

**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, 2023

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

4841

26-2087865

(State or other jurisdiction of incorporation or organization)

(Primary standard industrial code number)

(I.R.S. employer identification no.)

1173 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

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

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

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

As of June 30, 2023, 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 approximately \$7.1 billion. 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, 2024, the registrant had outstanding 126,162,538 shares of Class A common stock, \$0.0001 par value per share and 17,359,398 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 "Proxy Statement") for the 2024 Annual Meeting of Stockholders. The Proxy Statement will be filed with the Securities and Exchange Commission within 120 days of the registrant's fiscal year ended December 31, 2023.

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GLOSSARY OF SELECTED TERMS

As used in this Annual Report on Form 10-K (“Annual Report”), unless the context otherwise requires, references to the following terms have the respective meaning as defined below.

Active Accounts: The number of distinct user accounts that have streamed content on our platform within the last 30 days of the period. See Item 7, Management’s Discussion and Analysis of Financial Condition and Results of Operations, Key Performance Metrics, elsewhere in this Annual Report for additional detail.

Ad-supported Video on Demand (AVOD): Streaming content supported by advertising that does not charge a fee.

Apps: Primarily refers to the direct-to-consumer streaming applications on the Roku platform (e.g., The Roku Channel or Netflix). We also use “apps” to refer to mobile applications (such as our Roku Smart Home app).

Average Revenue per User (ARPU): 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. See Item 7, Management’s Discussion and Analysis of Financial Condition and Results of Operations, Key Performance Metrics, elsewhere in this Annual Report for additional detail.

DSP: A demand-side platform (such as Roku’s OneView ad-buying platform), which allows buyers of digital advertising inventory to manage multiple ad exchange and data exchange accounts across multiple platforms through one interface.

FAST: Free, ad-supported linear streaming TV, which does not include on-demand content.

Licensed Roku TV partners: TV original equipment manufacturers (“OEMs”) that license the Roku OS and leverage our smart TV reference designs to build TVs.

Linear TV: A TV format that provides programming at specifically scheduled times.

Premium Subscriptions: Subscription-based streaming services from content partners (e.g., Paramount) offered through The Roku Channel.

Roku-branded TVs: TVs powered by the Roku OS that are designed, made, and sold by Roku. Roku-branded TVs include the Roku Select, Roku Plus, and Roku Pro Series TVs.

Roku home screen: The first screen the viewer sees when they begin streaming with a Roku streaming device. The viewer is also returned to the home screen by pressing the home button on the Roku remote or when exiting apps.

Roku home screen menu: The left-hand navigation bar on the Roku home screen.

Roku Originals: Original content programming created by Roku.

Roku OS: Roku operating system that is purpose built for TV and powers Roku streaming devices.

Roku Pay: Our proprietary payments solution that handles method of payment, account information, and billing for the associated Active Account. Roku Pay enables content publishers to provide users with quick and easy purchases on the Roku platform without having to enter their payment information. It also enables users to easily sign up for subscription-based streaming apps (on those that have Roku Pay enabled).

Roku TV models: TVs powered by the Roku OS that are made and sold by our licensed Roku TV partners.

Streaming: The distribution of video, music, or other media content via the Internet.

Streaming device: Any device that enables streaming. For Roku, this encompasses Roku streaming players, Roku TV models, and Roku-branded TVs.

Streaming Hours: The aggregate amount of time streaming devices stream content on Roku’s streaming platform in a given period. See Item 7, Management’s Discussion and Analysis of Financial Condition and Results of Operations, Key Performance Metrics, elsewhere in this Annual Report for additional detail.

Streaming platform: The technology that delivers the viewer experience and streaming apps (e.g., The Roku Channel and Netflix) over an internet connection to a user’s TV.

Streaming players: A device that connects to a TV to enable streaming (such as the Roku Express, Roku Express 4K, Roku Streaming Stick 4K, Roku Ultra, Roku Streambar SE, Roku Streambar, and Roku Streambar Pro).

Smart TV: A television that is connected to the internet through an operating system (e.g., the Roku OS).

Subscription Video on Demand (SVOD): Streaming content that is available on demand, requires a paid subscription, and can be ad-supported or ad-free.

TV streaming: The act of streaming content over the internet on a TV.

The Roku Channel: Roku’s owned and operated streaming service. The Roku Channel aggregates three types of content—AVOD, FAST, and Premium Subscriptions—within The Roku Channel app and through viewing experiences integrated throughout the Roku platform (e.g., Live TV on the home screen menu).

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This 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. In some cases, forward-looking statements may be identified by words such as "aim," "anticipate," "believe," "continue," "could," "design," "developing," "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 profitability;
- the impact of macroeconomic conditions, uncertainties and geopolitical conflicts on our business, operations, and the markets and communities in which we and our advertisers, content partners, licensed Roku TV partners, other device licensees, manufacturers, suppliers, retailers, and viewers operate;
- our ability to attract and retain viewers and increase Streaming Hours;
- our ability to attract and retain advertisers;
- our ability to attract and retain TV brands, manufacturing partners, and service operators to license and deploy our technology;
- our ability to produce or acquire rights to distribute popular content on our streaming platform on favorable terms, or at all, including the renewals of our existing agreements with content partners;
- changes in TV 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 expand our products and services into adjacent markets, scale our operations in these markets, and do so profitably over time;
- 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;
- our ability to obtain financing on favorable terms, or at all;
- our ability to manage the selling prices of our products to increase Active Accounts; 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.

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 by hours streamed.

We pioneered streaming to the TV. We believe that all TV will be streamed. The shift of the TV ecosystem to streaming continues and is expanding TV’s capabilities for viewers, content partners, advertisers, and other industry participants. Nearly every major media company not only has a streaming service, but has also expanded beyond pure subscription streaming models to new ad-supported streaming options. Advertisers use TV streaming to reach viewers who are increasingly unreachable on traditional TV while also benefiting from the digital advertising capabilities that TV streaming platforms can deliver.

Our Mission

Our mission is to be the global TV streaming platform that connects and benefits the entire TV ecosystem of viewers, content partners, and advertisers. Through our TV streaming platform, we connect viewers to the entertainment they love; enable content partners to build, engage, and monetize large audiences; and provide advertisers with unique capabilities to reach viewers.

Our Strategy and Business Model

The foundation of our platform is the Roku operating system (the “Roku OS”), which is purpose built for TV streaming, and powers Roku streaming devices. The Roku OS is designed to run on low-cost hardware, which enables Roku streaming devices to be sold to customers at competitive prices. The Roku OS connects viewers to our streaming platform via a broadband network, giving them access to a wide selection of content through a streaming experience that is both delightful and easy to use. We provide updates via the Roku OS to continuously deliver an exceptional TV streaming experience.

We dedicate significant resources to build, maintain, and advance the Roku OS; to provide an industry-leading streaming platform for our viewers, content partners, and advertisers; to obtain content for our streaming platform that attracts viewers, including our own original programming (Roku Originals); and to extend Roku’s leadership as the global shift to TV streaming continues.

Our three-phased business model—grow scale, grow engagement, and grow monetization—drives our mission as a global streaming platform that connects and benefits the TV ecosystem of viewers, content partners, and advertisers. We leverage our ownership of our streaming platform to help our viewers find content across the streaming universe, while simultaneously growing monetization.

Scale: Increasing the number of Active Accounts

We make access to TV streaming affordable through a broad lineup of devices, at a variety of competitive price points, including Roku TV models, Roku-branded TVs, and Roku streaming players.

Roku TV models are TVs made and sold by our Roku TV partners, which are TV original equipment manufacturers (“OEMs”) that license the Roku OS and leverage our smart TV reference designs. We have driven strong Active Account growth through our Roku TV licensing program, which we launched 10 years ago.

In 2023, we launched Roku-branded TVs, which are designed, made, and sold by us. The Roku Select and Roku Plus Series TVs are available at Best Buy, Amazon, and Costco in the United States, and the Roku Pro Series TV is expected to be available in spring 2024. Roku-branded TVs complement our successful Roku TV licensing program. We believe our Roku-branded TVs will enable us to further grow our leadership position in TV streaming and expand into the higher-end range of performance TVs. Roku-branded TVs will also help us innovate more quickly in all aspects of hardware and software and test directly with viewers, improving the product and viewer experience and strengthening the entire Roku ecosystem.

Roku streaming players enable users to easily turn (nearly) any TV into a smart TV. On a periodic basis, we launch new streaming player models with a focus on offering high performance at an affordable price.

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 streaming players to their subscribers in their markets.

The Roku ecosystem extends beyond TV streaming to smart home devices that include cameras, video doorbells, a home monitoring system, plugs, light bulbs, and light strips, along with our Roku Smart Home mobile application for iOS and Android. Similar to our TV streaming business model, we build scale by selling Roku Smart Home devices and then monetize through smart home services. We offer subscription plans for our cameras, video doorbells, and home monitoring system.

Audio is an important part of the TV streaming experience, and we also offer Roku-branded wireless speakers and subwoofers that seamlessly connect to TVs powered by the Roku OS.

Through our streaming devices and the Roku platform, we provide viewers tremendous choice, value, and an exceptional viewer experience. In 2023, we added 10.0 million net Active Accounts, ending the year with 80.0 million Active Accounts.

Engagement: Growing Streaming Hours

We believe that offering viewers a wide range of content and an easy-to-use interface drives increased user engagement. We grew Streaming Hours from 87.4 billion hours in 2022 to 106.0 billion hours in 2023 through the increased distribution of Roku streaming devices, increasing our Active Accounts, and continuing to enhance our viewer experience.

One of the key competitive advantages driving our success is our position as a TV streaming platform that has achieved significant scale—our home screen is the first thing our viewers see when they start their TV streaming journey. From this position, we can help the viewer decide what to watch across the vast range of options available to them on our streaming platform. We innovate and build features to support this critical role in the viewer’s journey, and it is a key driver of our monetization.

The Roku Home Screen Menu (left navigation bar) contains features such as Live TV, Sports, and What to Watch, and in 2023 we launched enhancements to make it even easier for viewers to find and discover great entertainment. For example, we are enabling more personalization through recommendations and features that allow viewers to track TV shows, movies, and sports teams. Additionally, Roku’s powerful universal search makes it fast and easy when viewers are looking for specific content.

We also empower viewers to choose how much they want to spend on content by offering them a broad array of ad-supported, subscription, and transactional options. Our direct relationship with customers provides us with detailed insights about their behavior on our streaming platform, including certain content viewers search for, the apps viewers install and watch, and the types of content that viewers purchase or subscribe to on our platform. This first party data enables us to develop actionable insights such as content recommendations to improve our viewers’ experience.

Our significant scale, ability to reach highly engaged viewers, tools that enable seamless sign ups, and marketing/discovery features make us an attractive platform to content partners. They can also reach and engage those viewers who no longer use or never used traditional TV services. As more viewers shift to TV streaming, content partners that publish apps on our platform are able to reach these streaming audiences at scale and engage viewers directly.

One of the key engagement drivers on our streaming platform is The Roku Channel, our owned and operated streaming app. The Roku Channel aggregates a broad variety of entertainment into a unified streaming experience, through three distinct types of content:

- **AVOD** (ad-supported video on demand): Users can stream a broad variety of 80,000+ movies and TV shows, including Roku Originals, for free.
- **Live TV**: Users have access to watch 400+ FAST (free, ad-supported linear streaming TV) channels.
- **Premium Subscriptions**: Users can easily sign up, view, and manage subscriptions to dozens of streaming services that require a subscription such as Paramount+ and AMC+ with a single, monthly bill.

The Roku Channel benefits from its integration with our streaming platform, which has features such as Live TV, Sports, What to Watch, and more that can surface content from The Roku Channel to our viewers directly from our home screen and throughout a viewer’s streaming journey on our platform. In 2023, The Roku Channel was a top 5 app on our platform by both Active Account reach and Streaming Hours.

The foundation of our content strategy for The Roku Channel is third party licensed content and, to a smaller extent, Roku Originals. Our content spend is intended to be commensurate with the growth trajectory of The Roku Channel and with the broader macroeconomic environment. The Roku Channel is available on devices powered by the Roku OS in the United States, the United Kingdom, Canada, and Mexico. In the United States, it is also available online at TheRokuChannel.Roku.com, and on Amazon Fire TVs, Samsung TVs, Google TV, and other Android TV OS devices.

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

We generate platform revenue primarily from the sale of digital advertising (including direct and programmatic video advertising, media and entertainment promotional spending, and related services), as well as streaming services distribution (including subscription and transaction revenue shares, the sale of Premium Subscriptions, and the sale of branded app buttons on remote controls). Previously, we referred to streaming services distribution as content distribution services. Our TV streaming platform enables content partners and advertisers to reach audiences that are increasingly unreachable on traditional TV. Each user on our streaming platform creates multiple revenue opportunities for Roku through activities such as navigating through the Roku home screen, watching ad-supported content, or signing up for subscription services. 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 gross profit.

We make it easy for content partners to distribute and monetize their streaming content through three primary business models: subscription video on demand (“SVOD”), which includes subscriptions to individual video on demand apps and so-called virtual multichannel video programming distribution (“vMVPD”) services; ad-supported video, which includes ad-supported video on demand (“AVOD”) apps 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; and transaction video on demand, which includes apps that offer a la carte content purchases or rentals. Through Roku Pay, our proprietary billing solution, we are also able to assist content partners with billing services, including billing users for in-app purchases like content rentals, managing subscriptions, and customer invoices. Roku Pay allows content partners to enable a frictionless signup within their app, and we believe this key benefit simplifies user subscription signups and drives purchase and retention for our content partners.

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

Just as ads evolved decades ago when TV replaced radio as the primary entertainment medium, ads on TV streaming offer new and more performant opportunities than traditional TV. We offer advertisers a unique and effective set of tools to reach viewers both on and off our streaming platform. Advertisers are able to leverage the combination of our significant scale, our direct relationship with viewers, and our advertising capabilities to serve relevant advertisements. Advertisers on our platform also can measure both the effectiveness of the ads served and their return on investment.

We are developing new and deeper relationships with third-party ad-buying platforms (retail media networks, demand-side platforms (“DSPs”), and other strategic partners) to meet marketers where they currently are buying programmatic advertising. At the same time, our specialized ad products (such as Shoppable Ads, the Kroger Shopper Program, native ad formats, and our audience guarantees) are accessible only on our advertising platform. This overall approach protects our strategic assets, while creating additional demand opportunities for our ad inventory. Advertisers can use third-party DSPs or OneView (our ad-buying platform) to set up, make changes, and measure ad campaigns entirely on their own.

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 traditional TV. Additional promotional advertising opportunities include content sponsorships that give viewers the opportunity to experience a free movie or show and sponsored themes in our viewer experience and shoppable ads that allow viewers to buy products directly from the TV screen. With shoppable ads, we are adding more performant tools and more partnerships to expand the capabilities we can offer advertisers.

The Roku Channel is also a core strategic asset in our monetization efforts that simultaneously benefits viewers, content partners, and advertisers, while generating increasing platform revenue. For viewers, The Roku Channel is a compelling destination for a diverse selection of free and paid entertainment. For content partners, The Roku Channel provides a variety of options to distribute and monetize content through both licensing agreements and Premium Subscriptions. And for both content partners and advertisers, The Roku Channel delivers a large and engaged audience at scale that we believe will continue to grow. Owning and operating both The Roku Channel and the streaming platform creates unique value, making us a leader in free content, positioning us to be a valuable partner to content partners, and providing a large source of ad inventory.

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 further differentiate our streaming platform and increase the value we deliver to our viewers, content partners, and advertisers. We must regularly update and enhance our streaming platform to meet evolving viewer behavior and provide a best-in-class content delivery and advertising platform. We must provide content partners 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. We aim to balance our commitment to achieving positive Adjusted EBITDA for full year 2024 and our investments to further expand our scale, engagement, and monetization.

Advertising Innovation

We continue to innovate our advertising offerings. In 2023, for the first time, Roku City (our dynamic screen saver) was opened for major advertisers in a broader range of verticals, such as McDonald's, Mattel, and Carnival Cruise Line, which have integrated brand-specific visuals into our iconic screen saver. We also announced a number of partnerships to expand the value we can deliver to marketers. For example, we partnered with DoorDash to allow their merchants to place click-to-order offers within their Roku ads, and with Instacart to help consumer-packaged goods (CPG) advertisers measure whether users are purchasing products on Instacart after seeing an ad on our streaming platform. Building on the Shoppable Ad technology that we launched with Walmart in 2022, we partnered with Shopify to enable users to purchase products from Shopify merchants directly from Roku devices. And Spotify partnered with Roku as its first TV streaming partner to introduce video ads in the Spotify app on Roku devices.

International Markets

The shift from traditional TV to TV streaming is a global phenomenon, as it offers viewers better choice and greater control over their entertainment. We believe that the value our business delivers to viewers, content partners, and advertisers is as compelling in international markets as it is in the United States. Today Roku streaming devices are available in 15+ countries. We are the leading TV streaming platform in the United States and Mexico by hours streamed.

Internationally, we continue to grow our footprint and deepen our presence in key markets. In Mexico, we announced RCA as a new Roku TV partner, an 8K Roku TV model with TCL, and new Roku TV models with Philips. Building on our expansion in Latin America, we announced Roku TV models with Caixun in Chile and the launch of RCA Roku TV models in Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua. In the United Kingdom, we announced Roku TV models with JVC (at Currys stores), Polaroid, and Sharp. And in Germany, we expanded our Roku TV program with our third TV OEM partner, Coccaa. In international markets, we will continue to focus on building scale first, increasing engagement, and ultimately driving monetization.

We are successfully growing The Roku Channel internationally. The Roku Channel is available on devices powered by the Roku OS in the United Kingdom, Canada, and Mexico. Mexico has become the channel's largest international market. With strong scale and engagement, and the launch of our digital advertising business in 2022, we have begun to monetize in Mexico.

Sales and Marketing

We engage in a wide variety of sales and marketing activities to continuously grow scale, 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 partners, advertisers, TV brands, retailers, and service operators, and driving sales of our products and our licensed Roku TV partners' products 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 our streaming platform among content partners, 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 partners and advertisers as well as for our consumer marketing campaigns. Our relationship with content partners is typically client-direct. Through our dedicated content partner relationship management team, we enter into agreements with content partners to distribute their apps on our platform, or license their content for The Roku Channel, or both. As part of our distribution agreements with AVOD apps, we typically secure direct access to a portion of the content partners' video ad inventory for our monetization, and our sales efforts are differentiated and complementary to that of our content partners. Whereas our content partners typically feature their brand and content in their sale, we focus on delivering a large streaming audience across many apps and via other Roku branded experiences such as our home screen 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.

We are developing relationships with more third-party ad-buying platforms (e.g., retail media networks, DSPs, and other strategic partners) to reach marketers buying programmatic advertising on such platforms and to create more demand opportunities for Roku ad inventory. Our sales teams and products are organized into 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 partners and entertainment brands, (iv) performance and direct-to-consumer brands, (v) international markets, and (vi) local advertising.

We work with our licensed Roku TV partners to assist in all phases of the development of Roku TV models, including planning, manufacturing, and marketing. In the United States, the majority of our products and our licensed Roku TV partners' products 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 (excluding Roku TV models). We also sell products internationally through distributors and to retailers. Amazon, Best Buy, and Walmart collectively accounted for 71% of our devices revenue for the year ended December 31, 2023 and 67% of our devices revenue for the year ended December 31, 2022. 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 device sales. Our revenue and gross profit are traditionally strongest in the fourth quarter of each fiscal year and represent a higher 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 streaming device sales through retailers in an effort to grow our Active Accounts, which typically reduce our devices gross margin or results in a devices gross loss in the fourth quarter.

Research and Development

Our research and development model relies on a combination of in-house staff and outsourced development and manufacturing partners to cost-effectively improve and enhance our platform, and to develop new TVs, players, audio products, smart home devices, features, and functionality. We work closely with content partners, advertisers, licensed Roku TV partners, and service operators to understand their current and future needs. We have designed a product development process that seeks to take input from our partners into account when making decisions about our future product and service offerings. In addition, we solicit user feedback in the development of new features and enhancements to our platform. We intend to continue to invest significantly in research and development to bring new or improved products and services to market.

Manufacturing

We outsource the manufacturing of our products to our contract manufacturers, original design manufacturers, and other contractors and vendors. All of our products are manufactured 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 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 manufacturers ship our products to our third-party warehouses in the United States and to our distributors in the United Kingdom and Brazil where we ship our products directly to retailers, wholesale distributors, and consumers.

Government Regulation

Our business and our products 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 protections, often bringing enforcement actions for unfair acts or deceptive practices related to privacy and security. 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, and regulators' interpretations of these laws, 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 partners 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 local content quotas or 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, 2023, we had approximately 1,300 issued patents and 500 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 building scale by growing our Active Accounts, growing engagement by increasing the hours of content streamed through our platform, and growing the monetization of the activities that viewers engage in through our platform.

Our competitors include:

- companies that offer TV streaming devices that compete with Roku streaming devices 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 as 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 viewers on other content and advertising mediums, including on other ad-supported streaming services and social media apps;
- companies that offer users other sources for news and entertainment, including broadcast and cable television networks, newspapers and magazines, social networks, and video games;
- companies that offer products that compete with our audio products or our smart home products and services; and

- companies that operate in the same locations as our offices or offer remote work positions that may be better able to 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. Increasingly, we also compete with these same publishers in seeking to sell advertising to support the distribution of streaming content. A number of leading content publishers have launched new ad-supported subscription tiers, which offer consumers access to content either for free or for a lower subscription fee.

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, 2023, we employed approximately 3,150 full-time employees located in 15 countries. Only our employees in Brazil are represented by a labor union with respect to their employment. The majority of our employees have adopted a hybrid work schedule (consisting of both in-person work and working from home).

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. We also emphasize integrity, transparency, and honesty in our internal and external conduct of business. All employees are required to comply fully with our Code of Conduct and Business Ethics, which sets forth our values, business culture, and practices.

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 leverage 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.

Diversity, Equity, and Inclusion

We are committed to being a diverse and inclusive organization. Since the launch of our formal diversity, equity, and inclusion (“DEI”) strategy in 2020, we have made considerable progress on elevating awareness of DEI, promoting dialogue and empathy, implementing employee resource groups, and expanding representation on The Roku Channel and the Roku platform.

Our dedicated Inclusion Strategy team partners across Roku’s global footprint to develop strategies and lead coordinated initiatives that advance inclusive employee and viewer experiences. Our four-part DEI framework includes four pillars: Employee Experience, Attract and Source, Leading Inclusively, and Customer Experience.

Employee Experience: We facilitate an inclusive employee experience through our pay equity analysis, learning and development offerings, internal and external communications, employee resource groups (“ERG”), and mentoring. In 2023, we continued our U.S. pay equity analysis to help ensure we pay fairly and equitably across gender and ethnicity, year over year. Our six voluntary and employee-led ERGs are highly engaged and foster a diverse and inclusive workplace, build internal community, encourage career growth and networking, and support social impact partnerships. In 2023, we delivered DEI offerings in the areas of bias, inclusive conversations, bridging gaps across differences, and allyship. Our DEI Talks series featured a diverse group of tech and entertainment and media leaders. We also increased the frequency of DEI communications to amplify our commitment, both internally and externally.

Attract and Source: Our Inclusive Recruiting Program Manager and DEI specialists embedded within our Talent Acquisition team directly contribute to our efforts to be inclusive. In addition, every member of our Talent Acquisition team is trained on how to source, engage, and recruit candidates from different backgrounds. To that end, our recruiters are equipped to discuss DEI best practices with hiring managers to ensure we continue to widen the candidate pipeline for all roles and create inclusive recruiting experiences. Furthermore, our U.S. university recruiting and intern programs embed DEI into their strategies so that our recruiting pipelines include historically black colleges and universities, Hispanic-serving institutions, and underrepresented clubs and programs across other schools where we recruit.

Our external relationships are also focused on organizations that reflect underrepresented communities, including technical and non-technical women and underrepresented minority organizations, to enable our hiring managers and recruiters to attend or speak at related conferences, share our job descriptions, and tell our employer brand story to a wider audience.

Leading Inclusively: Our leaders are instrumental in sustaining inclusive employee and customer experiences. We seek to increase opportunities for leaders to demonstrate inclusive leadership. Members of our executive management team volunteer to serve as executive sponsors for our ERGs, while additional leaders volunteer to be executive advocates or chairs. We are also building inclusive leadership awareness into our training and people manager resources and communications.

Customer Experience: As a TV streaming platform with both U.S. and international viewers, we believe our customer experiences should reflect the diversity of our customers. We offer a slate of “inclusion zones” (including Black Voices, Pride, Latino Voices, Women’s Voices, and Asian and Pacific Islander Voices) on the Roku platform that highlight and celebrate related stories from various content providers.

Community Engagement and Social Impact

We have developed a Social Impact program that engages our local communities through employee volunteerism. Our program partners with organizations that provide opportunities for employees to mentor high school students through activities such as career panels, industry masterclasses, and hands-on science, technology, engineering, and math (STEM) challenges.

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 our new hires’ speed to productivity. In addition to mandatory training covering anti-harassment, anti-discrimination, and privacy, we offer employees a suite of highly encouraged training offerings covering topics such as high-performance feedback, career development, change management, and communication skills. Managers are provided with training on expectations for managers and have access to a 1:1 leadership coaching program 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 opportunity, we consider what that employee would be paid by another employer, what we would have to pay to replace that employee if the employee leaves Roku, and the amount we would pay to retain that employee. 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 generally do not pay cash bonuses (other than to employees eligible for sales commissions) or have performance-based equity awards because our employees are expected to work at the highest level.

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 our 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 a website (www.sec.gov) that contains reports, proxy and information statements, and other information regarding companies (including Roku) 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;
- the acceptance and growth of streaming TV advertising and advertising platforms;
- our ability to further monetize our streaming platform;
- our ability to successfully run our demand-side platform and work with other third-party demand sources;
- our ability to develop, maintain, and expand relationships with licensed Roku TV partners, manufacturing partners, and service operators;
- our ability to establish and maintain relationships with important content partners;
- popular or new content publishers not publishing their content on our streaming platform;
- the non-renewal or early termination of our agreements with content partners;
- maintaining an adequate supply of quality video advertising inventory on our platform and effectively selling the available supply;
- content partners electing not to participate in platform features that we develop;
- irrelevant or unengaging advertising or media and entertainment promotional spending campaigns on our platform;
- our operation of The Roku Channel;
- users signing up for offerings and services outside of our platform;
- our and our licensed Roku TV partners’ ability to develop, maintain, and expand relationships with important retail sales channels that we and they rely on to sell our streaming devices and other 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 introduction of new products and services;
- our and our licensed Roku TV partners’ reliance on contract manufacturers and limited manufacturing capabilities;
- our reliance on licensed Roku TV partners’ operations for the supply of Roku TV models;
- 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 products and our licensed Roku TV partners’ products;
- our ability to obtain key components from sole source suppliers;
- interoperability of our products with content partners’ and other third parties’ offerings, technologies, and systems;
- detecting hardware defects and software errors in our products before they are released to end users;
- component manufacturing, design, or other defects that may render our products permanently inoperable;
- our ability to obtain or maintain necessary or desirable third-party technology licenses;
- our use of artificial intelligence (“AI”) technologies in some of our products and services;

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 secure funds to meet our financial obligations and support our planned business growth;
- adverse developments affecting financial institutions, including bank failures;

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 our collection, storage, and use of personal and confidential information related to the users of our products and services;
- 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

- intellectual property infringement claims and litigation resulting in significant costs or 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 impact of macroeconomic conditions, natural disasters, geopolitical conflicts, or other natural or man-made catastrophic events on our business;

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;
- litigation, claims, regulatory inquiries, investigations, and other legal proceedings;

Risks Related to Ownership of Our Class A Common Stock

- the dual class structure of our common stock;
- volatility in the market 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 price 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

The TV streaming industry 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 our streaming platform and compete successfully with these companies, it will be difficult for us to attract and retain users and our business will be harmed.

The TV streaming industry 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 user 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 partners, and advertisers. We also must effectively support popular sources of streaming content that are available on our platform, such as Amazon Prime Video, Disney+, Hulu, Max, 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 Roku streaming devices made by us and our licensed Roku TV partners. 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, increase Streaming Hours, and monetize our streaming platform. 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 and Charter Communications (and their joint venture, Xumo, LLC), offer TV streaming applications and devices as part of their cable service plans and can leverage their existing user bases, installation networks, broadband delivery networks, and name recognition to gain traction in TV streaming. If viewers of TV streaming content prefer alternative products to Roku streaming devices, we may not be able to achieve our expected growth in Active Accounts, Streaming Hours, platform 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 continue to increase in the future. This increased competition could result in pricing pressure, lower revenue and gross profit, or the failure of Roku streaming devices, our platform or our other products 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 and unknown future developments may require further investments in the development of Roku streaming devices, our platform and our other products. We may not have sufficient resources to continue to make the investments needed to maintain our competitive position. In addition, many 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 our own lines of Roku-branded smart home products and services, including indoor and outdoor cameras, video doorbells, smart lighting, smart plugs, and home monitoring products, and audio products, including wireless speakers and subwoofers. As a result, we face additional competition from other brands of smart home products and audio products. If these products do not operate as designed or do not enhance the TVs powered by the Roku OS or other viewing experiences as we intend, our users' overall viewing experience may be diminished, and this may impact the overall demand for our products and our partners' Roku TV models.

Our future growth depends on the acceptance and growth of streaming TV advertising and advertising platforms.

We operate in a highly competitive advertising industry and compete for revenue from advertising with other streaming platforms and services, including social media and other digital 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. For example, Netflix, Disney+, and Amazon Prime Video have launched ad-supported tiers in their streaming services, which has further increased competition for streaming advertising revenue. 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 reach, and maintaining a strong 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 advertising in traditional media or on other digital platforms, such as traditional TV, radio, print publications, and social media. The future growth of our business depends on the growth of streaming TV advertising and on advertisers increasing their spending on advertising on our platform. Although traditional TV advertisers have shown growing interest in streaming TV advertising, we cannot be certain that their interest will continue to increase or that they will not revert to traditional TV advertising or shift their advertising spending to social media and other digital platforms (rather than to us). In addition, if we are unable to compete with social media and other digital platforms to win business from advertisers and advertising 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 streaming TV 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 or regulatory pressure in some countries to limit streaming TV advertising (including limiting the advertising that may be associated with children's content) or impose local content requirements on streaming TV services, which 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 partners. We generate platform revenue primarily from the sale of digital advertising (including direct and programmatic video advertising, media and entertainment promotional spending, and related services) and streaming services distribution (including subscription and transaction revenue shares, the sale of Premium Subscriptions, and the sale of branded app buttons on remote controls). As such, we are seeking to expand the number of Active Accounts and increase Streaming Hours 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 Roku streaming device 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 app may continue to play content for a period of time determined by the streaming app (although all Roku devices include a Roku OS feature that is designed to identify when content has been continuously streaming on an app for an extended period of time without user interaction, which periodically prompts the user to confirm that they are still watching the selected app and closes the app if the user does not respond affirmatively).

Our ability to deliver advertisements relevant to our users and to increase our platform's value to advertisers and content partners depends on the collection of user engagement data, which may be restricted or prevented by a number of factors, including the evolving data protection legal landscape. Users may decide to opt out or restrict our ability to collect viewing data or to provide them with more relevant advertisements. Content partners 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 apps to improve the relevancy of advertisements provided to our users.

Other apps 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 apps by allowing users to purchase additional content and streaming services within their apps; when users purchase these additional services within these apps, we may earn less revenue than when the services are purchased directly from us. If our users spend most of their time within particular apps 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. Additionally, our distribution agreements with our most popular apps are renegotiated periodically; thus, even if we are currently able to monetize Streaming Hours within an app, we may not be able to do so in the future. If we are unable to further monetize our streaming platform, our business may be harmed.

Our efforts to monetize our streaming platform through ad-supported content may not continue to grow as we expect, and our platform revenue growth has been, and may continue to be, lower than expected due to advertisers significantly curtailing or pausing advertising spending due to inflationary pressures, recessionary fears or other reasons that are out of our control. In addition, advertisers' spending commitments, such as those we obtain in connection with annual TV Upfront presentations, are typically not fully binding, and the revenue we receive from such commitments may be less than the initially committed amount. This means that in order to materially increase the monetization of our streaming platform through the sale of video advertising, we will need to attract significantly more advertising dollars to our streaming platform as well as deliver ad-supported content that results in our users streaming significantly more ad-supported content. 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 not successful in running a demand-side platform ("DSP") or in working with other third-party demand sources, our business may be harmed.

Through OneView (our proprietary DSP) and other third-party demand sources (such as third-party DSPs and supply-side platforms), advertisers and advertising agencies can programmatically purchase and manage their streaming TV, desktop, and mobile advertising campaigns both on and off the Roku platform. The market for programmatic streaming TV ad buying is an evolving market, and our current and potential advertisers and advertising agencies may not continue to shift to programmatic ad buying from other buying methods as quickly as we expect or at all. If the market for programmatic streaming TV ad buying deteriorates or develops more slowly than we expect, advertisers and advertising agencies may not use OneView or other third-party demand sources, and our business could be harmed. If we are unable to expand our programmatic demand by maintaining and developing third-party demand relationships in a way that is competitive with other advertising platforms, our business could be harmed. In addition, if OneView or other third-party demand sources do not have the functionality or services expected by advertisers or advertising agencies, they may take their advertising spend to a non-Roku platform. We also may not be able to adapt to changes or trends in programmatic streaming TV advertising, which would harm our ability to grow our advertising revenue and harm our business.

Our growth depends in part on our ability to develop, maintain, and expand relationships with our licensed Roku TV partners and manufacturing partners and, to a lesser extent, service operators.

We license the Roku OS and our smart TV reference designs to certain TV brand and manufacturing partners for the development, manufacture, and commercialization of licensed Roku TV models. We have developed, and intend to continue to develop and expand, relationships with these TV brand and manufacturing partners. We continue to invest in the growth and expansion of our Roku TV program both in the United States and international markets. For a number of years, the sale of Roku TV models by our licensed Roku TV partners has materially contributed to growth in our Active Accounts and Streaming Hours, and supported our platform monetization efforts. This growth has primarily been driven by North America; however, our Roku TV licensing program has been expanded to certain international markets and has represented an increased share of new Active Accounts. We do not typically receive, nor do we typically expect to receive, license revenue from these arrangements, but we typically incur operating expenses in connection with establishing and supporting 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 thereby enabling us to generate more streaming services distribution and 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 licensed Roku TV partner (including as a result of our launch of Roku-branded TVs that are designed, made, and sold by us) could harm our results of operations, damage our reputation, increase pricing and promotional pressures from other partners and retail distribution channels, increase our marketing costs, and result in the loss of revenue. 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 these relationships, our ability to grow or maintain our business could be adversely impacted.

We have also developed licensing relationships with certain service operators, primarily in international markets; however, this program has been decreasing in scale in recent years, and as a result we have shifted the focus of our international growth to the sale of Roku streaming devices and expanding our Roku TV licensing program. Based on the decreasing scale of our licensing program for service operators, including termination of these relationships, we expect that the number of Active Accounts generated from this program will continue to decline, which may impact the overall growth rate of our Active Accounts in international markets.

Our Roku TV licensing arrangements are complex and time-consuming to negotiate and complete. Our current and potential partners include TV brands, retailers, cable and satellite companies, and telecommunication providers. Under these license arrangements, we generally have limited or no control over the amount and timing of resources these entities dedicate to the relationship. In the past, our licensed Roku TV partners have failed to meet their forecasts and anticipated market launch dates for distributing Roku TV models, and they may fail to meet their forecasts or such launches in the future. If our licensed Roku TV partners or service operator partners fail to meet their forecasts or such launches for distributing licensed streaming devices or choose to deploy competing streaming solutions within their product lines, our business may be harmed.

We depend on a small number of content partners 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 partners have accounted for a significant portion of the hours streamed on our platform. In the fiscal year ended December 31, 2023, the top three streaming services represented almost 50% of all hours streamed in the period. If, for any reason, we cease distributing apps that have historically streamed a large percentage of the aggregate Streaming Hours on our platform, our Streaming Hours, our Active Accounts, or Roku 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 apps, streaming app features, and content. In order to remain competitive, we must consistently meet user demand for popular streaming apps, streaming app features, and content, particularly as we launch new streaming devices, introduce new TVs powered by the Roku OS, or enter new markets, including international markets. If we are not successful in helping our content publishers launch and maintain streaming apps and streaming app features 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 app offerings on a cost-effective basis largely depends on our ability to:

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

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

The non-renewal or early termination of agreements with our content partners may result in the removal of certain apps or app features from our streaming platform and may harm our streaming device sales, Active Account growth, and engagement.

We enter into agreements with all our content partners, which have varying terms and conditions, including expiration dates and rights to terminate under certain circumstances. Our agreements with content partners generally have terms of one to three years and can be terminated before the end of the term by the content partner under certain circumstances, including if we materially breach the agreement, become insolvent, enter bankruptcy, commit fraud, or fail to adhere to the content partners' 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 partners 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 partners before our existing agreements have expired. If we are unable to renew such agreements on a timely basis on mutually agreeable terms, or if a content partner terminates an agreement with us prior to its expiration, we may be required to temporarily or permanently remove certain apps or app features from our streaming platform.

The loss of such apps or app features 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 partners on terms favorable to us, or at all, or if these content partners face problems in delivering their content across our platform, we may lose app partners or users and our streaming device sales, Active Account growth, and engagement may be harmed.

If we are unable to maintain an adequate supply of quality video ad inventory on our platform or generate sufficient demand to 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 apps on our streaming platform. We seek to obtain the ability to sell such inventory from the content partners of such apps. We may fail to attract content partners 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 apps on our platform varies greatly among apps. Accordingly, we may not have access to a significant portion of the video ad inventory on our platform. For certain apps, including YouTube's ad-supported app, we have no access to video ad inventory at this time and we may not secure access in the future. Moreover, when existing SVOD services introduce new ad-supported tiers to their streaming services, we have in the past and in the future may not be able to reach agreement on access to video ad inventory on these tiers on mutually agreeable terms, or at all. 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. Further, even if we have an adequate supply of quality video ad inventory, we may not be able to generate sufficient demand for such ad inventory or sell the ad inventory at our desired price. If we are unable to effectively sell our available video ad inventory, our business may be harmed.

If our content partners 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 partners or meet their requirements. For example, some content partners have elected not to participate in our new home screen menu features or have imposed limits on our data gathering for usage within their apps. In addition, our streaming platform utilizes our proprietary Brightscript scripting language in order to allow our content partners to develop and create apps on our streaming platform. Certain content partners may find other languages, such as HTML5, more attractive to develop for and shift their resources to developing their apps on other platforms. If key content partners do not find our streaming platform simple and attractive to develop apps 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 requirements, our business may be harmed.

If the advertising and media and entertainment promotional spending campaigns on our platform decrease, or the campaigns that run are not relevant or not engaging to our users, our business may be adversely impacted.

We have made, and are continuing to make, investments to engage with more advertisers and content partners, and enable them to deliver more relevant advertising and media and entertainment promotional spending campaigns to our users. However, a small number of content partners historically have accounted for a significant portion of the media and entertainment promotional spending campaigns on our platform, and we believe recent consolidation among content partners has resulted in decreased media and entertainment promotional spending campaigns on our platform. If our content partners continue to decrease the media and entertainment promotional spending campaigns on our platform, our financial condition and operating results may suffer, and our business may be harmed.

In addition, existing and prospective advertisers and content partners 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 partners 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 partners.

If the advertising and media and entertainment promotional spending campaigns on our streaming platform are not relevant, are overly intrusive, or are too frequent and impede the use of our platform, our users may stop using our platform, resulting in a reduction of our Active Accounts and Streaming Hours, which will harm our business, financial condition and operating results.

We are subject to various risks in connection with our operation of The Roku Channel.

We operate The Roku Channel, which offers 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, we previously acquired content rights, including rights to certain projects in development, from the mobile-first video distribution service known as Quibi, and made The Roku Channel 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. We also commission original content that we own and distribute on The Roku Channel. From time to time, we may remove underperforming content from The Roku Channel and record an impairment change related to such removal, as we did in the third quarter of 2023.

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 is ultimately not appealing to our users and advertisers, usage of The Roku Channel may decline, and our business may be harmed. Further, even if we successfully monetize The Roku Channel in the United States, we may not be successful in monetizing The Roku Channel in international markets.

In addition, we produce 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 apps on our platform, our business may be harmed.

We earn revenue by acquiring subscribers for certain of our content partners activated on or through our platform, including Premium Subscriptions on The Roku Channel, which allow our users to pay for content from various content partners. 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 partners or by other means for which we do not receive attribution, our business may be harmed.

In addition, certain apps available on our platform allow users to purchase additional streaming services from within those apps. 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-app transactions at the expense of stand-alone purchases through our platform, our business may be harmed.

We and our licensed Roku TV partners depend on retail sales channels to effectively market and sell our respective products, and if we or our partners fail to maintain and expand effective retail sales channels, we or our partners could experience lower product sales.

To continue to grow our Active Accounts, we must maintain and expand retail sales channels for our products and for the Roku products sold by our partners or licensees. The majority of our products and our licensed Roku TV partners’ products 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 certain products directly through our website and internationally through distributors and retailers such as Coppel in Mexico, Magazine Luiza in Brazil, MediaMarkt in Germany, and Currys in the United Kingdom. As we have only recently expanded to certain international markets, we may not have established a strong reputation or relationships with retailers for those markets as compared to our retail sales channels in the United States or our competitors in international markets.

Our retailers and distributors also sell products that compete with our products and our licensed Roku TV partners' products, including house-branded televisions sold by such retailers that utilize TV operating systems other than the Roku OS. We have no minimum purchase commitments or long-term contracts with any of these retailers or distributors, and there can be no assurance that we will reach agreements with our retailers and distributors on terms we find acceptable or that will be consistent with our past practices. We may be reliant on certain retailers or distributors. Amazon, Best Buy, and Walmart in total accounted for 71% and 67% of our devices revenue for the fiscal year ended December 31, 2023 and December 31, 2022, respectively. Furthermore, our licensed Roku TV partners may be reliant on the same retailers and distributors or other retailers and distributors for a significant portion of their unit sales of Roku TV models. If one or several retailers or distributors were to discontinue selling our products or our licensed Roku TV partners' products, choose not to prominently display those products in their stores or on their websites, or close or severely limit access to their brick and mortar locations, the volume of our products or our licensed Roku TV partners' products sold could decrease, which would harm our business. These risks may be exacerbated by our reliance on certain retailers or distributors, or when a major retailer in a jurisdiction commercializes televisions under brands that the retailer controls.

In addition, if any of our existing licensed Roku TV partners choose to work exclusively with, or divert a significant portion of their business with us to, other operating system developers, this may adversely impact our ability to continue to license the Roku OS and our smart TV reference design to TV brands and to grow Active Accounts and monetize the Roku OS. 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, smart TVs, and smart home devices, is able to market and promote these products more prominently on its website, and could refuse to offer or promote our products on its website. Any reduction in our ability to place and promote our products, or increased competition for available shelf or website placement, could require us to increase our marketing or other expenditures to maintain our product visibility or could 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 products 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 our brand may be negatively impacted by factors that are out of our control, such as the quality and reliability of the Roku TV models made by our licensed Roku TV partners and the quality of the content that our content partners provide. Our competitors may be able to achieve and maintain brand awareness and consumer demand for their products 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, which may adversely affect our ability to attract and retain users and harm our business.

Our streaming platform allows our users to choose from a wide variety of apps, representing a variety of content from a wide range of content partners. Our users can choose and control which apps they download and watch, and they can use certain settings to prevent apps from being downloaded to Roku 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 apps that include controversial content. Controversies related to the content included on certain apps 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. Further, 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, advertisers, content partners, and licensed Roku TV partners, which could harm our business.

Our users depend on our customer support organization to resolve issues relating to our products and our streaming platform. A high level of support is critical for the success of our business. We currently outsource the majority of our customer support operation to a third-party customer support organization which provides support to end users. In addition, we train our licensed Roku TV partners and service operator licensees to provide first-level customer support to users of Roku TV models and other devices. 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 monetize our streaming platform, to sell our products to users and could harm our reputation with potential new customers and our licensees.

We must continue to innovate and develop new and existing products and services to remain competitive, and new products and services expose our business to new risks.

We must continually innovate and improve our products and services and develop new products and services to meet changing consumer demands. The introduction of a new product or service is a complex task, involving significant expenditures in research and development, promotion, and sales channel development, and can expose our business to new risks. The introduction of new products and services or changes to our existing products and services may result in new or enhanced governmental or regulatory scrutiny, new litigation or claims, or other complications that could adversely affect our business, reputation, or financial results. For example, we have faced and may continue to face new intellectual property infringement claims related to new products and services we have introduced. In addition, our entrance into entirely new lines of business beyond our historical core business of TV streaming and advertising, such as our launch of Roku-branded smart home products (including home monitoring products) and shoppable ads that allow users to purchase advertised products and services directly from their Roku streaming devices, may change our risk profile and subject us to risks that differ from the risks we face as a result of our historical TV streaming business. In particular, the provision of home monitoring services is a highly regulated industry where various licensing requirements may apply in each jurisdiction where such services are offered.

Whether users will broadly adopt our new products or services is not certain. Our future success will depend on our ability to develop new and competitively priced products and services and add new desirable content and features to our streaming platform. Moreover, we must introduce new products and services in a timely and cost-effective manner, and we must secure production orders for new products from our contract manufacturers. The development of new products and services is a highly complex process, and we do not expect that all of our projects will be successful.

The successful development and introduction of new products and services 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 or security 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;
- the ability of our contract manufacturers to produce quality products and minimize defects, manufacturing mishaps, and shipping delays;
- our ability to obtain required licenses and comply with other regulatory requirements; 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 or services in a timely or cost-effective manner, and our business may be harmed.

We do not have our own 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, smart home products, and Roku-branded TVs. Our contract manufacturers are vulnerable to, among other issues:

- capacity constraints;
- reduced component availability;
- production, supply chain, or shipping disruptions or delays, including from labor disputes, strikes, mechanical issues, quality control issues, natural disasters, geopolitical conflicts, and public health crises; 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 products.

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

We also rely upon our contract manufacturers and other contractors to perform some of the development work on our products. The contract manufacturers or other contractors may be unwilling or unable to successfully complete desired development or fix defects or errors in a timely manner. Delays in development work by contract manufacturers or contractors 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 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 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 devices gross margin.

In addition, our contract manufacturers' facilities, and the facilities of our contract manufacturers' suppliers, are located in various geographic areas that may be subject to political, economic, labor, trade, public health, social, and legal uncertainties, including Taiwan, Vietnam, China, and Brazil, and such uncertainties may harm or disrupt our relationships with these parties or their ability to perform. For example, if the tensions between Taiwan and China escalate and impact the operations of our contract manufacturers and their Taiwanese suppliers, our supply chain and our business could be adversely affected. 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 licensed Roku TV partners encounter problems with their internal operations or with their contract manufacturers, assemblers, or component suppliers.

Some of our licensed Roku TV partners have internal manufacturing capabilities, while others rely primarily or exclusively upon contract manufacturers to build the Roku TV models that our licensed Roku TV partners sell to retailers. Regardless of whether their manufacturing capabilities are internal or contracted, our licensed Roku TV partners' manufacturers may be vulnerable to capacity constraints and reduced component availability; increases in tariffs on imports of Roku TV models; future possible changes in regulations on exports: restrictions, by the United States or otherwise, on dealings with certain countries, companies, or imported inputs; tariffs on parts or components for Roku TV models; and supply chain disruptions and shipping delays.

Our licensed Roku TV partners' control over delivery schedules, manufacturing yields, and costs, particularly when components are in short supply, may be limited. For those licensed Roku TV partners with contract manufacturers or suppliers, the problems are exacerbated because the contract manufacturer is a third party, and the licensed Roku TV partner does not have direct visibility into or control over the operations. Delays, component shortages, and other manufacturing and supply problems could impair the manufacture or distribution of Roku TV models. Interruptions in the supply of Roku TV models to retailers and distributors or increases in the pricing of Roku TV models at times have negatively affected, and could adversely affect in the future, the volume of Roku TV models sold at retail, resulting in slower Active Accounts and Streaming Hours growth.

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

If we fail to accurately forecast our manufacturing requirements for our products 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 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 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 or the use of particular components. If we incur costs to cover excess supply commitments, our business may be harmed.

Conversely, if we underestimate our product requirements, our contract manufacturers may have inadequate material or component inventory, which could interrupt the manufacturing of our 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 our products via air freight, which is more expensive than ocean freight, and adversely affected our devices gross margin during such periods of high demand (for example, during end-of-year holidays). If we fail to accurately forecast our manufacturing requirements, our business may be harmed.

Our 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 products. For example, each of our streaming players and TVs powered by the Roku OS 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 a 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 semiconductor shortages, or become subject to U.S. or foreign sanctions or export control restrictions or penalties. Such suppliers have experienced, and may in the future experience, production, shipping, or logistical constraints arising from macroeconomic conditions or other circumstances, such as inflationary pressures, geopolitical conflict, and supply chain disruptions. Such interruptions and delays have in the past and may in the future force us to seek similar components from alternative sources, which may not always be available, and which may cause 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.

If our products do not operate effectively with various offerings, technologies, and systems from content partners and other third parties that we do not control, our business may be harmed.

The Roku OS is designed to perform using relatively low-cost hardware, which enables us to drive user growth via Roku streaming devices offered at a low cost to users. However, this hardware must be interoperable with all apps and other offerings, technologies, and systems from our content partners, including virtual multi-channel video programming distributors, and other third parties. We have no control over these offerings, technologies, and systems beyond our app certification requirements, and if Roku streaming devices 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 Roku streaming devices, 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, including, for example, the Roku-branded TVs we launched in 2023 and our recently announced Roku Pro Series TVs, 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 partners have the right to test and certify our new products before we can publish their apps. The certification processes can be time-consuming and introduce third-party dependencies into our product release cycles. If our content partners 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 licensed Roku TV partners or we may not continue to offer certain apps. To continue to grow our Active Accounts and user engagement, we will need to prioritize development of Roku streaming devices to work better with new offerings, technologies, and systems, including our smart home products and services. If we are unable to maintain consistent operability of Roku streaming 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 partners may impact the accessibility, speed, functionality, and other performance aspects of Roku streaming devices. We may not successfully develop Roku 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 products are complex and may contain hardware defects and software errors, which could manifest themselves in ways that could harm our reputation and our business.

Our products and the products of our licensed Roku TV partners are complex and have contained and may in the future contain hardware defects or software errors. These defects and errors can manifest themselves in any number of ways in our products or our streaming platform, including through diminished performance, security vulnerabilities, data loss or poor quality, device malfunctions, or even permanently disabled products. Some errors may only be discovered after a product has been shipped and used by users and may in some cases only be detected under certain circumstances or after extended use. We update our software on a regular basis, and, despite our quality assurance processes, we could introduce software errors in the process of any such update.

The introduction of a serious software error could result in products becoming permanently disabled. We offer a limited warranty for our products, in accordance with applicable law, however, providing software updates, product support, and other activities could cause us to be responsible for issues with products for an extended period of time. Any defects discovered in our products 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 our end 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 that were unknown to us or over which we have no control and may render our products 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 could cause our products to fail and could 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 or transmitter in a player fails and cannot detect a home network's Wi-Fi access point, the 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 defective products, which could be at a considerable cost and expense. Should we have a widespread problem of this kind, our reputation in the market could also be adversely affected.

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

We utilize or enable certain industry standard and other commercially available technology in our products and streaming platform that is licensed by third parties. As we continue to introduce new features or improvements to our products and on 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 or maintain 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 products, streaming platform, and our business.

We are incorporating AI technologies into some of our products and services, which may present operational and reputational risks.

We have incorporated and intend to continue incorporate AI technologies, such as generative AI, into our products and services. As with many innovations, AI presents risks and challenges that could adversely impact our business. For example, AI technologies can create accuracy issues, unintended biases, and discriminatory outcomes, or may create content that appears correct but is inaccurate or flawed. If the recommendations, content, or analyses that AI applications produce are or are alleged to be deficient or inaccurate, we could be subjected to competitive harm, potential legal liability, and brand or reputational harm. The legal and regulatory landscape surrounding AI technologies is rapidly evolving and uncertain, including in the areas of intellectual property, cybersecurity, and privacy and data protection. For example, there is uncertainty around the validity and enforceability of intellectual property rights related to the use, development, and deployment of AI technologies. Compliance with new or changing laws, regulations or industry standards relating to AI may impose significant operational costs and may limit our ability to develop, deploy or use AI technologies. There can be no assurance that the measures we have taken to mitigate the potential risks related to generative AI will be sufficient. Failure to appropriately respond to this evolving landscape may result in legal liability, regulatory action, or brand and reputational harm.

Risks Related to Operating and Growing Our Business

We have incurred operating losses in the past, and although we have achieved profitability in certain prior quarters, we may continue to incur operating losses in the future and may not be able to achieve profitability again in the near term or at all.

We have incurred operating losses in the past, and we may incur operating losses in the future. Although we achieved profitability in certain prior quarters, we may not be able to achieve profitability again in the near term or at all. As of December 31, 2023, we had an accumulated deficit of \$1,297.6 million. Our operating expenses have increased in the past and may increase again in the future as we 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 achieve profitability again. 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 Accounts, 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 on our advertising platform;
- seasonal, cyclical, or other shifts in revenue from advertising or product sales;
- the timing of the launch of new or updated products, apps, or features;
- the addition or removal of content or apps from our platform;
- 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 products or partner-branded products;
- delays in delivery of our products or partner-branded products, or disruptions in our or our partners' supply or distribution chains; and
- an increase in legal costs, including 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 devices segment (which generates revenue from the sale of streaming players, Roku-branded TVs, smart home products and services, audio products, and related accessories, as well as revenue from licensing arrangements with service operators) experienced negative gross margins for the fiscal year ended December 31, 2023, and our platform segment (which generates revenue from the sale of digital advertising (including direct and programmatic video advertising, media and entertainment promotional spending, and related services) and streaming services distribution (including subscription and transaction revenue shares, the sale of Premium Subscriptions, and the sale of branded app buttons on remote controls)) experienced positive gross margin for the fiscal year ended December 31, 2023. Gross margins on our streaming devices vary across models and can change over time as a result of product transitions, pricing and configuration changes, component costs, device 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 retail sales channel mix, component cost increases, price competition, or the introduction of new products, 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 devices gross margin or record negative gross margin on devices in an effort to increase the number of Active Accounts and grow our gross profit.

As a result, our devices segment revenue may not increase as rapidly as it has historically, or at all, and, unless we are able to continue to increase our platform segment revenue and grow the number of Active Accounts, we may be unable to grow gross profit and our business will be harmed. For example, in the past, global supply chain disruptions have resulted in shipping delays, increased shipping costs, component shortages, and increases in component prices, which negatively affected our devices gross margin. If a reduction in gross margin does not result in an increase in our Active Accounts or an increase in our platform revenue and gross profit, our financial results may suffer, and our business may be harmed. In addition, our platform segment has experienced in the past, and may experience in the future, lower gross margins than we anticipate. If our platform gross margins are lower than we anticipate, 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 may continue to expand certain of these activities. Our historical growth has placed, and any 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 products;
- broaden our customer support capabilities;
- expand our product offerings;
- support our licensed Roku TV 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, including if we grow our business too rapidly, we may not be able to execute our business strategies, which could harm our business and adversely affect our financial condition, results of operations, or cash flows.

We have previously undertaken restructuring plans to adjust our investment priorities and manage our operating expenses, and we may do so again in the future. For example, in 2023, we approved measures to lower our year-over-year operating expense growth rate by consolidating our office space utilization, performing a strategic review of our content portfolio, reducing outside services expenses, and slowing our year-over-year headcount expense growth rate through workforce reductions and limiting new hires, among other measures.

We have incurred, and may in the future incur, material costs and charges in connection with restructuring plans and initiatives, and there can be no assurance that any restructuring plans and initiatives will be successful. Any restructuring plans may adversely affect our internal programs and our ability to recruit and retain skilled and motivated personnel, may result in a loss of continuity, loss of accumulated knowledge, or inefficiency during transitional periods, may require a significant amount of employees' time and focus, and may be distracting to employees, which may divert attention from operating and growing our business. For more information, see Note 17 to the consolidated financial statements in Item 8 of this Annual Report.

If we fail to achieve some or all of the expected benefits of any restructuring plans or are unable to manage our growth and expansion plans effectively, which may be impacted by factors outside of our control, our business, operating results, and financial condition could be adversely affected.

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 products 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 products 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, use of AI technologies, copyright and intellectual property, and local content and advertising requirements, among others;
- exposure to increased corruption risk and compliance with laws such as the U.S. 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 TV services and products, including those provided by incumbent TV service providers and local consumer electronics companies;

- greater difficulty supporting and localizing Roku streaming devices and our streaming platform, including delivering support and training documentation in languages other than English;
- our ability to deliver or provide access to popular streaming apps 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 Russian invasion of Ukraine and the Israel-Hamas war), tariffs, trade disputes, local or global recessions, diplomatic or economic tensions (such as the tension between China and Taiwan), 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;
- any pandemics or epidemics, which could result in decreased economic activity in certain markets, changes in the 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 (see the section titled “Foreign Currency Exchange Rate Risk” in Item 7A of this Annual Report for additional information);
- restrictions on the repatriation of earnings from certain jurisdictions; and
- working capital constraints.

In addition, we may face challenges in successfully deploying our business model in international markets. Three core areas of focus define our business model: first, we grow scale by increasing our Active Accounts; second, we grow engagement by increasing the hours of content streamed through our platform; and, third, we grow monetization of the activities that users engage in through our platform. Even if we are able to increase our Active Accounts in international markets, we may be unable to effectively grow our Streaming Hours or monetize user activity in those markets. Further, as of December 31, 2023, our ARPU was lower in international markets than in the United States. 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 seasons fall below our expectations, our business may be harmed.

Seasonal 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 products through retailers in an effort to grow our Active Accounts, which typically reduce our devices gross margin in the fourth quarter.

Given the seasonal nature of advertising and our product 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, reductions in consumer discretionary spending, curtailed advertising spending, 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, macroeconomic uncertainties and inflationary pressures negatively affected consumer electronics sales during the holiday season in 2023. In addition, delays or disruptions at U.S. ports of entry have in the past, and may in the future, adversely affect our or our licensed Roku TV partners’ ability to timely deliver products 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 products 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, workforce participation rates, and unstable political conditions. Our employees, particularly engineers and other product developers, are in demand, and we devote significant resources to identifying, hiring, training, successfully integrating, and retaining these employees. To attract top talent, we generally offer competitive compensation packages before we can validate the productivity of those employees. In addition, many companies now offer a remote or hybrid work environment, which may increase the competition for employees from employers outside of our traditional office locations. To retain employees, we have in the past and may in the future need to increase our employee compensation levels or other benefits in response to competition and other business and macroeconomic factors. 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, past or any additional workforce reductions could harm employee morale and negatively impact employee recruiting and retention.

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, licensed Roku TV 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 partners, advertisers, advertisement agencies, licensed Roku TV 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 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 products 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 products and streaming platform, along with the timing and effort related to the introduction of new platform features, products, the 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.

In addition, we currently have no committed source of financing, and may need to obtain financing via a credit facility in the future. Any future credit agreements we may enter into could require a lien on our assets or contain financial covenants and other restrictions that may limit our operational flexibility or otherwise adversely affect our financial condition. 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.

We maintain cash deposits in excess of federally insured limits. Adverse developments affecting financial institutions, including bank failures, could adversely affect our liquidity and financial performance.

We maintain domestic cash deposits in Federal Deposit Insurance Corporation ("FDIC") insured banks that exceed the FDIC insurance limits. We also maintain cash deposits in foreign banks where we operate, some of which are not insured or are only partially insured by the FDIC or similar agencies. Bank failures, events involving limited liquidity, defaults, non-performance, or other adverse developments that affect financial institutions, or concerns or rumors about such events, may lead to liquidity constraints. For example, in 2023, Silicon Valley Bank failed and was taken into receivership by the FDIC. The failure of a bank, or other adverse conditions in the financial or credit markets impacting financial institutions at which we maintain balances, could adversely impact our liquidity and financial performance. There can be no assurance that our deposits in excess of the FDIC or other comparable insurance limits will be backstopped by the U.S. or applicable foreign government, or that any bank or financial institution with which we do business will be able to obtain needed liquidity from other banks, government institutions, or by acquisition in the event of a failure or liquidity crisis.

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, user video and audio recordings, 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 complying with requirements regarding 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 services 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 user video and audio recordings), 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, and have been, 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, improper employee access of confidential data, and inadvertent employee disclosure 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. The geopolitical conflicts stemming from the Russian invasion of Ukraine and the current unrest in the Middle East have increased the risk of malicious attacks on information technology operations globally, including for companies headquartered in the United States, that could materially disrupt our systems and operations, supply chain, and ability to produce, sell, and distribute our devices and services.

Most of our employees now have a hybrid work schedule (consisting of both in-person work and working from home). Although we have implemented work from home protocols, 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 use of personal and private 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.

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 partners', 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. We cannot assure you that we will not be impacted by ransomware, cybersecurity attacks, or other vulnerabilities in the future.

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 security incidents may not be covered by our insurance policies, and not all aspects of a security incident may be covered even where coverage exists. 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 streaming platform, streaming devices, smart home products, website, computer systems, or 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 products 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 and partners 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), other consumers, employees, job applicants and partners, and we rely on third-party service providers to collect, process, transmit, and store personal or confidential information (including our users’ payment card data and video and audio recordings). 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 and deliver relevant advertising and personalized content for ourselves and on behalf of our partners on our products.

We collect information about the interaction of users with our platform, devices, website, advertisements, and content partners’ streaming apps. 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 partners, 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 or collect categories of personal information deemed sensitive. 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 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 will continue to monitor the implementation and evolution of data protection regulations, but if we are not compliant with 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 20 million euros or 4% of the annual global revenue of a noncompliant company, whichever is higher, 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. 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, the California Consumer Privacy Act (“CCPA”) 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 amended the CCPA and became effective on January 1, 2023 (with a “look-back” to January 1, 2022), and among other things, requires the establishment of a dedicated agency to regulate and enforce the CCPA.

Furthermore, rules governing new technological developments, such as developments in generative AI, remain unsettled. Several national and local governments have proposed or enacted measures related to the use of AI technologies in products and services. For example, in the EU, there is a proposed regulation related to AI that is proceeding towards adoption. If adopted, this regulation could impose new and substantial obligations related to the use of AI-related systems. In the United States, there similarly is growing interest among federal, state, and local policymakers with respect to potential legislation, regulation and/or guidance to address perceived concerns with the rapid uptake of AI technologies. The rules and regulations adopted by policymakers over time may require us to make changes to our business practices.

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. Among other things, such restrictions are likely to increase the number of users to whom we cannot serve targeted advertising, and are likely to restrict our ability to collect and process certain types of information deemed sensitive under these new laws. The Canadian province of Quebec has also recently enacted a data protection law, known as Bill 64, that may similarly restrict our data processing activities.

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. After a period of uncertainty concerning certain mechanisms for data transfers to the United States, on July 10, 2023, the European Commission adopted an adequacy decision concerning a new framework for data transfers from the EEA to the United States, known as the EU-U.S. Data Privacy Framework (“EU-U.S. DPF”).

That decision recognizes that the United States ensures an adequate level of protection for personal information transferred from the EEA to organizations participating in the EU-U.S. DPF. The United Kingdom has made a similar determination, providing a means by which data transfers may take place between the U.S. and the United Kingdom. That framework is known as the UK Extension to the EU-U.S. DPF, and it went into effect on October 12, 2023. Roku is currently evaluating participation in the EU-U.S. DPF and the UK Extension.

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 CPRA, 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 as well as the teams of our service providers and partners for the performance and operation of the Roku OS, streaming platform, smart home products, and computer systems. For example, our smart home product line is reliant on (among other things) the engineering and software development teams and information technology systems of the service providers we use to assist in the design, manufacture, and maintenance of those products. Service interruptions, errors in our software, or the unavailability of computer systems used in our operations could diminish the overall attractiveness of our products 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, could result in liabilities to our customers or third parties, and could adversely affect our business. Our property insurance and cyber liability insurance may not be sufficient to fully cover our losses or may not cover a particular event at all. 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, zero rating of competing services by ISPs, 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 users with access to the internet also offer users 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 and claims regarding intellectual property rights could result in the loss of rights important to our products 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 and may seek to challenge the validity or enforceability of our own patents and patents applications. The cost of patent litigation or other proceedings, even if resolved in our favor, has been and is expected to 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's attention from our other business concerns or otherwise adversely affect our business and operating results. 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, thereby hindering our ability to sell or use the relevant technology, or requiring redesign of the allegedly infringing solutions to avoid infringement, which could be costly, time-consuming, or impossible. 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 discover such breaches, and if we do, 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.

There can be no assurance that the particular forms of intellectual property protection that we seek, including business decisions about when to file patents and when to maintain trade secrets, will be adequate to protect 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 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. Foreign patent laws may also continue to develop and significantly impact our ability to protect or maintain our intellectual property. Any invalidation of a patent claim could have a significant impact on our ability to protect the innovations contained within our products 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. Despite the cost and time we spend monitoring, we may or may not be able to detect infringement by third parties. Our competitive position may be harmed if we cannot detect infringement and enforce our intellectual property rights quickly or at all. 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. In some circumstances, we may choose to not pursue enforcement because an infringer has a dominant intellectual property position or for other business reasons.

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 products and our streaming platform or could result in public disclosure of competitively sensitive trade secrets.

We incorporate open-source software in our proprietary software. From time to time, companies that have incorporated open-source software into their products and services have faced claims challenging the ownership of certain open-source software or compliance with open-source software license terms. Therefore, we could be subject to similar suits by parties claiming ownership of what we believe to be open-source software or our noncompliance with the open-source software license 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 appropriately 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 our products or technology or impose unanticipated obligations that could require the disclosure of trade secrets. Some open-source software is governed by licenses containing conditions that any person who distributes or uses a modification or derivative work of software that was subject to an open-source license make the modified version subject to the same open-source license. Distributing or using software that is subject to this kind of open-source license can lead to a requirement that certain aspects of our solutions be distributed or made available in source code form. In such event, we could be required to make portions of our proprietary software generally available under similar open-source software license terms to third parties, including competitors, at low or no cost, to seek licenses from third parties in order to continue offering our products, to re-engineer our products, or to discontinue the sale of our products in the event re-engineering cannot be accomplished on a timely basis or at all, any of which could harm our business.

Further, use of open-source software can involve greater risks than those associated with use of third-party commercial software, as open-source licensors generally do not provide warranties, assurances of title, performance, non-infringement, or controls on the origin of the software. Open-source software typically lacks support, and authors of such open-source software may abandon further development and maintenance. Open-source software may contain security vulnerabilities and other liabilities, and we may be subject to additional security risk by using open-source software. We have established processes to help alleviate these risks, but there can be no assurance that these processes will alleviate all risks with the open-source software we incorporate.

Under our agreements with many of our content partners, 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 partners, 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 or other property 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 licensed Roku TV 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

Macroeconomic uncertainties have in the past and may continue to adversely impact our business, results of operations, and financial condition.

Macroeconomic uncertainties, including increased inflation and interest rates, recessionary fears, financial and credit market fluctuations, changes in economic policy, bank failures, labor disputes, the COVID-19 pandemic, and global supply chain constraints have in the past, and may continue to, adversely impact many aspects of our business. For example, our business is dependent on consumer discretionary spending and advertising spending, both of which are susceptible to changes in macroeconomic conditions, such as growing inflation, rising interest rates, recessionary fears, and economic uncertainty. Sustained or worsening inflation or an economic downturn may result in fewer consumer purchases of our products or the products of our licensed Roku TV partners (which could impact our Active Account growth) and reduced advertising spending (which could impact our monetization efforts). We believe advertising budgets in a variety of industries have been pressured by factors such as inflation, rising interest rates, and related market uncertainty, which has led to reduced advertiser spending, which has adversely affected our platform revenue. Any continued pullback in consumer discretionary spending or advertising spending could adversely affect our future operating results. In addition, a significant reduction in the supply of original entertainment content, including as a result of macroeconomic factors or labor disputes (such as the 2023 strikes called by the Writers Guild of America and SAG-AFTRA), could in turn reduce the demand for advertising and media and entertainment promotional spending campaigns on our platform, and have a material adverse effect on our growth in Active Accounts and Streaming Hours or negatively impact our results of operations.

The extent to which macroeconomic uncertainties may continue to impact our operational and financial performance remains uncertain and will depend on many factors outside our control. These direct and indirect impacts may negatively affect our business and operating results.

Natural disasters, geopolitical conflicts, or other natural or man-made 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 Russian invasion of Ukraine and the Israel-Hamas war), terrorist attack and other geopolitical conflicts (such as Yemen's Houthis attacks in the Red Sea), medical epidemic or pandemic (such as the COVID-19 pandemic), government shutdown orders, other man-made disasters, or other catastrophic events could disrupt our, our business partners' and customers' business operations or result in disruptions in the broader global economic environment. 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 licensed Roku TV 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 licensed Roku TV partners as a result of a disaster or other catastrophic event could delay the manufacture and shipment of our products or the products of our licensed Roku TV partners, 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 natural 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 the reference design of TVs powered by the Roku OS, 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 we or our licensed Roku TV partners may be unable to sell TVs powered by the Roku OS 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, children's online 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. Certain state laws, such as the CCPA, the CPRA, and the Virginia Consumer Data Protection Act, also impose 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, the EU has adopted the Digital Services Act, which is legislation that updates the liability and safety rules for digital platforms, products, and services. The EU also recently adopted the Data Act, which seeks to enhance interoperability and facilitate data sharing and reuse across products and services.

Regulatory investigations and enforcement actions could also impact our business operations. For example, we and other companies in the media, entertainment, and advertising technology industries have been subject to government investigation by regulatory bodies with regard to our compliance with data privacy and security laws. Advocacy organizations have also filed complaints with data protection authorities against businesses with streaming apps and advertising technology, arguing that certain of these companies' practices do not comply with the CCPA or other regulations. Such investigations or enforcement actions may require us to alter our practices. Further, if we or the third parties that we work with, such as contract payment processing services, content partners, vendors, or developers, violate or are alleged to violate applicable privacy or security laws, laws concerning access to data, 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 content partners 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 partners at risk for claims under various unsettled laws, including the Video Privacy Protection Act ("VPPA"). Some of our content partners 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, in 2019, the FTC 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. Following this review, in December 2023, the FTC issued a formal Notice of Proposed Rulemaking that proposes specific revisions to the COPPA rule and seeks additional public input. Among other topics, the FTC has proposed rule changes that would prohibit targeted advertising to children absent express opt-in consent from parents, strengthen data security requirements for children's personal information, and limit the period during which children's personal information can be retained. The review has not been concluded and could result in broadening the applicability of COPPA and other changes.

There have also been proposals in the U.S. Congress to amend and expand COPPA. Changes to the COPPA legislation or rules could limit the information that we or our content partners and advertisers may collect and use and the content of advertisements in relation to certain app partner content. The CPRA and certain other state privacy laws also impose certain opt in and opt out requirements before certain information about minors can be collected. California also has adopted a new law known as the Age Appropriate Design Code Act, which has a stated purpose of protecting "the well being, data, and privacy of children using online platforms." A federal district court in California granted a preliminary injunction preventing that law from going into effect during the pendency of litigation challenging it on constitutional grounds, and the California Attorney General has since asked a federal appeals court to lift that injunction. At the same time, since adoption of the California law, similar legislation has been introduced for consideration in other U.S. states. The EU and many of its member states, among other jurisdictions, also have rules that limit processing of personal information, including children's data, and that impose specific requirements intended to protect children online. We and our content partners and advertisers could be at risk for violation or alleged violation of these and other privacy, advertising, children's online protection, 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. Following Russia's invasion of Ukraine, the United States and other countries imposed economic sanctions and severe export control restrictions against Russia and Belarus, and the United States and other countries could impose wider sanctions and export restrictions and take other actions should the conflict further escalate. In addition, the effects of Brexit on EU-UK political, trade, economic, and diplomatic relations continue to be uncertain and such impact may not be fully realized for several years or more. Continued uncertainty and friction may result in regulatory, operational, and cost challenges to our international operations.

These and other trade disputes, geopolitical tensions, or political uncertainty can disrupt supply chains and increase the cost of our and our partners' products, and have a negative impact on consumer confidence, which could impair our future growth and adversely affect our international operations, business, financial condition, and results of operations.

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 products 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. In addition, there are inherent limitations to the effectiveness of any policies, procedures and internal controls relating to such compliance, and there can be no assurance that such procedures or internal controls will work effectively at all times or protect us against liability under anti-corruption, sanctions or other laws for actions taken by us, our retailers or partners. Any such potential violation by us, our retailers, or our partners could have negative consequences, including government investigations, enforcement actions, monetary fines, or civil and/or criminal penalties, and our reputation, brand, and revenue may be harmed.

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. 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, and broadband service providers' ability to control the delivery speed of different content traveling on their networks. 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. In September 2023, the FCC formally proposed to restore the 2015 open internet rules and re-establish the FCC's role in overseeing broadband providers, although some representatives of broadband providers have already stated that they may challenge such a decision in court.

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. In addition, in some jurisdictions (including the United States), network operators are pursuing proposals that would require or enable them to impose fees on content providers related to delivery of network traffic.

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”), Section 230 of the Communications Decency Act (“Section 230”) 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 apps 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 our stock price 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.

The generally accepted accounting principles in the United States 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 litigation, claims, regulatory inquiries, investigations, and other legal 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 various legal proceedings, claims, arbitration proceedings, and investigations and inquiries from government entities, including with regard to intellectual property, employment, consumer and data privacy, corporate governance, and commercial disputes, among other matters. These matters are inherently uncertain. Any proceedings, claims, or inquiries initiated by or against us, whether successful or not, may be time-consuming, subject us to damage awards, regulatory orders, consent decrees, injunctive relief, fines, or other penalties or sanctions, require us to change our policies or practices, result in increased operating costs, divert management's attention, harm our reputation, and require us to incur significant legal and other expenses. In addition, our insurance may not be adequate to protect us from all material expenses related to pending and future claims. Any of these factors could materially adversely affect our business, financial condition, and results of operations.

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 has 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, 2023, Mr. Wood controls a majority of the combined voting power of our Class A and Class B common stock even though he only owns 12.2% of the outstanding Class A and Class B common stock. As a member of our Board of Directors (our “Board”), 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 market 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 market 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 partners;
- changes in laws or regulations applicable to our products 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;
- the perception that our environmental, social, and corporate governance performance is inadequate compared to that of our competitors;
- 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 addition, we and other companies that have experienced volatility in the market price of their stock have been, and may in the future be, subject to securities class action litigation or derivative litigation. 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 market 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 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 market 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, on committees of our Board, 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, any future credit agreement we enter into could contain 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 our company, 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 so that not all directors are elected at one time;
- permitting our Board 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 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 1C. Cybersecurity

Cybersecurity Risk Management and Strategy

Our enterprise-wide approach to risk management is designed to support the achievement of our organizational and strategic objectives and improve long-term organizational performance. Cybersecurity is a critical component of our enterprise risk management approach, and cybersecurity risks are among the enterprise risks that are subject to oversight by our Board and the Audit Committee of our Board (the "Audit Committee").

Our cybersecurity program is designed to assess, identify, and manage cybersecurity risks and threats. Key components of our cybersecurity program include:

- managing cybersecurity threats by deploying technical safeguards that are designed to protect our information systems from cybersecurity threats, which we evaluate and seek to improve, including through vulnerability assessments and cybersecurity threat intelligence;
- maintaining cybersecurity incident management procedures to address incident reporting, classification, escalation, response, and recovery, and facilitate efficient and consistent management of cybersecurity incidents involving our information systems;
- assessing and testing our cybersecurity policies and practices via internal efforts (such as assessments, vulnerability testing, threat modeling, tabletop exercises, and other exercises focused on evaluating the effectiveness of our cybersecurity measures) and by engaging third parties (including cybersecurity consulting firms) to perform assessments of our cybersecurity measures;
- a third-party cybersecurity risk management process, including, among other things, a security assessment and contracting process for vendor applications and implementing contractual security measures with third-party vendors; and
- cybersecurity awareness training for all employees and enhanced training for certain employees.

Cybersecurity Governance

As part of its broader risk oversight activities, the Board oversees risks from cybersecurity threats, primarily through delegation to the Audit Committee. As reflected in its charter, the Audit Committee assists the Board in reviewing our significant cybersecurity matters and concerns. The Audit Committee engages on cybersecurity matters with our management team, including our Vice President of Trust Engineering, who regularly provides presentations to the Audit Committee on our cybersecurity program and cybersecurity risks. These presentations address a range of topics including, for example, the threat landscape and cybersecurity events, vulnerability assessments, incident preparedness assessments, disaster recovery plans, and cybersecurity awareness training. Two additional members of our Board, who have cybersecurity experience but are not members of the Audit Committee, are invited to attend Audit Committee meetings when review of our cybersecurity program is on the agenda. In addition, the full Board receives regular updates on the activities of the Audit Committee, including with regard to cybersecurity oversight.

Our Vice President of Trust Engineering is principally responsible for overseeing our cybersecurity risk management program, in partnership with other members of management. Our Vice President of Trust Engineering has served in various roles in cybersecurity and information technology for over 30 years, including as Vice President and Chief Security Architect of Intertrust Technologies Corporation and Java Security Architect at Sun Microsystems, Inc.

In addition, our Executive Incident Management Team ("EIMT") is a cross-functional management committee focused on providing executive guidance on the cybersecurity incident response process to facilitate an appropriate and timely response, make decisions related to cybersecurity incidents, and notify appropriate parties with relevant cross-functional expertise in the event of a cybersecurity incident.

Our Trust Engineering team is responsible for the day-to-day identification, assessment, and management of information security risks and provides regular updates to our Vice President of Trust Engineering regarding the prevention, detection, mitigation, and remediation of cybersecurity incidents. Cybersecurity incidents are escalated to our Vice President of Trust Engineering, the EIMT, and the Chair of our Audit Committee in accordance with our cybersecurity incident management procedures, so that decisions can be made regarding incident reporting and disclosure in a timely manner.

Notwithstanding our cybersecurity risk management and governance, we may not be successful in preventing or mitigating a cybersecurity incident that could have a material adverse effect on us. While our business strategy, results of operations, and financial condition have not been materially affected by risks from cybersecurity threats, including as a result of previously identified cybersecurity incidents, we cannot provide assurance that they will not be materially affected in the future by such risks or any future material incidents. For more information regarding the cybersecurity risks we face, see Item 1A, Risk Factors, elsewhere in this Annual Report, under the caption “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.”

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.

Holders of Record

As of December 31, 2023, there were approximately 70 stockholders of record of our Class A common stock and 15 stockholders of record of our Class B common stock. The actual number of stockholders of our Class A common stock is greater than the number of record holders and includes stockholders who are beneficial owners but whose shares of Class A common stock are held in street name by banks, brokers, and other nominees.

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.

Sale of Unregistered Securities and Use of Proceeds

None.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

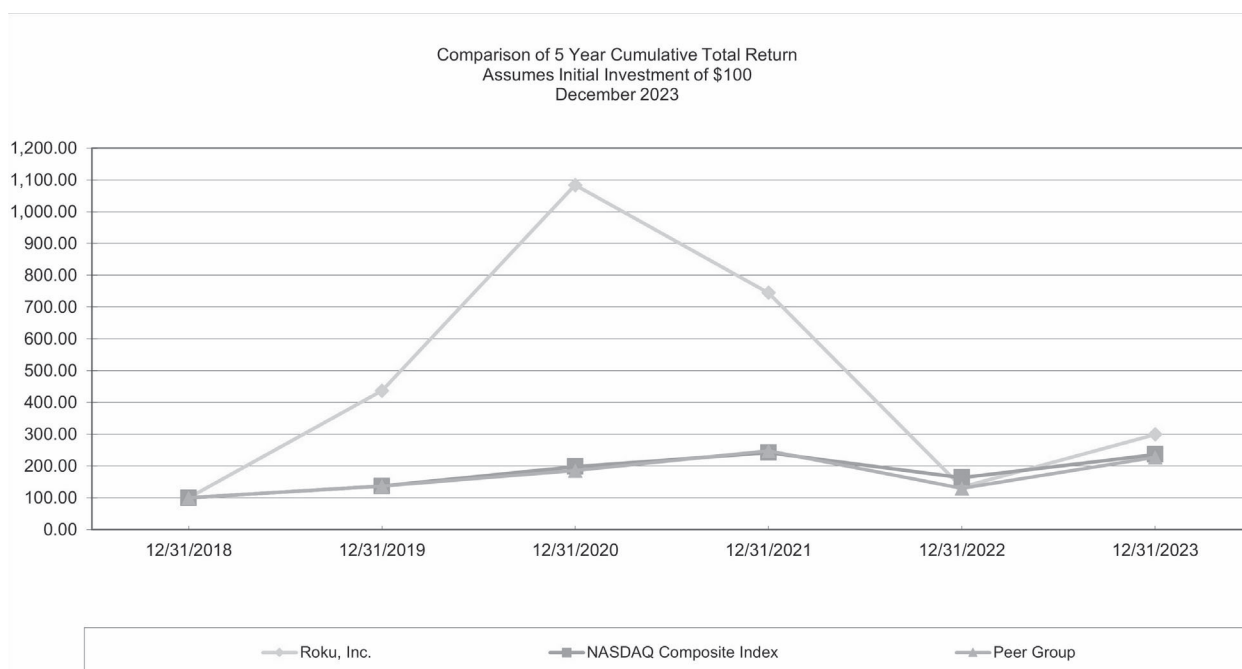
None.

Stock Performance Graphs and Cumulative Total Return

The following graph shows the cumulative total stockholder return of an investment of \$100 in cash from December 31, 2018 through December 31, 2023, for (i) our Class A common stock, (ii) the Nasdaq Composite Index, and (iii) the Peer Group of companies described below. Because no published index of comparable 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.

Our Peer Group consists of Alphabet, Inc., Fox Corp, fuboTV, Inc., Interpublic Group of Companies, Inc., LiveRamp Holdings, Inc., Magnite, Inc., Meta Platforms, Inc., Netflix, Inc., Paramount Global, Pinterest, Inc., Pubmatic, Inc., Snap, Inc., Tradedesk Financial Corp, Vizio Holding Corp, Walt Disney Co., and Warner Bros. Discovery, Inc.

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-18	Dec-19	Dec-20	Dec-21	Dec-22	Dec-23
Roku, Inc.	\$100	\$437	\$1,084	\$745	\$133	\$299
Nasdaq Composite Index	\$100	\$137	\$198	\$242	\$163	\$236
Peer Group	\$100	\$136	\$186	\$247	\$129	\$227

Source: Prepared by Zacks Investment Research, Inc. Used with permission. All rights reserved. Copyright 1980-2022.

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.

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 2023 and 2022 and year-to-year comparisons between those years. Discussions of fiscal year 2021 and year-to-year comparisons between fiscal years 2022 and 2021 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 Item 7 of our Annual Report for the fiscal year ended December 31, 2022 filed with the SEC on February 16, 2023.

Overview

Our two reportable segments are the platform segment and the devices segment. Platform revenue is generated from the sale of digital advertising (including direct and programmatic video advertising, media and entertainment promotional spending, and related services) and streaming services distribution (including subscription and transaction revenue shares, the sale of Premium Subscriptions, and the sale of branded app buttons on remote controls). Streaming services distribution was previously referred to as content distribution services.

Devices revenue is generated from the sale of streaming players, Roku-branded TVs (beginning in March 2023), smart home products and services, audio products, and related accessories as well as revenue from licensing arrangements with service operators. We expect to continue to manage the average selling prices of Roku streaming devices to increase our Active Accounts. We expect that the trade off from devices gross profit or loss to grow Active Accounts will result in increased platform revenue and platform gross profit.

During the fiscal year ended December 31, 2023, as part of our continuing evaluation of our operations, we determined to implement additional measures to continue to bring down our year-over-year operating expense growth rate by consolidating our office space utilization, performing a strategic review of our content portfolio, reducing outside services expenses, and slowing our year-over-year headcount expense growth rate through a series of workforce reductions and limiting new hires, among other measures. We recorded a total restructuring charge of \$356.1 million during the fiscal year ended December 31, 2023 as a result of these actions. See Note 17 to the consolidated financial statements in Item 8 of this Annual Report for additional details.

Business Conditions and Macroeconomic Factors

Macroeconomic factors, such as increased inflation and interest rates, recessionary fears, financial and credit market fluctuations, changes in economic policy, global supply chain constraints, and geopolitical developments (such as the war in Ukraine and the unrest in the Middle East), have had, and we believe may continue to have, an impact on our business and results of operations. We believe that advertisers in a variety of industries reduce their overall advertising spend when they are impacted by these factors, which in turn adversely affects our platform revenue. Higher inflation and economic uncertainty also lead to a reduction in consumer discretionary spending, which impacts our devices revenue. We believe that the direct and indirect impacts of these business conditions and macroeconomic factors are difficult to isolate or quantify. See Item 1A, Risk Factors, and the Note Regarding Forward Looking Statements elsewhere in this Annual Report for additional details.

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. All of our gross profit is generated from our platform segment.

Our gross profit was \$1,522.6 million and \$1,441.1 million for the years ended December 31, 2023 and 2022, respectively, reflecting an increase of 6%.

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. Additionally, users who only register an account for use of one of our smart home products are not included in our reported number of Active Accounts. 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, an Active Account may include more than one individual, such as a family, and one Active Account may include use of multiple Roku streaming devices.

We had 80.0 million and 70.0 million Active Accounts as of December 31, 2023 and 2022, respectively, reflecting an increase of 14%.

Streaming Hours

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 Roku 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. Additionally, smart home products do not contribute to our Streaming Hours. 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 partners is not tied to the hours streamed on their streaming apps, and the number of Streaming Hours does not correlate to revenue earned from such content partners or ARPU on a period-by-period basis. Moreover, Streaming Hours on our platform are measured whenever a Roku streaming device 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 app may continue to play content for a period of time determined by the streaming app. 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 Roku streaming devices include a Roku OS feature that is designed to identify when content has been continuously streaming on an app 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 app and closes the app if the user does not respond affirmatively. We believe that the implementation of this feature across the Roku platform benefits us, our customers, content partners, and advertisers. Some of our leading content partners, including Netflix, also have implemented similar features within their apps. This Roku OS feature supplements these app features. This feature has not had and is not expected to have a material impact on our future financial performance.

We streamed 106.0 billion and 87.4 billion hours during the years ended December 31, 2023 and 2022, respectively, reflecting an increase of 21%.

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 Accounts base and the progress of our platform business.

ARPU was \$39.92 as of December 31, 2023 as compared to \$41.68 as of December 31, 2022, reflecting a decrease of 4%. The decrease in ARPU is due to an increasing share of Active Accounts in international markets where we are currently focused on growing scale and engagement, rather than monetization of our streaming platform.

Components of Results of Operations

Revenue

Platform Revenue

We generate platform revenue from the sale of digital advertising (including direct and programmatic video advertising, media and entertainment promotional spending, and related services) and streaming services distribution (including subscription and transaction revenue shares, the sale of Premium Subscriptions, and the sale of branded app buttons on remote controls). 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 streaming services distribution agreements with our content partners. To supplement supply, we purchase advertising inventory from our content partners, on an as needed basis. To date, we have generated most of our platform revenue in the United States.

Devices Revenue

We generate devices revenue from the sale of streaming players, Roku-branded TVs, smart home products and services, audio products, and related accessories. Our devices revenue also includes licensing arrangements with service operators. We generate most of our devices revenue in the United States. In our international markets, we primarily sell our devices through wholesale distributors which, in turn, sell to retailers.

Cost of Revenue

Cost of Revenue, Platform

Cost of revenue, platform primarily consists of costs associated with acquiring advertising inventory and amortization costs of content, both licensed and produced, and revenue share with content partners. Cost of revenue, platform 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 customer support and platform operations personnel, and amortization of acquired developed technology.

Cost of Revenue, Devices

Cost of revenue, devices is comprised mostly of manufacturing costs payable to third party manufacturers for devices we sell which include streaming players, Roku-branded TVs, audio products and smart home products. Cost of revenue, devices also includes technology licenses or royalty fees on devices we sell, inbound and outbound freight, duty and logistics costs, third-party packaging, inventory provisions, and allocated overhead costs related to facilities, third-party cloud services, 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 salaries, benefits, and stock-based compensation for our development teams as well as outsourced development expenses. In addition, research and development expenses include allocated facilities and overhead expenses.

Sales and Marketing

Sales and marketing expenses consist primarily of 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 support functions. Sales and marketing expenses also include marketing, retail and merchandising expenses, and allocated facilities and overhead expenses.

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 and overhead expenses.

Other Income, Net

For the years ended December 31, 2023 and 2022, other income, 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, transaction gains and losses, and net change in the fair value of the Strategic Investment (as defined in Note 7 to the consolidated financial statements in Item 8 of this Annual Report).

Income Tax Expense

Our income tax expense consists primarily of income taxes in certain foreign jurisdictions where we conduct business and income taxes in the United States. We have a full valuation allowance for deferred tax assets, including net operating losses primarily for the U.S. and any jurisdiction where we do not expect to realize their benefits in the future. 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,		
	2023	2022	2021
Net Revenue:			
Platform	86 %	87 %	82 %
Devices	14 %	13 %	18 %
Total net revenue	100 %	100 %	100 %
Cost of Revenue:			
Platform	41 %	38 %	30 %
Devices	15 %	16 %	19 %
Total cost of revenue	56 %	54 %	49 %
Gross Profit (Loss):			
Platform	45 %	49 %	52 %
Devices	(1)%	(3)%	(1)%
Total gross profit	44 %	46 %	51 %
Operating Expenses:			
Research and development	25 %	25 %	17 %
Sales and marketing	30 %	27 %	16 %
General and administrative	12 %	11 %	9 %
Total operating expenses	67 %	63 %	42 %
Income (Loss) from Operations	(23)%	(17)%	9 %
Other Income, Net:			
Interest expense	— %	— %	— %
Other income, net	3 %	1 %	— %
Total other income, net	3 %	1 %	— %
Income (Loss) Before Income Taxes	(20)%	(16)%	9 %
Income tax expense (benefit)	— %	— %	— %
Net Income (Loss)	(20)%	(16)%	9 %

Comparison of Years Ended December 31, 2023 and 2022

Net Revenue

	Years Ended December 31,		Change \$	Change %
	2023	2022		
<i>(in thousands, except percentages)</i>				
Platform	\$ 2,994,105	\$ 2,711,441	\$ 282,664	10 %
Devices	490,514	415,093	75,421	18 %
Total net revenue	\$ 3,484,619	\$ 3,126,534	\$ 358,085	11 %

Platform

Platform revenue increased by \$282.7 million, or 10%, during the year ended December 31, 2023 as compared to the year ended December 31, 2022, primarily due to an increase in revenue from streaming services distribution, such as revenue share on content subscriptions and Premium Subscriptions through The Roku Channel, which was offset by slightly lower revenue from advertising driven primarily by weakness in media and entertainment promotional spending.

Devices

Devices revenue increased by \$75.4 million, or 18%, during the year ended December 31, 2023 as compared to the year ended December 31, 2022. \$10.0 million of the increase was due to a change in estimated transaction price for a licensing arrangement with a service operator for which performance obligations were satisfied in prior periods and was recognized as revenue during the three months ended March 31, 2023. The remaining increase was driven primarily by the sales of Roku-branded TVs introduced in March 2023 and to a lesser extent by the sales of smart home products, partially offset by lower revenue from sales of streaming players. The volume of streaming players sold decreased by 8% and the average selling price of streaming players increased by 1% during the year ended December 31, 2023 as compared to the year ended December 31, 2022.

Cost of Revenue and Gross Profit

	Years Ended December 31,		Change \$	Change %
	2023	2022		
<i>(in thousands, except percentages)</i>				
Cost of Revenue:				
Platform	\$ 1,427,546	\$ 1,179,675	\$ 247,871	21 %
Devices	534,458	505,737	28,721	6 %
Total cost of revenue	<u>\$ 1,962,004</u>	<u>\$ 1,685,412</u>	<u>\$ 276,592</u>	<u>16 %</u>
Gross Profit (Loss):				
Platform	\$ 1,566,559	\$ 1,531,766	\$ 34,793	2 %
Devices	(43,944)	(90,644)	46,700	(52)%
Total gross profit	<u>\$ 1,522,615</u>	<u>\$ 1,441,122</u>	<u>\$ 81,493</u>	<u>6 %</u>

Platform

The cost of revenue, platform increased by \$247.9 million, or 21%, during the year ended December 31, 2023 as compared to the year ended December 31, 2022. The increase of \$182.4 million was primarily driven by higher costs of acquiring content, higher costs of Premium Subscriptions, and higher credit card processing fees, partially offset by lower content asset amortization and lower cost of advertising inventory. The cost of revenue, platform also includes restructuring charges of \$67.0 million of which \$65.5 million consisted of impairment charges related to removing selected content assets from The Roku Channel.

Gross profit for the platform segment increased by \$34.8 million, or 2%, during the year ended December 31, 2023 as compared to the year ended December 31, 2022, primarily driven by the overall growth in our platform revenue.

Devices

The cost of revenue, devices increased by \$28.7 million, or 6%, during the year ended December 31, 2023 as compared to the year ended December 31, 2022. The increase was primarily driven by higher manufacturing costs of \$8.7 million, higher royalties of \$8.6 million, higher inventory provision of \$2.2 million, and higher other device related costs such as product warranties and overhead cost allocation of \$9.3 million, offset by lower freight costs of \$3.5 million. The increase in manufacturing costs was driven primarily by the cost of Roku-branded TVs that we began selling in March 2023 and the cost of smart home products. The cost of revenue, devices also includes restructuring charges of \$3.3 million that consist of employee severance, facilities exit costs, and asset impairments.

Gross loss for the devices segment decreased by \$46.7 million, or 52%, during the year ended December 31, 2023 as compared to the year ended December 31, 2022. The gross loss was driven by a higher cost of manufacturing of products in the devices segment as compared to the revenue generated from them. We manage the average selling prices of our products to increase our Active Accounts.

Operating Expenses

	Years Ended December 31,			
	2023	2022	Change \$	Change %
<i>(in thousands, except percentages)</i>				
Research and development	\$ 878,474	\$ 788,913	\$ 89,561	11 %
Sales and marketing	1,033,359	838,419	194,940	23 %
General and administrative	403,159	344,678	58,481	17 %
Total operating expenses	<u>\$ 2,314,992</u>	<u>\$ 1,972,010</u>	<u>\$ 342,982</u>	<u>17 %</u>

Research and development

Research and development expenses increased by \$89.6 million, or 11%, during the year ended December 31, 2023 as compared to the year ended December 31, 2022. The increase was primarily driven by higher restructuring charges of \$90.9 million comprised of asset impairments, facilities exit costs, and employee severance. In addition, the increase includes higher office facilities and IT infrastructure expenses of \$7.9 million, offset by lower consulting expenses of \$6.6 million and lower personnel-related expenses of \$3.0 million.

Sales and marketing

Sales and marketing expenses increased by \$194.9 million, or 23%, during the year ended December 31, 2023 as compared to the year ended December 31, 2022. The increase was primarily driven by higher restructuring charges of \$102.8 million comprised of asset impairments, facilities exit costs, and employee severance. In addition, the increase includes higher marketing, retail, and merchandising expenses of \$89.7 million, and higher office facilities and IT infrastructure expenses of \$11.3 million, offset by lower consulting expenses of \$4.8 million, lower other sales and marketing expenses of \$2.7 million, and lower personnel-related expenses of \$1.5 million.

General and administrative

General and administrative expenses increased by \$58.5 million, or 17%, during the year ended December 31, 2023 as compared to the year ended December 31, 2022. The increase was primarily driven by higher restructuring charges of \$53.9 million comprised of asset impairments, facilities exit costs, and employee severance. In addition, the increase includes higher personnel-related expenses of \$5.5 million, and higher office facilities and IT infrastructure expenses of \$2.3 million, offset by lower legal, consulting, and professional services expenses of \$4.8 million.

Other Income, Net

	Years Ended December 31,			
	2023	2022	Change \$	Change %
<i>(in thousands, except percentages)</i>				
Interest expense	\$ (730)	\$ (5,161)	\$ 4,431	(86)%
Other income, net	93,677	43,766	49,911	114 %
Total other income, net	<u>\$ 92,947</u>	<u>\$ 38,605</u>	<u>\$ 54,342</u>	<u>141 %</u>

Other income, net

Total other income, net, increased by \$54.3 million, or 141%, during the year ended December 31, 2023 as compared to the year ended December 31, 2022. The increase was primarily driven by an increase in interest income of \$51.0 million from higher interest rates on our cash balances, an increase in other income of \$8.6 million that includes income recognized related to non-cash consideration associated with the delivery of services as part of a strategic commercial arrangement and an unrealized gain in the fair value of the Strategic Investment, and a reduction in interest expense of \$4.4 million as the Credit Facility (as defined below) was fully repaid in February 2023, offset by an increase in foreign exchange losses of \$9.7 million due to fluctuation in exchange rates.

Income Tax Expense

	Years Ended December 31,		Change \$	Change %
	2023	2022		
(in thousands, except percentages)				
Income tax expense	\$ 10,131	\$ 5,722	\$ 4,409	77 %

Income tax expense

Income tax expense increased by \$4.4 million, or 77%, for the year ended December 31, 2023 as compared to the year ended December 31, 2022. The increase was driven by the increases in foreign taxes primarily due to the increase of taxable earnings in our foreign operations.

Liquidity and Capital Resources

As of December 31, 2023, we had cash and cash equivalents of \$2,025.9 million. Approximately 4% 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 devices revenue. 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 for our products, as well as operating expenses such as personnel-related expenses including employee termination payments, consulting and professional service expenses, facility expenses, and marketing expenses. Other uses of cash include purchases of property and equipment and mergers and acquisitions.

We have pursued merger and acquisition activities in the past, and we may pursue additional merger and acquisition activities in the future, including the acquisition of rights to programming and content assets. Though we do not expect to incur expenses for facilities and building related costs at the same level as the last few fiscal years, we will continue to incur expenses on the maintenance of our facilities and purchases of computer systems, and other property and equipment, in order to support future growth in our business. These activities may materially impact our liquidity and capital resources.

We believe our existing cash and cash equivalents balance 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, uncertainties, including, but not limited to, those detailed in Item 1A, Risk Factors in this Annual Report and the effects of the current macroeconomic environment. While the current macroeconomic environment 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. If we raise additional financing by the incurrence of indebtedness, we may be subject to fixed payment obligations and also to restrictive covenants. Additionally, due to the current macroeconomic environment, we may be unable to obtain debt or equity financing on terms that are acceptable to us.

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 provided 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").

On November 18, 2019, we borrowed an aggregate principal amount of \$100.0 million from the Term Loan A Facility. We elected an interest rate equal to the adjusted one-month LIBOR rate plus an applicable margin of 1.75% based on our secured leverage ratio. The Credit Facility matured on February 19, 2023 and the outstanding Term Loan A Facility was repaid in full.

As of December 31, 2022, we had outstanding letters of credit against the Revolving Credit Facility of \$37.7 million. Upon maturity of the Credit Facility on February 19, 2023, the outstanding letters of credit were secured by our existing cash balance, a portion of which is restricted for that purpose. As of December 31, 2023, we had outstanding letters of credit of \$37.5 million, which are secured by restricted cash of \$40.7 million.

See Note 10 to the consolidated financial statements in Item 8 of this Annual Report for additional details.

Cash Flows

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

	Years Ended December 31,	
	2023	2022
Consolidated Statements of Cash Flows Data:		
Cash flows provided by operating activities	\$ 255,856	\$ 11,795
Cash flows used in investing activities	\$ (92,619)	\$ (201,696)
Cash flows (used in) provided by financing activities	\$ (61,243)	\$ 8,357

Cash Flows from Operating Activities

Our operating activities provided cash of \$255.9 million for the year ended December 31, 2023. Our net loss of \$709.6 million for the year ended December 31, 2023 was adjusted by non-cash charges of \$972.7 million comprised mainly of stock-based compensation, amortization of content assets, depreciation and amortization of property and equipment and intangible assets, amortization of operating right-of-use assets, impairment of assets as part of restructuring charges, and change in fair value of the Strategic Investment.

The changes in our operating assets and liabilities used cash totaling \$7.3 million mainly due to payments made to acquire content, payments made for operating leases liabilities, and an increase in the accounts receivable balance at the end of the year due to higher revenue, offset by an increase in accounts payable and accrued liabilities due to timing of payments, an increase in deferred revenue, a decrease in prepaid expenses, and a decrease in inventory balances at the end of fiscal 2023.

Cash Flows from Investing Activities

Our investing activities for the year ended December 31, 2023 included cash outflows of \$92.6 million consisting of purchases of property and equipment and expenditures related to the expansion of our office facilities of \$82.6 million and an additional investment in the Strategic Investment of \$10.0 million.

Cash Flows from Financing Activities

Our financing activities used cash of \$61.2 million for the year ended December 31, 2023. The cash outflow related primarily to the repayment of \$80.0 million of our Credit Facility that became due in February 2023 offset by \$18.8 million received from proceeds from the exercise of employee stock options.

Material Cash Requirements from Known Contractual Obligations

Our material cash requirements from known contractual obligations as of December 31, 2023 consisted of:

- 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 partners and produce content under contractual arrangements. For additional information regarding 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. Our restructuring efforts to consolidate office space did not materially change our operating lease obligations.

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 \$6.2 million of uncertain tax positions as of December 31, 2023. We adjust these positions when facts and circumstances change, such as the closing of a tax audit or the refinement of an estimate. We are unable to accurately predict when these amounts will be realized or released. Although we believe we have adequately provided for our uncertain tax positions, no assurance can be given that the final tax outcome of these matters will not be materially different.

Critical Accounting 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 based on historical experience, current trends and other factors that we believe to be reasonable at the time our consolidated financial statements are prepared. We evaluate our estimates and assumptions on an ongoing basis. Our actual results could differ from these estimates.

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. Judgment may be required in determining whether products contain multiple distinct performance obligations and whether each should be accounted for separately or as one combined performance obligation.

For arrangements with multiple performance obligations, we allocate revenue to each distinct performance obligation based on its relative stand-alone selling price ("SSP"). Our process for determining SSP requires judgment. For performance obligations routinely sold separately, we consider multiple factors that may vary over time depending upon the unique facts and circumstances related to each performance obligation. We determine SSP based on prices charged to customers for individual products, taking into consideration other factors, which may include (i) historical and expected discounting practices, (ii) the size, and volume of transactions, (iii) the geographic areas in which our products are sold, and (iv) our overall go-to-market strategy. For those performance obligations that are not routinely sold separately, we determine SSP using information that may include market conditions and other observable inputs.

When arrangements have variable consideration, we utilize the expected value method to estimate the amount expected to be received. The amount of variable consideration that is included in the transaction price is constrained to the extent that it is probable a significant reversal in the amount of the cumulative revenue recognized will not occur in a future period. The estimate of the variable consideration is based on the assessment of historical, current, and forecasted performance noted and expected from the performance obligation.

The transaction price in some of our arrangements include non-cash consideration. We determine the fair value of non-cash consideration at contract inception by using historical internal and observable third-party data.

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 devices revenue includes allowances for returns and sales incentives in the estimated transaction price.

Amortization of Content Assets

The amortization expense for content assets (licensed and produced) is based on projected monetization of such content which results in accelerated or straight-lined patterns depending on the nature of the content. Judgment is required to determine the amortization patterns of our content assets which are monetized as a group. Critical judgments include: (i) the predominant monetization strategy of content, (ii) the grouping of content with similar characteristics, and (iii) the application of historical viewership model and projected decay. These judgments and underlying analysis are reviewed regularly and adjusted as needed on a prospective basis.

Impairment of Long-Lived Assets

We review long-lived assets, including property and equipment, right-of-use assets, and intangible assets with finite lives whenever events or changes in circumstances indicate the carrying amount of the asset or asset group to which it relates may not be recoverable. If such facts and circumstances indicate an asset or asset group's carrying amount may not be recoverable, we assess its recoverability by comparing the projected undiscounted net cash flows directly associated with the use and eventual disposition of the asset or asset group against their respective carrying amounts. If the asset or asset group is not recoverable, an impairment loss is recognized based on the excess of the carrying amount over the fair value of the asset or asset group.

During the year ended December 31, 2023, we recognized an impairment charge of \$131.6 million for operating lease right-of-use assets and an impairment charge of \$72.3 million for property and equipment related to a decision to sub-lease and cease the use of certain office facilities and related property and equipment. The impairment was a result of the restructuring efforts announced in the third quarter of fiscal year 2023. See Note 17 for additional details. There were no impairments of property and equipment, right-of-use assets, and intangible assets with finite lives during the years ended December 31, 2022 and December 31, 2021.

Significant judgments and estimates included in the determination of the fair value of the assets were identification of events or changes in circumstances necessitating an impairment assessment, the expected downtime prior to the commencement of future subleases, projected sublease income over the remaining lease periods, and discount rates that reflect the level of risk associated with the expected future cash flows.

Allowances for Sales Returns and Sales Incentives

Our accounts receivable is 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 are subject to income taxes in the U.S. and foreign jurisdictions. We account for income taxes using 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.

In determining the need for a valuation allowance, we assess both positive and negative evidence in the various jurisdictions to determine whether it is more likely than not that our deferred tax assets are recoverable. We regularly assess all available evidence, including cumulative historic losses and forecasted earnings. A valuation allowance is established when it is more likely than not that the deferred tax assets will not be realized. We have established a full valuation allowance for our 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. A change in the assessment of the realizability of deferred tax assets may materially impact our tax provision in the period in which a change of assessment occurs. Release of the valuation allowance would result in the recognition of U.S. federal and state deferred tax assets and a corresponding decrease to income tax expense in the period the release is recorded.

Recent Accounting Pronouncements

The recent accounting pronouncements 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 and cash equivalents. The primary objective of our investment policy is to preserve principal while maximizing income without significantly increasing risk. We believe that an increase or decrease in interest rates of 100 basis points on our cash and cash equivalents balance would impact our interest income by an additional increase or decrease of \$20.7 million.

Foreign Currency Exchange Rate Risk

Most of our revenue is generated within the United States and as such we have minimal foreign currency risk related to our revenue. Our foreign currency risk primarily relates to operating expenses, cash balances and lease liabilities denominated in currencies other than U.S. dollars, primarily British pounds and Euros. Our results of current and future operations and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates.

We have experienced and will continue to experience fluctuations in our net income as a result of transaction gains or losses related to revaluing monetary asset and liability balances that are denominated in currencies other than the functional currency of the entities in which they are recorded. We have not entered into any derivatives or other financial instruments in an attempt to hedge our foreign currency exchange risk, but we may do so in the future.

Item 8. Financial Statements and Supplementary Data

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of 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, 2023 and 2022, 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, 2023, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2023 and 2022, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2023, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 16, 2024, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the 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 in Streaming Services Distribution – 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 partners, management is required to estimate variable consideration from transactional revenue sharing related to streaming services distribution.

Variable consideration related to streaming services distribution ("content partner 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 streaming services distribution, the estimate of the variable consideration is based on management's assessment of historical, current, and forecasted performance of the partner's applications.

We identified the forecasts of variable consideration relating to streaming service distribution as a critical audit matter due to the significant judgment necessary to estimate variable consideration. 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 streaming services distribution.
- 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 streaming services distribution.
 - 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 partners' content applications as well as our observations and inquiries as to the changes within the business and considerations of macroeconomic and industry factors.

/s/ DELOITTE & TOUCHE LLP

San Jose, California

February 16, 2024

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

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

	As of December 31,	
	2023	2022
Assets		
Current Assets:		
Cash and cash equivalents	\$ 2,025,891	\$ 1,961,956
Accounts receivable, net of allowances of \$34,127 and \$40,191 as of December 31, 2023 and 2022, respectively	816,337	760,793
Inventories	92,129	106,747
Prepaid expenses and other current assets	138,585	135,383
Total current assets	<u>3,072,942</u>	<u>2,964,879</u>
Property and equipment, net	264,556	335,031
Operating lease right-of-use assets	371,444	521,695
Content assets, net	257,395	292,766
Intangible assets, net	41,753	58,881
Goodwill	161,519	161,519
Other non-current assets	92,183	77,830
Total Assets	<u>\$ 4,261,792</u>	<u>\$ 4,412,601</u>
Liabilities and Stockholders' Equity		
Current Liabilities:		
Accounts payable	\$ 385,330	\$ 164,800
Accrued liabilities	788,040	750,810
Current portion of long-term debt	—	79,985
Deferred revenue, current portion	102,157	87,678
Total current liabilities	<u>1,275,527</u>	<u>1,083,273</u>
Deferred revenue, non-current portion	24,572	28,210
Operating lease liability, non-current portion	586,174	584,651
Other long-term liabilities	49,186	69,911
Total Liabilities	<u>1,935,459</u>	<u>1,766,045</u>
Commitments and contingencies (Note 12)		
Stockholders' Equity:		
Common stock, \$0.0001 par value;	14	14
1,150,000 (Class A - 1,000,000 and Class B - 150,000) shares authorized as of December 31, 2023 and 2022;		
143,502 (Class A - 126,118 and Class B - 17,384) shares and 140,027 (Class A - 122,602 and Class B - 17,425) shares issued and outstanding as of December 31, 2023 and 2022, respectively		
Additional paid-in capital	3,623,747	3,234,860
Accumulated other comprehensive income (loss)	159	(292)
Accumulated deficit	(1,297,587)	(588,026)
Total stockholders' equity	<u>2,326,333</u>	<u>2,646,556</u>
Total Liabilities and Stockholders' Equity	<u>\$ 4,261,792</u>	<u>\$ 4,412,601</u>

See accompanying Notes to Consolidated Financial Statements

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

	Years Ended December 31,		
	2023	2022	2021
Net Revenue:			
Platform	\$ 2,994,105	\$ 2,711,441	\$ 2,264,920
Devices	490,514	415,093	499,664
Total net revenue	<u>3,484,619</u>	<u>3,126,534</u>	<u>2,764,584</u>
Cost of Revenue:			
Platform	1,427,546	1,179,675	818,506
Devices	534,458	505,737	537,478
Total cost of revenue	<u>1,962,004</u>	<u>1,685,412</u>	<u>1,355,984</u>
Gross Profit (Loss):			
Platform	1,566,559	1,531,766	1,446,414
Devices	(43,944)	(90,644)	(37,814)
Total gross profit	<u>1,522,615</u>	<u>1,441,122</u>	<u>1,408,600</u>
Operating Expenses:			
Research and development	878,474	788,913	461,602
Sales and marketing	1,033,359	838,419	455,601
General and administrative	403,159	344,678	256,297
Total operating expenses	<u>2,314,992</u>	<u>1,972,010</u>	<u>1,173,500</u>
Income (Loss) from Operations	<u>(792,377)</u>	<u>(530,888)</u>	<u>235,100</u>
Other Income, Net:			
Interest expense	(730)	(5,161)	(2,980)
Other income, net	93,677	43,766	4,467
Total other income, net	<u>92,947</u>	<u>38,605</u>	<u>1,487</u>
Income (Loss) Before Income Taxes	<u>(699,430)</u>	<u>(492,283)</u>	<u>236,587</u>
Income tax expense (benefit)	10,131	5,722	(5,798)
Net Income (Loss)	<u>\$ (709,561)</u>	<u>\$ (498,005)</u>	<u>\$ 242,385</u>
Net income (loss) per share — basic	<u>\$ (5.01)</u>	<u>\$ (3.62)</u>	<u>\$ 1.83</u>
Net income (loss) per share — diluted	<u>\$ (5.01)</u>	<u>\$ (3.62)</u>	<u>\$ 1.71</u>
Weighted-average common shares outstanding — basic	<u>141,572</u>	<u>137,668</u>	<u>132,710</u>
Weighted-average common shares outstanding — diluted	<u>141,572</u>	<u>137,668</u>	<u>141,668</u>

See accompanying Notes to Consolidated Financial Statements

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

	Years Ended December 31,		
	2023	2022	2021
Net Income (Loss)	\$ (709,561)	\$ (498,005)	\$ 242,385
Other comprehensive gain (loss), net of tax:			
Foreign currency translation adjustment	451	(333)	12
Other comprehensive gain (loss), net of tax	451	(333)	12
Comprehensive Income (Loss)	\$ (709,110)	\$ (498,338)	\$ 242,397

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)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
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
Issuance of common stock pursuant to equity incentive plans	4,890	—	18,357	—	—	18,357
Stock-based compensation expense	—	—	359,931	—	—	359,931
Foreign currency translation adjustment	—	—	—	(333)	—	(333)
Net loss	—	—	—	—	(498,005)	(498,005)
Balance-December 31, 2022	140,027	14	3,234,860	(292)	(588,026)	2,646,556
Issuance of common stock pursuant to equity incentive plans	3,475	—	18,757	—	—	18,757
Stock-based compensation expense	—	—	370,130	—	—	370,130
Foreign currency translation adjustment	—	—	—	451	—	451
Net loss	—	—	—	—	(709,561)	(709,561)
Balance-December 31, 2023	143,502	\$ 14	\$ 3,623,747	\$ 159	\$(1,297,587)	\$ 2,326,333

See accompanying Notes to Consolidated Financial Statements

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

	Years Ended December 31,		
	2023	2022	2021
Cash flows from operating activities:			
Net income (loss)	\$ (709,561)	\$ (498,005)	\$ 242,385
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation and amortization	70,447	48,651	42,621
Stock-based compensation expense	370,130	359,931	187,532
Amortization of right-of-use assets	57,579	55,507	31,024
Amortization of content assets	207,852	234,355	95,570
Foreign currency remeasurement (gains) losses	1,457	(8,230)	—
Change in fair value of Strategic Investment	(4,348)	532	—
Impairment of assets	269,402	7,500	—
Provision for (recoveries of) doubtful accounts	1,674	2,081	(904)
Other items, net	(1,510)	(190)	(101)
Changes in operating assets and liabilities:			
Accounts receivable	(56,937)	(10,887)	(221,768)
Inventories	14,725	(56,471)	3,619
Prepaid expenses and other current assets	15,058	(15,941)	(48,074)
Content assets and liabilities, net	(267,155)	(313,204)	(193,440)
Other non-current assets	(592)	(7,304)	(19,335)
Accounts payable	248,175	14,190	8,428
Accrued liabilities	57,714	167,526	128,931
Operating lease liabilities	(27,786)	(9,245)	(20,083)
Other long-term liabilities	(1,309)	(403)	(1,100)
Deferred revenue	10,841	41,402	(7,224)
Net cash provided by operating activities	<u>255,856</u>	<u>11,795</u>	<u>228,081</u>
Cash flows from investing activities:			
Purchases of property and equipment	(82,619)	(161,696)	(40,041)
Acquisition of businesses, net of cash acquired	—	—	(136,778)
Purchase of Strategic Investment	(10,000)	(40,000)	—
Net cash used in investing activities	<u>(92,619)</u>	<u>(201,696)</u>	<u>(176,819)</u>
Cash flows from financing activities:			
Repayments of borrowings	(80,000)	(10,000)	(5,000)
Proceeds from equity issued under incentive plans	18,757	18,357	18,532
Proceeds from equity issued under at-the-market offerings, net of offering costs	—	—	989,615
Net cash (used in) provided by financing activities	<u>(61,243)</u>	<u>8,357</u>	<u>1,003,147</u>
Net increase (decrease) in cash, cash equivalents and restricted cash	101,994	(181,544)	1,054,409
Effect of exchange rate changes on cash, cash equivalents and restricted cash	2,654	(4,170)	12
Cash, cash equivalents and restricted cash —Beginning of period	1,961,956	2,147,670	1,093,249
Cash, cash equivalents and restricted cash —End of period	<u>\$ 2,066,604</u>	<u>\$ 1,961,956</u>	<u>\$ 2,147,670</u>
Cash, cash equivalents and restricted cash at end of period:			
Cash and cash equivalents	2,025,891	1,961,956	2,146,043
Restricted cash, current	40,713	—	—
Restricted cash, non-current	—	—	1,627
Cash, cash equivalents and restricted cash —End of period	<u>\$ 2,066,604</u>	<u>\$ 1,961,956</u>	<u>\$ 2,147,670</u>

	Years Ended December 31,		
	2023	2022	2021
Supplemental disclosures of cash flow information:			
Cash paid for interest	\$ 915	\$ 3,894	\$ 2,578
Cash paid for income taxes	\$ 6,632	\$ 7,016	\$ 1,363
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
Unpaid portion of property and equipment purchases	\$ 429	\$ 28,503	\$ 3,073

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 (including direct and programmatic video advertising, media and entertainment promotional spending, and related services) and streaming services distribution (including subscription and transaction revenue shares, the sale of Premium Subscriptions, and the sale of branded app buttons on remote controls). Streaming services distribution was previously referred to as content distribution services. The Company generates devices revenue from the sale of streaming players, Roku-branded TVs, smart home products and services, audio products, and related accessories as well as revenue from licensing arrangements with service operators.

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. Certain prior period amounts in the consolidated financial statements and accompanying notes have been reclassified to conform to the 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;
- amortization and the impairment of content assets;
- the impairment of operating lease right-of-use assets and property and equipment;
- valuation of the Strategic Investment (defined in Note 7);
- 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 (loss) for the years ended December 31, 2023, 2022, and 2021 includes foreign currency translation adjustments.

Foreign Currency

The functional currency of some of the Company’s foreign subsidiaries is the U.S. dollar. Monetary assets and liabilities of these subsidiaries are remeasured into U.S. dollars from the local currency at exchange rates in effect at period-end and non-monetary assets and liabilities are remeasured at historical exchange rates. Revenue and expenses are remeasured at average exchange rates in effect during each period. Foreign currency gains or losses from remeasurement 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 \$1.5 million, a gain of \$8.2 million, and a loss of \$1.2 million during the years ended December 31, 2023, 2022, and 2021, respectively.

The Company also has some foreign subsidiaries which use local currency as their functional currency. The financial statements of these subsidiaries are translated to U.S. dollars using month-end exchange rates for assets and liabilities, and average exchange rates for revenue and expenses. Translation gains and losses are recorded in accumulated other comprehensive income (loss) as a component of stockholders' equity.

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. Cash and cash equivalents consist primarily of bank deposit accounts and investments in money market funds.

The Company's restricted cash balance is included in Prepaid expenses and other current assets in the consolidated balance sheets and is used to secure outstanding letters of credit related to operating leases for office facilities. The letters of credit were previously secured by the Credit Facility (defined in Note 10) which matured and was repaid in February 2023. See Note 10 for additional details.

The Company maintains its cash, cash equivalent, and restricted cash balances with high credit financial institutions and continuously monitors the amount of exposure to any one institution and diversifies as necessary in order to minimize its concentration risk. Such balances often exceed regulated insured limits.

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 consisted of the following activities (in thousands):

	Years Ended December 31,		
	2023	2022	2021
Beginning balance	\$ 7,417	\$ 6,015	\$ 5,912
Add: Charged to revenue	16,560	19,068	16,181
Less: Utilization of sales return reserve	(16,169)	(17,666)	(16,078)
Ending balance	<u>\$ 7,808</u>	<u>\$ 7,417</u>	<u>\$ 6,015</u>

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

	Years Ended December 31,		
	2023	2022	2021
Beginning balance	\$ 28,903	\$ 48,411	\$ 30,838
Add: Charged to revenue	85,178	94,731	90,530
Less: Utilization of sales incentive reserve	(91,057)	(114,239)	(72,957)
Ending balance	<u>\$ 23,024</u>	<u>\$ 28,903</u>	<u>\$ 48,411</u>

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

	Years Ended December 31,		
	2023	2022	2021
Beginning balance	\$ 3,498	\$ 2,158	\$ 4,181
Provision for (recoveries of) doubtful accounts	1,674	2,081	(904)
Adjustments for write-off	(2,959)	(741)	(1,119)
Ending balance	<u>\$ 2,213</u>	<u>\$ 3,498</u>	<u>\$ 2,158</u>

The Company did not have any customer that individually accounted for more than 10% of its accounts receivable, net balance as of December 31, 2023 and 2022.

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 and indefinite-lived intangible assets, for possible impairment at least annually during the fourth quarter of each fiscal year or more often, if and when circumstances indicate that goodwill or indefinite-lived intangible assets 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 or indefinite lived-intangible asset is less than its carrying value. In performing its annual assessment, the Company can opt to perform a qualitative assessment to test 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 or indefinite-lived intangible assets 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. Any excess of an indefinite-lived intangible asset's carrying amount over its fair value is recorded as an impairment loss.

The Company reviews long-lived assets, including property and equipment, right-of-use 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 recoverable. The Company assesses the recoverability of an asset or asset group based on their estimated undiscounted future cash flows directly associated with their use and eventual disposition. If the asset or asset group is not recoverable, an impairment loss is recognized based on the excess of the carrying amount over the fair value of the asset or asset group.

The Company did not recognize any impairment for goodwill in any of the periods reported. The Company recorded an impairment charge related to abandoned technology assets of \$7.5 million for the year ended December 31, 2022. There were no impairments of intangible assets during the years ended December 31, 2023 and December 31, 2021. See Note 17 for additional details.

During the year ended December 31, 2023, the Company recognized an impairment charge of \$131.6 million for operating lease right-of-use assets and an impairment charge of \$72.3 million for property and equipment related to a decision to sub-lease and cease the use of certain office facilities and related property and equipment. This action was taken as part of the restructuring announced in the third quarter of fiscal year 2023. See Note 17 for additional details. There were no impairments of property and equipment, right-of-use assets, and intangible assets with finite lives during the years ended December 31, 2022 and December 31, 2021.

Content Assets

The Company recognizes content assets (licensed and produced) as Content assets, net on the consolidated balance sheets. For licensed content, the cost per title is capitalized along with a corresponding liability when the license period begins, the content is available for streaming and when the fee is determinable. For produced content, all direct production costs are capitalized. Payment terms for certain licensed content require advanced payments which are reflected in Prepaid expenses and other current assets.

The amortization expense for content assets (licensed and produced) is based on projected usage which results in accelerated or straight-lined patterns depending on the nature of the content. Projected usage is mainly based on historical and projected viewing patterns. Amortization of content assets is included in Cost of revenue, platform in the consolidated statements of operations.

Content assets (licensed and produced) 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. In addition, unamortized costs for assets that have been, or are expected to be, abandoned are written off. During the year ended December 31, 2023, the Company recognized an impairment charge of \$65.5 million related to removing select licensed and produced content from The Roku Channel. This action was taken as part of the restructuring announced in the third quarter of fiscal year 2023. See Note 17 for additional details. The Company did not recognize any impairment of content assets during the years ended December 31, 2022 and December 31, 2021.

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 based on the amount expected to be received for transferring the promised goods or services in the contract which may include fixed consideration or variable consideration. At the inception of each arrangement, the Company evaluates the likelihood that the payments will be collected. When arrangements have variable consideration, the Company utilizes the expected value method to estimate the amount expected to be received. The amount of variable consideration that is included in the transaction price is constrained to the extent that it is probable a significant reversal in the amount of the cumulative revenue recognized will not occur in a future period. 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 Company determines SSP based on prices charged to customers for individual products in consideration with historical and expected discounting practices, the size, and volume of transactions, geographic location, and go-to-market strategy. For those performance obligations that are not routinely sold separately, the Company determines SSP using information that may include market conditions and other observable inputs.

When the Company's arrangements involve 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 (including direct and programmatic video advertising, media and entertainment promotional spending, and related services) and streaming services distribution (including subscription and transaction revenue shares, the sale of Premium Subscriptions, and the sale of branded app buttons on remote controls).

The Company sells digital advertising to advertisers directly or through advertising agencies or third-party demand and supply-side platforms and to content partners 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 advertising 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 revenue sharing arrangements within its streaming services distribution 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 partners 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 Premium 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 app buttons on remote controls of streaming devices that provide one-touch access to a content partner'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.

Devices segment:

The Company generates devices revenue from the sale of streaming players, Roku-branded TVs, smart home products and services, audio products, and related accessories as well as revenue from licensing arrangements with service operators.

The Company sells the majority of its devices in the U.S. through retailers and distributors as well as through the Company's website. Devices 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 devices revenue ratably on a time elapsed basis over the estimated economic life of the associated products.

The Company's devices 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 devices revenue and the related shipping costs are included in Cost of revenue, devices.

The Company licenses the Roku OS, including updates and upgrades, to service operators. 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.

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 the 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.

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 its 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 one to eleven 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, 2023, and 2022, the Company did not capitalize any internal-use software development costs. During the year ended December 31, 2021, the Company capitalized internal-use software development costs of \$0.5 million. 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, 2023, 2022, and 2021, the Company amortized internal-use software development costs of \$0.9 million, \$1.0 million, and \$1.0 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 devices revenue allocated to unspecified upgrades and updates on a when-and-if available basis, and advance payments from advertisers, content partners, and licensing or services fees received from service operators and TV brands, 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 Expenses

Advertising expenses are recognized when incurred and are included in Sales and marketing expense in the consolidated statements of operations. The Company incurred advertising expenses of \$3.7 million, \$10.0 million, and \$35.2 million for the years ended December 31, 2023, 2022, and 2021, 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 volatility of the Company's Class A common stock price and the stock price volatilities of several peer companies which are similar in size and/or 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 the Company's 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.

Recent Accounting Pronouncements

In November 2023, the Financial Accounting Standards Board ("FASB") issued Accounting Standard Update ("ASU") 2023-07, *Segment Reporting (Topic 280) - Improvements to Reportable Segment Disclosures*, that requires companies to provide enhanced disclosures about significant segment expenses within its reportable segment disclosures on an annual and interim basis. The guidance is effective for fiscal years beginning after December 15, 2023 and interim periods within fiscal years beginning after December 15, 2024. The guidance applies retrospectively to all prior periods presented in the financial statements. The Company is currently in the process of evaluating the effects of the new guidance.

In December 2023, the FASB issued ASU 2023-09, *Income Taxes (Topic 740) - Improvements to Income Tax Disclosures*, that requires incremental disclosures within the income tax disclosures that increase the transparency and usefulness of income tax disclosures. The updated disclosures primarily require specific categories and greater disaggregation within the rate reconciliation, disaggregation of income taxes paid, and modifying other income tax-related disclosures. The guidance is effective either prospectively or retrospectively for fiscal years beginning after December 15, 2024. The Company is currently in the process of evaluating the effects of the new guidance.

3. REVENUE

The Company's disaggregated revenue is represented by the two reportable segments discussed in Note 16.

The contract balances include the following (in thousands):

	As of December 31,		
	2023	2022	2021
Accounts receivable, net	\$ 816,337	\$ 760,793	\$ 752,393
Contract assets (included in Prepaid expenses and other current assets)	17,964	42,617	46,952
Deferred revenue, current portion	102,157	87,678	45,760
Deferred revenue, non-current portion	24,572	28,210	28,726
Total deferred revenue	<u>\$ 126,729</u>	<u>\$ 115,888</u>	<u>\$ 74,486</u>

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 decreased by \$24.7 million during the year ended December 31, 2023 due to the timing of billing to customers and a slower growth rate in platform revenue. Contract assets decreased by \$4.3 million during the year ended December 31, 2022 due to the timing of billing to customers and a slower growth rate in platform revenue.

Deferred revenue reflects consideration invoiced prior to the completion of performance obligations and revenue recognition. Deferred revenue increased by approximately \$10.8 million during the year ended December 31, 2023 due to an increase in subscription revenue related to Premium Subscriptions and smart home products, higher device revenue in the year ended December 31, 2023 as compared to the year ended December 31, 2022, and due to the billings in excess of revenue recognized and timing of fulfillment of performance obligations related to platform revenue arrangements. Deferred revenue increased by approximately \$41.4 million during the year ended December 31, 2022 primarily due to the billings in excess of revenue recognized and timing of fulfillment of performance obligations related to revenue arrangements.

Revenue recognized during the year ended December 31, 2023 from amounts included in the total deferred revenue as of December 31, 2022 was \$88.4 million. Revenue recognized during the year ended December 31, 2022 from amounts included in the total deferred revenue as of December 31, 2021 was \$47.6 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 for these remaining performance obligations was \$1,195.9 million as of December 31, 2023, of which the Company expects to recognize approximately 47% over the next 12 months and the remainder thereafter.

The Company recognized \$45.5 million and reversed \$3.2 million of revenue during the years ended December 31, 2023 and 2022, respectively, from performance obligations that were satisfied in previous periods due to the changes in the estimated transaction price of its revenue contracts.

Customer I accounted for 11% of the total net revenue for the year ended December 31, 2023. The Company did not have any customer that individually accounted for more than 10% of its total net revenue for the years ended December 31, 2022 and 2021.

4. 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. Goodwill is evaluated for impairment annually. No impairment was recognized during the years ended December 31, 2023, 2022, and 2021.

Intangible Assets

The following tables summarize the Company's intangible assets for the periods presented (in thousands, except years):

	As of December 31, 2023			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted-Average Useful Lives (in years)
Developed technology	\$ 73,367	\$ (49,087)	\$ 24,280	5.9
Customer relationships	14,100	(13,948)	152	4.0
Tradename	20,400	(5,966)	14,434	9.8
Patents	4,076	(1,189)	2,887	14.0
Total Intangible assets	<u>\$ 111,943</u>	<u>\$ (70,190)</u>	<u>\$ 41,753</u>	6.7

	As of December 31, 2022			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted-Average Useful Lives (in years)
Developed technology	\$ 73,367	\$ (37,278)	\$ 36,089	5.9
Customer relationships	14,100	(10,920)	3,180	4.0
Tradename	20,400	(3,966)	16,434	9.8
Patents	4,076	(898)	3,178	14.0
Total Intangible assets	<u>\$ 111,943</u>	<u>\$ (53,062)</u>	<u>\$ 58,881</u>	6.7

The Company recognized an impairment charge of \$7.5 million during the year ended December 31, 2022 as part of its restructuring efforts related to the abandonment of future development of certain technology assets. See Note 17 for additional details.

The Company recorded expenses of \$17.1 million, \$17.7 million, and \$17.3 million for amortization of intangible assets during the years ended December 31, 2023, 2022, and 2021, respectively.

The Company recorded most of the amortization of developed technology in Cost of revenue, platform for the year ended December 31, 2023, and in Cost of revenue, platform and Research and development expenses for the years ended December 31, 2022 and 2021. The Company recorded amortization of customer relationships and tradename 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, 2023, the estimated future amortization expense for intangible assets for the next five years and thereafter is as follows (in thousands):

Year Ending December 31,	
2024	\$ 14,252
2025	12,533
2026	4,074
2027	2,737
2028	2,291
Thereafter	5,866
Total	<u>\$ 41,753</u>

5. BALANCE SHEET COMPONENTS

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

	As of December 31,	
	2023	2022
Accounts receivable, gross	\$ 850,464	\$ 800,984
Less: Allowances		
Allowance for sales returns	7,808	7,417
Allowance for sales incentives	23,024	28,903
Allowance for doubtful accounts	2,213	3,498
Other allowances	1,082	373
Total allowances	<u>34,127</u>	<u>40,191</u>
Accounts receivable, net	<u>\$ 816,337</u>	<u>\$ 760,793</u>

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

	As of December 31,	
	2023	2022
Computers and equipment	\$ 51,320	\$ 45,989
Leasehold improvements	292,418	353,245
Internal-use software	6,980	7,274
Office equipment and furniture	36,900	28,614
Property and equipment, gross	<u>387,618</u>	<u>435,122</u>
Accumulated depreciation and amortization	<u>(123,062)</u>	<u>(100,091)</u>
Property and equipment, net	<u>\$ 264,556</u>	<u>\$ 335,031</u>

Depreciation and amortization expense for property and equipment assets for the years ended December 31, 2023, 2022, and 2021 was \$53.3 million, \$31.0 million, and \$25.4 million, respectively.

During the year ended December 31, 2023, the Company recognized an impairment charge of \$72.3 million related to property and equipment associated with the leased office facilities that are part of its restructuring efforts. See Note 17 for additional details.

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

	As of December 31,	
	2023	2022
Payments due to content partners	\$ 239,196	\$ 201,054
Accrued cost of revenue	147,875	105,347
Marketing, retail and merchandising expenses	147,853	163,367
Operating lease liability, current	68,099	54,689
Content liability, current	54,319	88,717
Other accrued expenses	130,698	137,636
Total Accrued liabilities	<u>\$ 788,040</u>	<u>\$ 750,810</u>

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

	As of December 31,	
	2023	2022
Platform, current	\$ 66,636	\$ 59,276
Devices, current	35,521	28,402
Total deferred revenue, current	<u>102,157</u>	<u>87,678</u>
Platform, non-current	625	969
Devices, non-current	23,947	27,241
Total deferred revenue, non-current	<u>24,572</u>	<u>28,210</u>
Total Deferred revenue	<u>\$ 126,729</u>	<u>\$ 115,888</u>

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

	As of December 31,	
	2023	2022
Content liability, non-current	\$ 24,115	\$ 39,587
Other long-term liabilities	25,071	30,324
Total Other long-term liabilities	<u>\$ 49,186</u>	<u>\$ 69,911</u>

6. CONTENT ASSETS

Content assets consisted of the following (in thousands):

	As of December 31,	
	2023	2022
Licensed content, net and advances	\$ 148,777	\$ 243,226
Produced content:		
Released, less amortization	77,951	42,605
Completed, not released	11,235	3,537
In production	38,275	42,904
Total produced content, net	<u>127,461</u>	<u>89,046</u>
Total Content assets, net and advances	<u>\$ 276,238</u>	<u>\$ 332,272</u>
Current portion	\$ 18,843	\$ 39,506
Non-current portion	\$ 257,395	\$ 292,766

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

	Years Ended December 31,		
	2023	2022	2021
Licensed content	\$ 161,633	\$ 216,393	\$ 84,133
Produced content	46,219	17,962	11,437
Total amortization costs	<u>\$ 207,852</u>	<u>\$ 234,355</u>	<u>\$ 95,570</u>

During the year ended December 31, 2023, the Company recognized an impairment charge of \$65.5 million related to removing select licensed and produced content from The Roku Channel as part of its restructuring efforts. See Note 17 for additional details. The Company did not recognize any impairment of content assets during the years ended December 31, 2022 and December 31, 2021.

The following table reflects the expected amortization costs of released licensed and produced content assets, net for the next three years (in thousands):

	Years Ended December 31,		
	2024	2025	2026
Licensed content	\$ 76,586	\$ 28,824	\$ 17,637
Produced content	32,640	20,512	18,936
Total expected amortization costs	<u>\$ 109,226</u>	<u>\$ 49,336</u>	<u>\$ 36,573</u>

7. STRATEGIC INVESTMENT

In June 2022, the Company agreed to provide financing of up to \$60.0 million in the aggregate to a counterparty with whom the Company has a commercial relationship. The advances are in the form of convertible promissory notes (the "Strategic Investment") and are recognized as Other non-current assets on the consolidated balance sheets. The Strategic Investment accrues interest at 5% per annum. The convertible promissory notes have maturity dates as reflected in the table below, or are due upon a redemption event or in the event of a default.

The convertible promissory notes and their date of investment and maturity are as follows (in thousands):

As of December 31, 2023		
Date of Investment	Amount of Investment	Date of Maturity
June 15, 2022	\$40,000	June 15, 2025
March 23, 2023	\$5,000	March 23, 2026
May 23, 2023	\$5,000	May 23, 2026

The Strategic Investment contains certain redemption features that meet the definition of embedded derivatives and require bifurcation. The Company elected to apply the fair value option and account for the hybrid instrument containing the host contract and the embedded derivatives at fair value as a single instrument, with any subsequent changes in fair value included in Other income (expense), net in the consolidated statements of operations. See Note 8 for additional details on the fair value of the Strategic Investment.

8. FAIR VALUE DISCLOSURE

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

	As of December 31, 2023			As of December 31, 2022		
	Fair Value	Level 1	Level 3	Fair Value	Level 1	Level 3
Assets:						
Cash and cash equivalents:						
Cash	\$ 594,493	\$ 594,493	\$ —	\$ 1,353,547	\$ 1,353,547	\$ —
Money market funds	1,431,398	1,431,398	—	608,409	608,409	—
Restricted cash, current	40,713	40,713	—	—	—	—
Strategic Investment	53,816	—	53,816	39,468	—	39,468
Total assets measured and recorded at fair value	<u>\$ 2,120,420</u>	<u>\$ 2,066,604</u>	<u>\$ 53,816</u>	<u>\$ 2,001,424</u>	<u>\$ 1,961,956</u>	<u>\$ 39,468</u>

The following table reflects the changes in the fair value of the Company's Level 3 financial assets (in thousands):

	Years Ended December 31,	
	2023	2022
Beginning balance	\$ 39,468	\$ —
Purchase of Strategic Investment	10,000	40,000
Change in estimated fair value of Strategic Investment	4,348	(532)
Ending balance	<u>\$ 53,816</u>	<u>\$ 39,468</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 maturity of three months or less at the date of purchase to be cash equivalents. The Company measured money market funds of \$1,431.4 million and \$608.4 million as cash equivalents as of December 31, 2023 and 2022, 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, 2023 and 2022.

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.

As of December 31, 2023, the Company measured the Strategic Investment using Level 3 inputs. The fair value of the Strategic Investment on the date of purchase was determined to be equal to its principal amount. The Company recorded an unrealized gain of \$4.3 million and an unrealized loss of \$0.5 million in Other income, net related to the change in the fair value of the Strategic Investment for the years ended December 31, 2023 and 2022, respectively.

The Company classified the Strategic Investment as Level 3 due to the lack of relevant observable market data over fair value inputs. The fair value of the Strategic Investment was estimated using a scenario-based probability weighted discounted cash flow model. Significant assumptions include the discount rate, and the timing and probability weighting of the various redemption scenarios that impact the settlement of the Strategic Investment.

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.

During the year ended December 31, 2023, the Company recorded total impairment charges of \$269.4 million that included \$131.6 million of operating lease right-of-use assets impairment, \$72.3 million of property and equipment impairment, and \$65.5 million of content assets impairment related to removing select licensed and produced content from The Roku Channel.

During the year ended December 31, 2022, the Company recognized an impairment charge of \$7.5 million related to the abandonment of future development of certain technology assets. The Company did not record any impairment charges during the year ended December 31, 2021.

The fair value of the impaired operating lease right-of-use assets and property and equipment were estimated using discounted cash flow models, or the income approach, based on market participant assumptions with Level 3 inputs. The significant assumptions used in estimating fair value include the expected downtime prior to the commencement of future subleases, projected sublease income over the remaining lease periods, and discount rates that reflect the level of risk associated with the expected future cash flows. For the licensed and produced content that was removed from The Roku Channel, the net carrying amount of the content assets was written off. For the abandoned technology assets, the net carrying amount of the technology assets was written off.

9. LEASES

The Company has entered into operating leases primarily for office real estate. The leases have remaining terms ranging from less than 1 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,		
	2023	2022	2021
Operating lease expense	\$ 83,060	\$ 76,359	\$ 46,410
Variable lease expense	23,331	18,991	15,080
Total operating lease expense	<u>\$ 106,391</u>	<u>\$ 95,350</u>	<u>\$ 61,490</u>

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

	Years Ended December 31,		
	2023	2022	2021
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash outflows from operating leases	\$ 74,278	\$ 56,370	\$ 51,657
Right-of-use assets obtained in exchange for lease obligations:			
Operating leases	\$ 40,866	\$ 231,728	\$ 110,845
Decrease in operating lease right-of-use assets due to impairment (See Note 17)	\$ 131,646	\$ —	\$ —

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

	As of December 31,	
	2023	2022
Operating lease right-of-use assets	\$ 371,444	\$ 521,695
Operating lease liability, current (included in Accrued liabilities)	68,099	54,689
Operating lease liability, non-current	586,174	584,651
Total operating lease liability	<u>\$ 654,273</u>	<u>\$ 639,340</u>
Weighted-average remaining term for operating leases (in years)	7.94	8.62
Weighted-average discount rate for operating leases	3.94 %	3.80 %

Future lease payments under operating leases as of December 31, 2023 are as follows (in thousands):

Year Ending December 31,	Operating Leases
2024	\$ 89,751
2025	98,702
2026	100,237
2027	99,686
2028	100,099
Thereafter	282,716
Total future lease payments	771,191
Less: imputed interest	(110,068)
Less: expected tenant improvement allowance	(6,850)
Total ⁽¹⁾	<u>\$ 654,273</u>

⁽¹⁾ Total lease liabilities include liabilities related to operating lease right-of-use assets which were included in the impairment charges as part of the Company's restructuring efforts. See Note 17 for additional details.

As of December 31, 2023, the Company had no commitments relating to operating leases that have not yet commenced.

10. DEBT

The Company does not have any outstanding debt as of December 31, 2023. In February 2023, the Company repaid the debt balance in full and satisfied all outstanding debt obligations under the Credit Facility (as defined below) when it matured.

The Company's outstanding debt as of December 31, 2022 was as follows (in thousands):

	Amount	Effective Interest Rate
Term Loan A Facility	\$ 80,000	4.4 %
Less: Debt issuance costs	(15)	
Net carrying amount of debt	<u>\$ 79,985</u>	

The carrying amount of debt approximates fair value due to its variable interest rates. The interest expense associated with the Credit Facility for the years ended December 31, 2023 and 2022 is \$0.6 million and \$3.6 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. 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.

The Credit Facility matured on February 19, 2023 and the outstanding Term Loan A Facility was repaid in full.

As of December 31, 2022, the Company had outstanding letters of credit against the Revolving Credit Facility of \$37.7 million. Upon maturity of the Credit Facility on February 19, 2023, the outstanding letters of credit were secured by the Company's existing cash balance, a portion of which is restricted for that purpose. As of December 31, 2023 the Company had outstanding letters of credit of \$37.5 million, which are secured by restricted cash of \$40.7 million.

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, 2023 and 2022, 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 Offering

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.

Common Stock Reserved For Issuance

As of December 31, 2023, the Company's common stock reserved for issuance in the future is as follows (in thousands):

Common stock awards granted under equity incentive plans	13,984
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	27,880
Total reserved shares of common stock	<u>46,953</u>

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

Equity Incentive Plans

The Company currently grants equity under 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”). 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. The outstanding equity relates to the 2017 Plan and the 2008 Equity Incentive Plan (“2008 Plan”), a pre-IPO plan. No additional equity grants have been made pursuant to the 2008 Plan subsequent to the IPO.

The equity granted under the 2017 Plan is 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, 2023 is as follows (in thousands, except per share data):

	Number of Shares	Weighted-Average Grant Date Fair Value Per Share
Balance, December 31, 2022	8,577	\$ 120.82
Awarded	4,594	70.73
Released	(2,722)	115.33
Forfeited	(1,775)	114.42
Balance, December 31, 2023 - Outstanding	<u>8,674</u>	<u>\$ 97.33</u>

The weighted-average grant date fair value of restricted stock units granted during the years ended December 31, 2023, 2022, and 2021 was \$325.0 million, \$916.8 million, and \$342.6 million, respectively.

The fair value of restricted stock units that vested during the years ended December 31, 2023, 2022, and 2021 was \$314.0 million, \$282.6 million, and \$135.6 million, respectively.

The unrecognized stock-based compensation expense related to restricted stock units awarded to employees as of December 31, 2023 was \$692.9 million, which the Company expects to recognize over a weighted-average period of approximately 2.37 years.

Stock Options

Stock option activity for the year ended December 31, 2023 is as follows (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, 2022	5,807	\$ 72.79	7.1	—	
Granted	559	72.75	—	\$ 42.43	
Exercised	(753)	24.92	—	—	
Forfeited and expired	(303)	143.59	—	—	
Balance, December 31, 2023 - Outstanding	<u>5,310</u>	<u>\$ 75.55</u>	6.8	—	\$ 178,169
Balance, December 31, 2023- Exercisable	<u>3,317</u>	<u>\$ 60.42</u>	5.7	—	\$ 133,742

The weighted-average grant date fair value per share of options granted during the years ended December 31, 2023, 2022, and 2021 was \$42.43, \$36.66, and \$139.76, respectively.

The intrinsic value for stock options exercised in the years ended December 31, 2023, 2022, and 2021 was \$38.9 million, \$210.0 million, and \$997.6 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, 2023, the Company had \$69.4 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 2.2 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. Stock options granted to employees generally vest over one to four years and have a term of ten years. Restricted stock units generally vest over one to four years. No stock-based compensation was capitalized for the years ended December 31, 2023 and 2022. The amount of stock-based compensation capitalized as part of internal-use software for the year ended December 31, 2021 was not material.

The following table presents total stock-based compensation expense for the years ended December 31, 2023, 2022, and 2021 (in thousands):

	Years Ended December 31,		
	2023	2022	2021
Cost of revenue, platform	\$ 1,478	\$ 1,229	\$ 827
Cost of revenue, devices	3,761	2,440	2,035
Research and development	147,989	147,653	77,770
Sales and marketing	130,362	123,946	63,503
General and administrative	86,540	84,663	43,397
Total stock-based compensation	<u>\$ 370,130</u>	<u>\$ 359,931</u>	<u>\$ 187,532</u>

The fair value of stock options granted 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, 2023, 2022, and 2021 are as follows:

	Years Ended December 31,		
	2023	2022	2021
Expected term (in years)	5.0 - 5.8	5.0 - 6.8	5.0 - 6.8
Risk-free interest rate	3.48 - 4.72%	1.37 - 4.33%	0.36 - 1.2%
Expected volatility	61 - 63%	57 - 61%	38 - 39%
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, 2023, the Company had \$131.5 million of non-cancelable purchase commitments for inventory.

Content Commitments

The Company enters into contracts with content partners to license and produce content for streaming. When a title becomes available, the Company records a content asset and liability on the consolidated balance sheets. Certain licensing agreements, such as film output deals, include the obligation to license rights for unknown future titles for which the ultimate quantity and/or fees are not determinable as of the reporting date. The Company does not include any estimated obligation for these future titles beyond the known minimum amount. The unknown obligations could be material. 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, they are not included in the obligations below.

As of December 31, 2023, the Company's total obligation for licensed and produced content is \$286.1 million, of which the Company recorded \$59.2 million in Current liabilities and \$24.1 million in Other long-term liabilities in the consolidated balance sheets. The remaining \$202.8 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,	
2024	\$ 184,716
2025	62,655
2026	21,971
2027	12,732
2028	1,436
Thereafter	2,568
Total content liabilities	<u>\$ 286,078</u>

Letters of Credit

As of December 31, 2023 and 2022, the Company had irrevocable letters of credit outstanding in the amount of \$37.5 million and \$37.7 million, respectively, related to facilities leases. The letters of credit have various expiration dates through 2030.

Contingencies

The Company accounts for loss contingencies, including liabilities for intellectual property licensing and other 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 proceedings, claims and investigations 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 years ended December 31, 2023, 2022, and 2021, the Company did not have any loss contingencies that were material.

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 has 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,		
	2023	2022	2021
United States	\$ (699,114)	\$ (486,886)	\$ 240,560
Foreign	(316)	(5,397)	(3,973)
Net income (loss) before income taxes	<u>\$ (699,430)</u>	<u>\$ (492,283)</u>	<u>\$ 236,587</u>

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

	Years Ended December 31,		
	2023	2022	2021
Current:			
Federal	\$ 697	\$ 694	\$ —
State	2,715	2,444	589
Foreign	5,448	2,002	490
	<u>8,860</u>	<u>5,140</u>	<u>1,079</u>
Deferred:			
Federal	233	448	193
State	222	220	256
Foreign	816	(86)	(7,326)
	<u>1,271</u>	<u>582</u>	<u>(6,877)</u>
Total income tax expense (benefit)	<u>\$ 10,131</u>	<u>\$ 5,722</u>	<u>\$ (5,798)</u>

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

	Years Ended December 31,		
	2023	2022	2021
U.S. federal income tax at statutory rate	21.0 %	21.0 %	21.0 %
U.S. state and local income taxes	(0.4)	(0.5)	0.2
Change in valuation allowance	(23.6)	(39.1)	140.0
Research and development tax credit	6.8	14.6	(30.7)
Stock-based compensation	(2.8)	4.0	(114.3)
Discrete tax benefit due to intellectual property transfer	—	—	(19.1)
Meals and entertainment	(0.2)	(0.1)	0.1
Foreign rate differential	—	0.2	0.1
Section 162(m) limitation	(2.1)	(0.5)	1.1
State apportionment change	—	0.1	—
Tax rate change	—	—	(0.7)
Provision to return true-up	0.1	(0.1)	(0.1)
Other	(0.2)	(0.8)	(0.1)
Effective tax rate	<u>(1.4)%</u>	<u>(1.2)%</u>	<u>(2.5)%</u>

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

	As of December 31,	
	2023	2022
Deferred tax assets:		
Net operating loss carryforwards	\$ 484,136	\$ 517,787
Reserves and accruals	23,677	20,068
Research and development credits	248,381	230,586
Operating lease liabilities	183,359	153,145
Stock-based compensation	55,785	50,661
Depreciation and amortization	51,700	41,377
Section 174 capitalization	280,906	165,219
Other	6,190	286
Total deferred tax assets	<u>1,334,134</u>	<u>1,179,129</u>
Deferred tax liabilities:		
Operating lease right-of-use assets	(111,164)	(128,517)
Other	(4,357)	—
Total deferred tax liabilities	<u>(115,521)</u>	<u>(128,517)</u>
Valuation allowance	(1,209,822)	(1,040,341)
Net deferred tax assets	<u>\$ 8,791</u>	<u>\$ 10,271</u>

Beginning in 2022, the Tax Cuts and Jobs Act of 2017 (the "Tax Act") eliminated the right to deduct research and development expenses for tax purposes in the period the expenses were incurred and instead requires all U.S. and foreign research and development expenses to be amortized over five and fifteen tax years, respectively. Due to this required capitalization of research and development expenses, the Company has recorded U.S. current income tax expense of \$3.7 million for the year ended December 31, 2023.

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, 2023, the Company 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 \$166.0 million and \$199.2 million during the years ended December 31, 2023 and 2022, respectively.

The change in the valuation allowance during the years ended December 31, 2023 and December 31, 2022 is primarily attributable to an increase in deferred tax assets generated through capitalization of section 174 research and development expenses for U.S. federal and conforming state purposes.

For federal and state income tax reporting purposes, respective net operating loss carryforwards of \$1,807.3 million and \$1,604.0 million are available to reduce future taxable income. The federal net operating loss carryforwards will begin to expire in 2037, and certain state net operating losses have expired in 2023.

For Brazil, Netherlands, and U.K. income tax reporting purposes, the net operating loss carryforwards of \$8.6 million, \$47.6 million, and \$14.0 million, respectively, are available to reduce future taxable income, if any. Brazil 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.

As of December 31, 2023, the Company has research and development tax credit carryforwards of \$194.7 million and \$149.5 million for federal and state income tax purposes, respectively. If not utilized, the federal and state carryforwards will begin to expire in 2030 and 2039, respectively.

The total amount of unrecognized tax benefits as of December 31, 2023 is \$88.5 million, of which \$71.8 million is composed of research and development credits and \$16.7 million is related to international activities.

A reconciliation of the beginning and ending balance of unrecognized tax benefits is as follows (in thousands):

	As of December 31,	
	2023	2022
Unrecognized tax benefits at beginning of year	\$ 88,028	\$ 66,150
Gross increase for tax positions of current year	13,166	22,888
Gross decrease due to statute expiration	(54)	(317)
Gross increase for tax positions of prior years	140	676
Gross decrease for tax positions of prior years	(12,689)	(1,185)
Decrease relating to settlements with taxing authorities	(43)	(184)
Unrecognized tax benefits balance at end of year	<u>\$ 88,548</u>	<u>\$ 88,028</u>

As of December 31, 2023, \$5.2 million of the Company's gross unrecognized tax benefits, if recognized, would affect the effective tax rate and \$83.3 million would result in an adjustment to deferred tax assets with corresponding adjustments to the valuation allowance. The Company does not expect its gross unrecognized tax benefits to change significantly within the next 12 months.

The Company recognizes interest and penalties related to unrecognized tax benefits as a component of its income tax expense. The Company recorded \$1.0 million and \$0.8 million of accrued interest and penalties related to uncertain tax positions as of December 31, 2023 and December 31, 2022, respectively.

The Company files income tax returns in the U.S. federal jurisdiction, various state jurisdictions, and certain foreign jurisdictions. 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 Act, 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. 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 Company contributions were made for the years ended December 31, 2023, 2022, and 2021.

The Company has defined contribution plans in the U.K. and Korea for the employees in those countries. The Company contributed \$3.2 million, \$2.3 million, and \$1.3 million in total to these plans for the years ended December 31, 2023, 2022, and 2021, respectively.

15. 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 and restricted stock units 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,		
	2023	2022	2021
Numerator:			
Net income (loss)	\$ (709,561)	\$ (498,005)	\$ 242,385
Denominator:			
Basic net income (loss) per share:			
Weighted-average common shares outstanding — basic	141,572	137,668	132,710
Net income (loss) per share — basic	\$ (5.01)	\$ (3.62)	\$ 1.83
Diluted net income (loss) per share:			
Weighted-average common shares outstanding — basic	141,572	137,668	132,710
Effect of potentially dilutive securities:			
Restricted stock units	—	—	2,744
Stock options	—	—	6,214
Weighted-average common shares outstanding — diluted	141,572	137,668	141,668
Net income (loss) per share — diluted	\$ (5.01)	\$ (3.62)	\$ 1.71

Common stock equivalents excluded from the calculation of diluted net income (loss) per share because of their anti-dilutive effect were 14.0 million, 14.4 million and 1.1 million units of equity awards to purchase common stock granted under the Company's equity plans for the years ended December 31, 2023, 2022, and 2021, respectively.

16. 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.

Descriptions of the Company’s two reportable segments are as follows:

Platform

Platform revenue is generated from the sale of digital advertising (including direct and programmatic video advertising, media and entertainment promotional spending, and related services) and streaming services distribution (including subscription and transaction revenue shares, the sale of Premium Subscriptions, and the sale of branded app buttons on remote controls).

Devices

Devices revenue is generated from the sale of streaming players, Roku-branded TVs, smart home products and services, audio products, and related accessories as well as revenue from licensing arrangements with service operators.

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

	Years Ended December 31,		
	2023	2022	2021
Platform segment revenue			
Customer H	*	*	10 %
Customer I	13 %	*	*
Devices segment revenue			
Customer A	15 %	*	*
Customer B	15 %	21 %	22 %
Customer C	41 %	38 %	35 %

* Less than 10%

Revenue in international markets was less than 10% in each of the periods presented.

Long-lived assets, net

The following table presents long-lived assets, net, which consist primarily of property and equipment and operating lease right-of-use assets, by geographic area (in thousands):

	As of December 31,	
	2023	2022
United States	\$ 497,024	\$ 686,902
United Kingdom	109,315	127,538
Other countries	29,661	42,286
Total	<u>\$ 636,000</u>	<u>\$ 856,726</u>

17. RESTRUCTURING CHARGES

The Company began efforts to reduce its operating expense growth rate due to economic conditions in the fourth quarter of fiscal 2022. The Company recorded employee termination expenses, and an impairment charge related to abandoned technology assets during the year ended December 31, 2022.

During the year ended December 31, 2023, the Company implemented additional measures including consolidating its office space utilization, performing a strategic review of its content portfolio, reducing outside services expenses, and slowing its year-over-year headcount expense growth rate through a workforce reduction and limiting new hires, among other measures. As a result of these measures, the Company recorded restructuring charges associated with employee termination expenses consisting primarily of severance payments, employee benefits contributions, payroll taxes and related costs, impairment charges related to decisions to sub-lease and cease the use of certain office facilities and related property and equipment, and impairment charges related to removing select licensed and produced content from The Roku Channel.

The restructuring charges for the years ended December 31, 2023 and 2022 are recorded as follows (in thousands):

	Year Ended December 31, 2023				Year Ended December 31, 2022		
	Employee Terminations	Facilities Exit Costs	Asset Impairment Charges	Total	Employee Terminations	Asset Impairment Charges	Total
Cost of revenue, platform	\$ 1,164	\$ 1	\$ 65,867	\$ 67,032	\$ —	\$ —	\$ —
Cost of revenue, devices	524	6	2,793	3,323	—	—	—
Research and development	31,160	1,320	78,011	110,491	12,092	7,500	19,592
Sales and marketing	29,786	517	83,411	113,714	10,904	—	10,904
General and administrative	20,531	1,683	39,320	61,534	7,644	—	7,644
Total restructuring charges	<u>\$ 83,165</u>	<u>\$ 3,527</u>	<u>\$ 269,402</u>	<u>\$ 356,094</u>	<u>\$ 30,640</u>	<u>\$ 7,500</u>	<u>\$ 38,140</u>

The asset impairment charges for the year ended December 31, 2023 include \$131.6 million of operating lease right-of-use assets impairment, \$72.3 million of property and equipment impairment, and \$65.5 million of content assets impairment. The asset impairment charge for the year ended December 31, 2022 includes a \$7.5 million impairment charge related to abandoned technology assets.

A reconciliation of the beginning and ending balance of employee termination restructuring charges and facility exit costs, which are included in Accrued liabilities in the consolidated balance sheets, is as follows (in thousands):

	Year Ended December 31, 2023			Year Ended December 31, 2022	
	Employee Terminations	Facilities Exit Costs	Total	Employee Terminations	Total
Beginning balance	\$ 22,093	\$ —	\$ 22,093	\$ —	\$ —
Add: Restructuring charges incurred	83,165	3,527	86,692	30,640	30,640
Less: Payments made	(92,597)	(2,329)	(94,926)	(8,547)	(8,547)
Ending balance	<u>\$ 12,661</u>	<u>\$ 1,198</u>	<u>\$ 13,859</u>	<u>\$ 22,093</u>	<u>\$ 22,093</u>

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

The effectiveness of our internal control over financial reporting as of December 31, 2023 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in its report which is included herein.

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, 2023, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2023, of the Company and our report dated February 16, 2024, expressed an unqualified opinion on those financial statements.

Basis for Opinion

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

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

Definition and Limitations of Internal Control over Financial Reporting

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

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

/s/ DELOITTE & TOUCHE LLP

San Jose, California

February 16, 2024

Item 9B. Other Information

Insider Trading Arrangements

During the three months ended December 31, 2023, each of the following officers (as defined in Rule 16a-1(f) under the Exchange Act) of the Company adopted or terminated a “Rule 10b5-1 trading arrangement” or “non-Rule 10b5-1 trading arrangement,” as each term is defined in Item 408(a) of Regulation S-K.

Name	Action	Adoption/Termination Date	Trading Arrangement		Total Shares of Class A Common Stock to be Sold	Expiration Date
			Rule 10b5-1*	Non-Rule 10b5-1**		
Anthony Wood*** (Chief Executive Officer, President, and Chairman)	Adoption	November 15, 2023	X		300,000	September 9, 2024
Charles Collier (President, Roku Media)	Termination	November 17, 2023	X		117,359	June 17, 2024
	Adoption	November 21, 2023	X		626,636	November 21, 2024
Stephen Kay (Senior Vice President, General Counsel and Secretary)	Adoption	November 7, 2023	X		143,267	February 22, 2025

* Contract, instruction or written plan intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) under the Exchange Act.

** “Non-Rule 10b5-1 trading arrangement” as defined in Item 408(c) of Regulation S-K under the Exchange Act.

*** Trading arrangement adopted by the Wood Revocable Trust, of which Mr. Wood and his spouse are co-trustees.

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 the information contained in the sections “Voting and Meeting Information,” “Board of Directors and Corporate Governance,” “Executive Officer Biographies,” and “Other Matters” in our definitive Proxy Statement for the 2024 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of our year ended December 31, 2023 (our “Proxy Statement”).

Item 11. Executive Compensation

The information required by this item is incorporated by reference to the information contained in the sections “Compensation Discussion and Analysis” and “Executive Compensation” in our Proxy Statement.

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 the information contained in the sections “Security Ownership of Certain Beneficial Owners and Management” and “Equity Compensation Plan Information” in our Proxy Statement.

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

The information required by this item is incorporated by reference to the information contained in the sections “Certain Relationships and Related Transactions” and “Director Independence” in our Proxy Statement.

Item 14. Principal Accounting Fees and Services

The information required by this item is incorporated by reference to the information contained in the section “Ratification of Selection of Independent Registered Public Accounting Firm” in our Proxy Statement.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a)(1) Financial Statements

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

(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.

Number	Exhibit Title	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
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	10-K	001-38211	10.4	2/18/2022	
10.5 +	Forms of Consolidated Restricted Stock Unit Grant Notice and Award Agreement under 2017 Equity Incentive Plan	10-K	001-38211	10.5	2/18/2022	
10.6 +	Executive Supplemental Stock Option Program Enrollment Form					X
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-1/A	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 Loudon, dated June 11, 2015	S-1	333-220318	10.11	9/1/2017	
10.11 +	Employment Terms Agreement, by and between Roku, Inc. and Mustafa Ozgen, dated January 17, 2019	10-K	001-38211	10.18	3/2/2020	
10.12 +	Offer Letter, by and between Roku, Inc. and Charles Collier, dated September 16, 2022	10-K	001-38211	10.18	2/16/2023	
10.13 +	Offer Letter, by and between Roku, Inc. and Dan Jedda, dated February 11, 2023	10-Q	001-38211	10.1	7/28/2023	
10.14 +	Employment Contract, by and between Roku DX UK Ltd and Gidon Katz, dated August 9, 2023	8-K	001-38211	10.1	8/11/2023	
10.15 +	Roku, Inc. Amended and Restated Severance Benefit Plan	10-Q	001-38211	10.1	11/2/2023	
10.16	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	
10.17	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	
10.18	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	

10.19	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	Third Amendment to Coleman Highline Office Lease by and between Roku, Inc. and Cap Phase 1, LLC dated September 29, 2020 (1155 Coleman Ave)	10-Q	001-38211	10.1	4/29/2022	
10.21	Fourth Amendment to Coleman Highline Office Lease by and between Roku, Inc. and BCORE Coleman Owner LLC dated April 8, 2022 (1155 Coleman Ave)	10-Q	001-38211	10.3	4/29/2022	
10.22	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	
10.23	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	
10.24	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	
10.25	Third Amendment to Coleman Highline Office Lease by and between Roku, Inc. and Cap Oz 34, LLC dated June 4, 2020 (1173/1167/1161 Coleman Ave)	10-Q	001-38211	10.2	4/29/2022	
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 the signature page of this Annual Report on Form 10-K)					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
97.1	Roku, Inc. Policy for Recoupment of Incentive Compensation					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)					X

* These exhibits are furnished with this Annual Report and are not deemed filed with the SEC and are not incorporated by reference in any filing of Roku, Inc. under the Securities Act or the Exchange Act, 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 16th day of February 2024.

Roku, Inc.

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

By: /s/ Dan Jedda
Dan Jedda
Chief Financial Officer
(Principal Financial Officer)

By: /s/ Matthew Banks
Matthew Banks
Vice President, Corporate Controller and Chief
Accounting Officer
(Principal Accounting Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Anthony Wood and Dan Jedda, 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 16, 2024
<u>/s/ DAN JEDDA</u> Dan Jedda	Chief Financial Officer (Principal Financial Officer)	February 16, 2024
<u>/s/ MATTHEW BANKS</u> Matthew Banks	Vice President, Corporate Controller and Chief Accounting Officer (Principal Accounting Officer)	February 16, 2024
<u>/s/ RAVI AHUJA</u> Ravi Ahuja	Director	February 16, 2024
<u>/s/ JEFFREY BLACKBURN</u> Jeffrey Blackburn	Director	February 16, 2024
<u>/s/ MAI FYFIELD</u> Mai Fyfield	Director	February 16, 2024
<u>/s/ JEFFREY HASTINGS</u> Jeffrey Hastings	Director	February 16, 2024
<u>/s/ LAURIE SIMON HODRICK</u> Laurie Simon Hodrick	Director	February 16, 2024
<u>/s/ GINA LUNA</u> Gina Luna	Director	February 16, 2024
<u>/s/ RAY ROTHROCK</u> Ray Rothrock	Director	February 16, 2024