the years ended December 31, 2021, 2020, and 2019 was \$135.6 million, \$83.7 million, and \$40.5 million, respectively.

The unrecognized stock-based compensation expense related to restricted stock units awarded to employees as of December 31, 2021 was \$463.7 million, which the Company expects to recognize over a weighted-average period of approximately 2.08 years.

Stock Options

The following table summarizes the Company's stock option activities under the 2008 Plan and 2017 Plan (in thousands, except years and per share data):

	Number of Shares	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Life (Years)	Weighted- Average Grant Date Fair Value Per Share	Aggregate Intrinsic Value
Balance, December 31, 2020	8,733	\$ 26.19	5.7	—	
Granted	320	356.55	—	\$ 139.76	
Exercised	(2,841)	6.51	—	—	
Forfeited and expired	(38)	104.47	—	—	
Balance, December 31, 2021 - Outstanding	<u>6,174</u>	<u>\$ 51.87</u>	<u>5.8</u>	<u>—</u>	<u>\$ 1,129,748</u>
Balance, December 31, 2021- Exercisable	<u>4,548</u>	<u>\$ 14.73</u>	<u>4.9</u>	<u>—</u>	<u>\$ 973,186</u>

The weighted-average grant date fair value of options granted during the years ended December 31, 2021, 2020, and 2019 was \$139.76, \$54.39, and \$39.23, respectively.

The intrinsic value for stock options exercised in the years ended December 31, 2021, 2020, and 2019 was \$997.6 million, \$470.8 million, and \$474.2 million, respectively. Intrinsic value represents the difference between the fair values of the Company's common stock and the stock options' exercise price on the date of grant.

As of December 31, 2021, the Company had \$67.5 million of unrecognized stock-based compensation expense related to unvested stock options that is expected to be recognized over a weighted-average period of approximately 2.0 years.

Stock-based Compensation

The Company measures the cost of employee services received in exchange for an equity award based on the grant date fair value of the award. Generally, stock options granted to employees under the 2008 Plan vest 25% after one year and then 1/48th monthly thereafter and have a term of ten years. Restricted stock units generally vest over 4 years. For the years ended December 31, 2021, 2020, and 2019, the amount of stock-based compensation capitalized as part of internal-use software was not material.

The following table shows total stock-based compensation expense for the years ended December 31, 2021, 2020, and 2019 (in thousands):

	Years Ended December 31,		
	2021	2020	2019
Cost of revenue, platform	\$ 827	\$ 847	\$ 342
Cost of revenue, player	2,035	1,407	1,072
Research and development	77,770	58,412	40,036
Sales and marketing	63,503	42,846	24,179
General and administrative	43,397	30,564	19,546
Total stock-based compensation	<u>\$ 187,532</u>	<u>\$ 134,076</u>	<u>\$ 85,175</u>

The fair value of stock options granted under the 2008 Plan and 2017 Plan is estimated on the grant date using the Black-Scholes option-valuation model. The assumptions used to value stock options granted during the years ended December 31, 2021, 2020, and 2019 are as follows:

	Years Ended December 31,		
	2021	2020	2019
Expected term (in years)	5.0 - 6.8	5.0 - 6.7	5.0 - 6.7
Risk-free interest rate	0.36 - 1.20%	0.22 - 1.67%	1.35 - 2.56%
Expected volatility	38 - 39%	36 - 39%	35 - 36%
Dividend rate	—	—	—

12. COMMITMENTS AND CONTINGENCIES

Manufacturing Purchase Commitments

The Company has various manufacturing contracts with vendors in the conduct of the normal course of its business. In order to manage future demand for its products, the Company enters into agreements with manufacturers and suppliers to procure inventory based upon certain criteria and timing. Some of these commitments are non-cancelable. As of December 31, 2021, the Company had \$195.2 million of non-cancelable purchase commitments for inventory.

The Company records a liability for non-cancelable purchase commitments in excess of projected demand forecasts. The Company recorded \$0.2 million and \$1.2 million for these purchase commitments in Accrued liabilities as of December 31, 2021 and 2020, respectively.

Licensed Content Commitments

The Company enters into contracts with content publishers to license content for streaming. When a title becomes available, the Company records an asset and a liability on the consolidated balance sheets.

As of December 31, 2021, the Company's total obligation for licensed content is \$421.0 million, of which the Company recorded \$92.1 million in Current liabilities and \$51.2 million in Other long-term liabilities in the consolidated balance sheets. The remaining \$277.7 million is not yet recognized on the consolidated balance sheets as the content does not meet the criteria for asset recognition.

The expected timing of payments for these content obligations are as follows (in thousands):

Year Ending December 31,	
2022	\$ 212,355
2023	99,848
2024	59,544
2025	36,731
2026	8,715
Thereafter	<u>3,815</u>
Total content liabilities	<u>\$ 421,008</u>

The Company also licenses content under arrangements where the payments are variable and based on the revenue earned by the Company. Since those amounts cannot be determined as of December 31, 2021, they are not included in the obligations above.

In connection with the acquisition of certain content rights during the quarter ended March 31, 2021, the Company assumed liabilities related to certain costs of the development and use of certain assets that had been incurred but not paid at the time assumed. Escrow arrangements were put in place such that selling shareholders would cover such costs. Accordingly, the Company recognized both an indemnification asset and liability of \$81.4 million, respectively, as of March 31, 2021. As of December 31, 2021, \$77.5 million of both the indemnification asset and liability were released related to payments made for a portion of the liabilities assumed. The remaining indemnification balance as of December 31, 2021 is \$3.9 million, with the indemnification asset recorded as part of Prepaid expenses and other current assets and the indemnification liability recorded as part of Accrued liabilities in the consolidated balance sheets.

Letters of Credit

As of December 31, 2021 and 2020, the Company had irrevocable letters of credit outstanding in the amount of \$38.0 million and \$30.9 million, respectively, related to facilities leases. The letters of credit have various expiration dates through 2030.

Contingencies

The Company accrues for loss contingencies, including liabilities for intellectual property licensing claims, when it believes such losses are probable and reasonably estimable. These contingencies are reviewed at least

quarterly and adjusted to reflect the impact of negotiations, estimated settlements, legal rulings, advice of legal counsel, and other information and events. The resolution of these contingencies and of other legal proceedings can be, however, inherently unpredictable and subject to significant uncertainties.

From time to time, the Company is subject to legal proceedings, claims, and investigations in the ordinary course of business, including claims relating to employee relations, business practices, and patent infringement. The Company is involved in litigation matters not listed herein. Although the results of these proceedings, claims, and investigations cannot be predicted with certainty, the Company does not believe that the final outcome of any matters that it is currently involved in are reasonably likely to have a material adverse effect on its business, financial condition, or results of operations. During the year ended December 31, 2021 the Company recorded expenses of \$4.8 million in Cost of revenue, player, \$1.8 million in Cost of revenue, platform, and \$3.4 million in General and administrative expenses for claims related to patent infringement. During the year ended December 31, 2020 the Company did not have any loss contingencies that were material. During the year ended December 31, 2019, the Company recorded expenses of \$9.9 million, in Cost of revenue, player for various claims related to patent infringements.

Indemnification

In the ordinary course of business, the Company has entered into contractual arrangements which provide indemnification provisions of varying scope and terms to business partners and other parties with respect to certain matters, including, but not limited to, losses arising out of the Company's breach of such agreements and out of intellectual property infringement claims made by third parties. The Company's obligations under these agreements may be limited in terms of time or amount, and in some instances, the Company may have recourse against third parties for certain payments. In addition, the Company has entered into indemnification agreements with its directors and certain of its officers that will require it, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors or officers.

It is not possible to determine the maximum potential amount under these indemnification obligations due to the limited history of prior indemnification claims and the unique facts and circumstances involved in each agreement. To date, the Company has not incurred any material costs as a result of such obligations and have not accrued any liabilities related to such obligations in the consolidated financial statements.

13. INCOME TAXES

The components of income (loss) before income taxes consist of the following (in thousands):

	Years Ended December 31,		
	2021	2020	2019
United States	\$ 240,560	\$ (21,107)	\$ (63,453)
Foreign	(3,973)	2,655	2,534
Net income (loss) before income taxes	<u>\$ 236,587</u>	<u>\$ (18,452)</u>	<u>\$ (60,919)</u>

The income tax (benefit) expense consisted of the following (in thousands):

	Years Ended December 31,		
	2021	2020	2019
Current:			
Federal	\$ —	\$ (219)	\$ (47)
State	589	620	244
Foreign	490	743	108
	<u>1,079</u>	<u>1,144</u>	<u>305</u>
Deferred:			
Federal	193	—	—
State	256	—	—
Foreign	(7,326)	(2,089)	(1,287)
	<u>(6,877)</u>	<u>(2,089)</u>	<u>(1,287)</u>
Total	<u>\$ (5,798)</u>	<u>\$ (945)</u>	<u>\$ (982)</u>

The following is a reconciliation of the statutory federal income tax rate to the Company's effective tax rate:

	Years Ended December 31,		
	2021	2020	2019
U.S. federal income tax at statutory rate	21.0 %	21.0 %	21.0 %
U.S. state and local income taxes	0.2	(3.2)	(0.4)
Change in valuation allowance	140.0	(698.4)	(213.4)
Federal research and development tax credit	(30.7)	102.9	30.8
Stock-based compensation	(114.3)	577.8	158.0
Discrete tax benefit due to IP transfer	(19.1)	—	—
Meals and entertainment	0.1	(1.6)	(1.4)
Foreign rate differential	0.1	—	(0.6)
Acquisition costs	—	—	(1.3)
Section 162(m) limitation	1.1	(7.2)	(1.4)
State apportionment change	—	4.4	1.3
Tax rate change	(0.7)	—	(0.4)
Provision to return true-up	(0.1)	9.4	9.9
Other	(0.1)	0.1	(0.5)
Effective tax rate	<u>(2.5)%</u>	<u>5.2 %</u>	<u>1.6 %</u>

Significant components of the Company's deferred income tax assets and liabilities consist of the following (in thousands):

	As of December 31,	
	2021	2020
Deferred tax assets:		
Net operating loss carryforwards	\$ 563,173	\$ 379,613
Reserves and accruals	20,969	14,131
Research and development credits	166,940	104,110
Operating lease liabilities	107,228	91,373
Stock-based compensation	36,350	28,318
Depreciation and amortization	40,583	—
Total deferred tax assets	<u>935,243</u>	<u>617,545</u>
Deferred tax liabilities:		
Operating lease right-of-use assets	(85,713)	(70,755)
Depreciation and amortization	—	(11,707)
Total deferred tax liabilities	<u>(85,713)</u>	<u>(82,462)</u>
Valuation allowance	<u>(838,949)</u>	<u>(530,887)</u>
Net deferred tax assets	<u>\$ 10,581</u>	<u>\$ 4,196</u>

A valuation allowance is provided when it is more likely than not that some portion of the deferred tax assets will not be realized through future operations. As a result of the Company's analysis of all available objective evidence, both positive and negative, as of December 31, 2021, management believes it is more likely than not that the U.S. and Netherlands deferred tax assets will not be fully realizable. Accordingly, the Company has provided a full valuation allowance against its U.S. and Netherlands deferred tax assets.

The Company's U.S. federal and state valuation allowance increased by \$261.8 million and \$169.7 million during the years ended December 31, 2021 and 2020, respectively, primarily due to U.S. federal and state tax losses and credits incurred during the period.

The change in the valuation allowance, during the year ended December 31, 2021, is primarily attributable to an increase in domestic net operating loss carryforwards, primarily due to stock-based compensation expense, and an increase of approximately \$46.2 million in deferred tax assets that are not realizable, related to the IP transfer completed during 2021, giving rise to foreign amortizable assets.

For federal and state income tax reporting purposes, respective net operating loss carryforwards of \$2,169.9 million and \$1,824.3 million are available to reduce future taxable income, if any. These net operating loss carryforwards will begin to expire in 2028 for federal and certain state net operating losses have expired in 2021. The federal net operating loss generated subsequent to 2017 can be carried forward indefinitely.

For Brazil, Denmark, Netherlands, and U.K. income tax reporting purposes, the net operating loss carryforwards of \$2.8 million, \$2.8 million, \$6.1 million, and \$33.9 million, respectively, are available to reduce future taxable income, if any, in those countries. Brazil, Denmark, and U.K. net operating losses can be carried forward indefinitely. Netherlands net operating losses can be carried back one year and carried forward

indefinitely. The Company also has U.K. research and development tax credit carryforwards of \$0.5 million, which can be carried forward indefinitely.

As of December 31, 2021, the Company has research and development tax credit carryforwards of \$133.8 million and \$97.4 million for federal and state income tax purposes, respectively. If not utilized, the federal and state carryforwards will begin to expire in 2028 and 2035, respectively.

The Internal Revenue Code of 1986, as amended (the “Code”), contains provisions that may limit the net operating loss and credit carryforwards available for use in any given period upon the occurrence of certain events, including a statutorily defined significant change in ownership. Utilization of the net operating loss and tax credit carryforwards is subject to an annual limitation due to an ownership change, as defined by section 382 of the Code. The Company completed a recent study to assess whether any section 382 ownership change has occurred since the Company’s formation. Based on the study, the Company had a section 382 ownership change on December 18, 2009 and tax attributes generated by the Company through the ownership change date are subject to the limitation.

A section 382 study was completed for dataxu, which the Company acquired in November 2019, covering the period from inception beginning May 1, 2008 through the acquisition date of November 8, 2019. Based on the study, the Company identified four ownership changes for section 382 purposes. As such, tax attributes generated by dataxu through the ownership change dates are subject to the limitation.

The total amount of unrecognized tax benefits as of December 31, 2021 is \$66.2 million, of which \$48.7 million is composed of research and development credits and \$17.5 million is related to international activities. A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows (in thousands):

	<u>As of December 31,</u>	
	<u>2021</u>	<u>2020</u>
Unrecognized tax benefits at beginning of year	\$ 29,175	\$ 19,487
Gross increase for tax positions of current year	36,198	9,959
Gross decrease due to statute expiration	(330)	(75)
Gross increase (decrease) for tax positions of prior years	1,107	(196)
Unrecognized tax benefits balance at end of year	<u>\$ 66,150</u>	<u>\$ 29,175</u>

The Company recognizes interest and penalties related to unrecognized tax benefits as a component of its income tax expense. As of December 31, 2021, the Company recorded \$0.4 million of accrued interest and penalties related to uncertain tax positions.

Change in the Company’s unrecognized tax benefits, if any, would have an immaterial impact on its effective tax rate. The Company does not expect its gross unrecognized tax benefits to change significantly within the next 12 months.

The Company files income tax returns in the U.S. federal jurisdiction and various state jurisdictions. The Company is currently under examination by the Texas Comptroller for calendar tax years 2015, 2016, and 2017. All tax years remain subject to examination by federal and state authorities. These audits include questioning the timing and amount of deductions; the nexus of income among various tax jurisdictions; and compliance with federal, state, and local tax laws.

The Company will continue to indefinitely reinvest earnings from its foreign subsidiaries, which are not significant. While federal income tax expense has been recognized as a result of the Tax Cuts and Jobs Act of 2017, the Company has not provided any additional deferred taxes with respect to items such as foreign withholding taxes, state income tax or foreign exchange gain or loss. It is not practicable for the Company to determine the amount of unrecognized tax expense on these reinvested international earnings.

14. RELATED-PARTY TRANSACTIONS

The Company did not engage in any material related party transactions for the years ended December 31, 2021 and 2020.

In the year ended December 31, 2019, the Company engaged in transactions with one of its strategic investors. With respect to this investor, the Company recorded revenue of \$8.5 million and expenses of \$1.3 million for the year ended December 31, 2019. During the years ended December 31, 2021 and 2020, the Company did not consider this investor to be a related party, as this investor did not meet the defined criteria.

In the year ended December 31, 2019, the Company had engaged in transactions with another company in which the Company's Chief Executive Officer held a majority voting interest and was a member of such company's board of directors at that time, and another member of the Company's Board of Directors is presently such company's Chief Executive Officer. With respect to transactions with this company, the Company incurred expenses of \$1.2 million for the year ended December 31, 2019.

15. RETIREMENT PLANS

The Company maintains a 401(k) tax deferred saving plan (the "Savings Plan") for the benefit of qualified employees. Qualified employees may elect to make contributions to the Savings Plan on a biweekly basis, subject to certain limitations. The Company may make contributions to the Savings Plan at the discretion of the Board of Directors. No contributions were made for the years ended December 31, 2021, 2020, and 2019.

In 2014, the Company established a defined contribution plan in the U.K. for its U.K.-based employees. The Company contributed \$1.3 million, \$0.7 million, and \$0.5 million to the plan for the years ended December 31, 2021, 2020, and 2019, respectively.

16. NET INCOME (LOSS) PER SHARE

The Company's basic net income (loss) per share is calculated by dividing the net income (loss) by the weighted-average number of shares of common stock outstanding for the period. The Company uses the two-class method to calculate net income (loss) per share. Except with respect to certain voting, conversion, and transfer rights and as otherwise expressly provided in the Company's amended and restated certificate of incorporation or required by applicable law, shares of the Company's Class A common stock and Class B common stock have the same rights and privileges and rank equally, share ratably, and are identical in all respects as to all matters. Accordingly, basic and diluted net income (loss) per share are the same for both classes.

For purposes of the calculation of diluted net income (loss) per share, options to purchase common stock, restricted stock units, and unvested shares of common stock issued upon the early exercise of stock options are considered common stock equivalents. Dilutive shares of common stock are determined by applying the treasury stock method. The dilutive shares are excluded from the calculation of diluted net loss per share in the period of net loss, as their effect is antidilutive.

The following table presents the calculation of basic and diluted net income (loss) per share as follows (in thousands, except per share data):

	Years Ended December 31,		
	2021	2020	2019
Numerator:			
Net income (loss)	\$ 242,385	\$ (17,507)	\$ (59,937)
Denominator:			
Basic net income (loss) per share:			
Weighted-average common shares outstanding — basic	132,710	123,978	115,218
Net income (loss) per share — basic	\$ 1.83	\$ (0.14)	\$ (0.52)
Diluted net income (loss) per share:			
Weighted-average common shares outstanding — basic	132,710	123,978	115,218
Effect of potentially dilutive securities:			
Restricted stock units	2,744	—	—
Stock options	6,214	—	—
Weighted-average common shares outstanding — diluted	141,668	123,978	115,218
Net income (loss) per share — diluted	\$ 1.71	\$ (0.14)	\$ (0.52)

Common stock equivalents excluded from the calculation of diluted net income (loss) per share because of their anti-dilutive effect are as follows (in thousands):

	Years Ended December 31,		
	2021	2020	2019
Equity awards to purchase common stock	1,128	13,088	15,668
Unvested shares of common stock issued upon early exercise of stock options and business acquisition	—	1	31
Total	1,128	13,089	15,699

17. SEGMENT INFORMATION

An operating segment is defined as a component of an entity for which discrete financial information is available that is evaluated regularly by the chief operating decision maker (“CODM”) for purposes of allocating resources and evaluating financial performance. The Company’s CODM is its Chief Executive Officer, and the CODM evaluates performance and makes decisions about allocating resources to its operating segments based on financial information presented on a consolidated basis and on revenue and gross profit for each operating segment. The Company uses the management approach to determine the segment financial information that should be disaggregated and presented separately in the Company’s notes to its consolidated financial statements. The management approach is based on the manner by which management has organized the segments within the Company for making operating decisions, allocating resources, and assessing performance.

The Company reports its financial results consistent with the manner in which financial information is viewed by management for decision-making purposes. The Company does not manage operating expenses such as research and development, sales and marketing and general and administrative expenses at the segment level. The Company does not allocate property and equipment or any other assets or capital expenditures to reportable segments.

The Company is organized into two reportable segments as follows:

Platform

Consists of revenue generated from the sale of digital advertising and related services including the demand-side platform, content distribution services (such as subscription and transaction revenue shares, media and entertainment promotional spending, the sale of Premium Subscriptions, and the sale of branded channel buttons on remote controls), and licensing arrangements with service operators and TV brands.

Player

Consists of revenue generated from sale of streaming players, audio products and accessories through retailers and distributors, as well as directly to customers through the Company’s website.

Customers accounting for 10% or more of segment revenue, net, were as follows:

	Years Ended December 31,		
	2021	2020	2019
<i>Platform segment revenue</i>			
Customer H	10 %	13 %	*
<i>Player segment revenue</i>			
Customer A	*	10 %	16 %
Customer B	23 %	18 %	17 %
Customer C	37 %	40 %	39 %

* Less than 10%

Revenue in international markets was less than 10% in each of the periods presented. Substantially all Company assets were held in the United States and were attributable to the operations in the United States as of December 31, 2021 and 2020.

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

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities and Exchange Act of 1934, as amended, or the Exchange Act) prior to the filing of this

Annual Report. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of the period covered by this Annual Report, our disclosure controls and procedures were, in design and operation, effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the quarter ended December 31, 2021 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Management's Report on Internal Control over Financial Reporting

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

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework set forth in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Our assessment excluded internal controls over financial reporting of This Old House and Nielsen AVA businesses which were acquired during the year and whose total assets represent 1.7% and total revenue represent 0.7% of our consolidated financial statement amounts as of and for the year ended December 31, 2021. Based on our evaluation under the framework set forth in *Internal Control — Integrated Framework (2013)*, our management concluded that our internal control over financial reporting was effective as of December 31, 2021.

The effectiveness of our internal control over financial reporting as of December 31, 2021 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in its report which is included below.

Inherent Limitations on Effectiveness of Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures or our internal controls will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Our disclosure controls and procedures and our internal controls over financial reporting have been designed to provide reasonable assurance of achieving their objectives. 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.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Roku, Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Roku, Inc. and subsidiaries (the “Company”) as of December 31, 2021, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control — Integrated Framework (2013) issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2021, of the Company and our report dated February 18, 2022, expressed an unqualified opinion on those financial statements.

As described in “Management’s Report on Internal Control over Financial Reporting”, management excluded from its assessment the internal control over financial reporting at the This Old House and Nielsen AVA businesses which were acquired during the year and whose financial statements constitute 1.7% of total assets and 0.7% of total revenue of the consolidated financial statement amounts as of and for the year ended December 31, 2021. Accordingly, our audit did not include the assessment of internal controls over financial reporting for the This Old House and Nielsen AVA businesses.

Basis for Opinion

The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable

assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

/s/ DELOITTE & TOUCHE LLP

San Jose, California

February 18, 2022

Item 9B. Other Information

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this item is incorporated by reference to our definitive Proxy Statement for the 2022 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of our year ended December 31, 2021.

Item 11. Executive Compensation

The information required by this item is incorporated by reference to our definitive Proxy Statement for the 2022 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of our year ended December 31, 2021.

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

The information required by this item is incorporated by reference to our definitive Proxy Statement for the 2022 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of our year ended December 31, 2021.

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

The information required by this item is incorporated by reference to our definitive Proxy Statement for the 2022 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of our year ended December 31, 2021.

Item 14. Principal Accounting Fees and Services

The information required by this item is incorporated by reference to our definitive Proxy Statement for the 2022 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of our year ended December 31, 2021.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a)(1) Financial Statements

See Index to Financial Statements in Item 8 of this Annual Report.

(a)(2) Financial Statement Schedule

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

(a)(3) Exhibits

The documents set forth below are filed herewith or incorporated herein by reference to the location indicated.

<u>Number</u>	<u>Exhibit Title</u>	<u>Incorporated by Reference</u>				<u>Filed Herewith</u>
		<u>Form</u>	<u>File No.</u>	<u>Exhibit</u>	<u>Filing Date</u>	
2.1	Agreement and Plan of Merger, dated October 22, 2019, by and among Roku, Inc., Delaware Acquisition Company, Inc., dataxu, Inc. and Shareholder Representative Services LLC, as Stockholder Representative and Amendment No. 1 to Agreement and Plan of Merger, dated November 8, 2019, by and among Roku, Inc., Delaware Acquisition Company, Inc., dataxu, Inc. and Shareholder Representative Services LLC, as Stockholder Representative	8-K	001-38211	2.1	11/14/2019	
3.1	Amended and Restated Certificate of Incorporation	8-K	001-38211	3.1	10/3/2017	
3.2	Amended and Restated Bylaws	S-1/A	333-220318	3.4	9/18/2017	
4.1	Reference is made to Exhibit 3.1					
4.2	Form of Class A Common Stock Certificate	S-1/A	333-220318	4.1	9/18/2017	
4.3	Description of Securities	10-K	001-38211	4.3	3/2/2020	
10.1 +	Roku, Inc. 2008 Equity Incentive Plan	S-1	333-220318	10.3	9/1/2017	

10.2 +	Forms of Option Agreement and Option Grant Notice under 2008 Equity Incentive Plan	S-1	333-220318	10.4	9/1/2017	
10.3 +	Roku, Inc. 2017 Equity Incentive Plan	S-1/A	333-220318	10.5	9/18/2017	
10.4 +	Forms of Consolidated Option Agreement and Option Grant Notice under 2017 Equity Incentive Plan					X
10.5 +	Forms of Consolidated Restricted Stock Unit Grant Notice and Award Agreement under 2017 Equity Incentive Plan					X
10.6 +	Executive Supplemental Stock Option Program 2022 Enrollment Form	8-K	001-38211	10.1	10/1/2021	
10.7 +	Roku, Inc. 2017 Employee Stock Purchase Plan	S-1/A	333-220318	10.8	9/18/2017	
10.8 +	Form of Indemnification Agreement, by and between Roku, Inc. and each of its directors and executive officers	S-1A	333-220318	10.9	9/18/2017	
10.9 +	Employment Terms Agreement, by and between Roku, Inc. and Stephen Kay, dated November 15, 2013	S-1	333-220318	10.9	9/1/2017	
10.10 +	Employment Terms Agreement, by and between Roku, Inc. and Steve Louden, dated June 11, 2015	S-1	333-220318	10.11	9/1/2017	
10.11 +	Employment Terms Agreement, by and between Roku, Inc. and Scott Rosenberg, dated October 30, 2012	S-1	333-220318	10.13	9/1/2017	
10.12 +	Employment Terms Agreement, by and between Roku, Inc. and Mustafa Ozgen, dated January 17, 2019	10-K	001-38211	10.18	3/2/2020	
10.13 +	Roku, Inc. Amended and Restated Severance Benefit Plan	8-K	001-38211	99.1	7/16/2019	
10.14	Coleman Highline Office Lease by and between Roku, Inc. and Cap Phase 1, LLC dated August 1, 2018 (1155 Coleman Ave)	10-Q	001-38211	10.26	8/10/2018	
10.15	Coleman Highline Office Lease by and between Roku, Inc. and Cap Oz 34, LLC dated August 1, 2018 (1173/1167/1161 Coleman Ave)	10-Q	001-38211	10.27	8/10/2018	
10.16	First Amendment to Coleman Highline Office Lease by and between Roku, Inc. and Cap Phase 1, LLC dated November 12, 2018 (1155 Coleman Ave)	10-K	001-38211	10.30	3/1/2019	

10.17	First Amendment to Coleman Highline Office Lease by and between Roku, Inc. and Cap Oz 34, LLC dated November 18, 2018 (1173/1167/1161 Coleman Ave)	10-K	001-38211	10.31	3/1/2019	
10.18	Credit Agreement, dated as of February 19, 2019, by and among Roku, Inc., Morgan Stanley Senior Funding, Inc., as lender, issuing bank, administrative agent and collateral agent, and the other issuing banks and lenders party thereto from time to time	10-K	001-38211	10.32	3/1/2019	
10.19	Assignment and Assumption of Lease, Landlord's Consent and First Amendment of Lease, dated as of April 30, 2019, by and among Roku, Inc., 8x8, Inc. and CAP Phase I, LLC	10-Q	001-38211	10.1	8/9/2019	
10.20	Second Amendment to Coleman Highline Office Lease by and between Roku, Inc. and Cap Phase 1, LLC dated April 30, 2019 (1155 Coleman Ave)	10-Q	001-38211	10.2	8/9/2019	
10.21	Second Amendment to Coleman Highline Office Lease by and between Roku, Inc. and Cap Oz 34, LLC dated April 30, 2019 (1173/1167/1161 Coleman Ave)	10-Q	001-38211	10.3	8/9/2019	
10.22	Incremental Assumption and Amendment No. 1 to Credit Agreement, dated as of May 3, 2019, by and among Roku, Inc., Morgan Stanley Senior Funding, Inc., as administrative agent and issuing bank, and the other issuing banks and lenders party thereto from time to time	10-Q	001-38211	10.4	8/9/2019	
21.1	List of Significant Subsidiaries of Roku, Inc.					X
23.1	Consent of Independent Registered Public Accounting Firm					X
24.1	Power of Attorney (included in signature page)					X
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
32.1 *	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
32.2 *	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
101.INS	Inline XBRL Instance Document					X
101.SCH	Inline XBRL Taxonomy Extension Schema Document					X

101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document	X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	X
101.LAB	Inline XBRL Taxonomy Extension Labels Linkbase Document	X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	X
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)	

* These exhibits are furnished with this Annual Report and are not deemed filed with the Securities and Exchange Commission and are not incorporated by reference in any filing of Roku, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date hereof and irrespective of any general incorporation language contained in such filings.

+ Indicates a management contract or compensatory plan or arrangement.

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 Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized, on this 18th day of February 2022.

Roku, Inc.

By: /s/ Anthony Wood
Anthony Wood
President and Chief Executive Officer
(Principal Executive Officer)

By: /s/ Steve Louden
Steve Louden
Chief Financial Officer
(Principal Financial and Accounting Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Anthony Wood and Steve Louden, and each of them, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her 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 he or she might or could do in person, hereby ratifying and confirming that all said attorneys-in-fact and agents, or any of them or their or his or her 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, as amended, this Annual Report has been signed below by the following persons on behalf of the Registrant in the capacities and on the dates indicated.

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ ANTHONY WOOD</u> Anthony Wood	President, Chief Executive Officer and Chairman (Principal Executive Officer)	February 18, 2022
<u>/s/ STEVE LOUDEN</u> Steve Louden	Chief Financial Officer (Principal Financial and Accounting Officer)	February 18, 2022
<u>/s/ RAVI AHUJA</u> Ravi Ahuja	Director	February 18, 2022
<u>/s/ MAI FYFIELD</u> Mai Fyfield	Director	February 18, 2022
<u>/s/ JEFFREY HASTINGS</u> Jeffrey Hastings	Director	February 18, 2022
<u>/s/ LAURIE SIMON HODRICK</u> Laurie Simon Hodrick	Director	February 18, 2022
<u>/s/ NEIL HUNT</u> Neil Hunt	Director	February 18, 2022
<u>/s/ GINA LUNA</u> Gina Luna	Director	February 18, 2022
<u>/s/ RAY ROTHROCK</u> Ray Rothrock	Director	February 18, 2022