UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2019

OR

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

For the transition period from_______ to _______

Commission File Number: 001-38211

ROKU, INC.
(Exact name of registrant as specified in its charter)

Delaware **(State or other jurisdiction of incorporation or organization)**	**26-2087865** **(I.R.S. Employer Identification No.)**

150 Winchester Circle
Los Gatos, California 95032
(Address of principal executive offices including zip code)

Registrant's telephone number, including area code: (408) 556-9040

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

Title of Each Class:	Trading Symbol(s):	Name of Exchange on Which Registered:
Class A Common Stock, $0.0001 par value	"ROKU"	The Nasdaq Global Select Market

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

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

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

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
Emerging growth company	☐		

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

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

As of October 31, 2019, the registrant had 90,968,113 of Class A common stock, $0.0001 par value per share, and 26,547,304 shares of Class B common stock, $0.0001 par value per share, outstanding.

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NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended ("the Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended ("the Exchange Act") about us and our industry that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this 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 "anticipate," "believe," "continue," "could," "design," "estimate," "expect," "intend," "may," "plan," "potentially," "predict," "project," "should," "will" or the negative of these terms or other similar expressions.

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 Quarterly Report on Form 10-Q, regarding, among other things:

- *our financial performance, including our revenue, cost of revenue, operating expenses and our ability to attain and sustain profitability;*
- *our ability to attract and retain users and increase hours streamed;*
- *our ability to attract and retain advertisers;*
- *our ability to attract and retain additional TV brands to deploy our technology;*
- *our ability to acquire rights to distribute popular content on our platform on favorable terms, or at all, including the renewals of our existing agreements with content publishers;*
- *changes in consumer viewing habits or 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, including developing integrations with our platform partners;*
- *our ability to develop and launch new streaming products and provide ancillary services and support;*
- *our ability to integrate the business and operations of dataxu, Inc., a demand-side platform (DSP) company that we recently acquired;*
- *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;*
- *security breaches and system failures;*
- *our ability to maintain, protect and enhance our intellectual property; and*
- *our ability to comply with laws and regulations that currently apply or may become applicable to our business both in the United States and internationally, including compliance with the EU General Data Protection Regulation.*

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

Other sections of this Quarterly Report on Form 10-Q 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 report or to conform these statements to actual results or to changes in our expectations. You should read this Quarterly Report on Form 10-Q and the documents that we reference in this Quarterly Report on Form 10-Q and have filed as exhibits to this 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 (ir.roku.com/investor-relations), our filings with the Securities and Exchange Commission, webcasts, press releases, and conference calls. We use these mediums, including our website, to communicate with investors and the general public about our company, our products, and other issues. It is possible that the information that we make available may be deemed to be material information. We therefore encourage investors and others interested in our company to review the information that we make available on our website.

PART I—FINANCIAL INFORMATION

Item 1. Financial Statements.

ROKU, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands)
(unaudited)

	As of	
	September 30, 2019	December 31, 2018
Assets		
Current Assets:		
Cash and cash equivalents	$ 385,999	$ 155,564
Short-term investments	1,496	42,146
Restricted cash	868	—
Accounts receivable, net of allowances	196,044	183,078
Inventories	73,531	35,585
Prepaid expenses and other current assets	28,908	15,374
Deferred cost of revenue, current	45	1,188
Total current assets	686,891	432,935
Property and equipment, net	61,878	25,264
Operating lease right-of-use assets	142,110	—
Intangible assets, net	1,061	1,477
Goodwill	1,382	1,382
Other non-current assets	3,983	3,939
Total Assets	$ 897,305	$ 464,997
Liabilities and Stockholders' Equity		
Current Liabilities:		
Accounts payable and accrued liabilities	$ 241,519	$ 148,562
Deferred revenue, current	35,912	45,442
Total current liabilities	277,431	194,004
Deferred revenue, non-current	12,932	19,594
Operating lease liability, non-current	142,134	—
Other long-term liabilities	1,031	6,748
Total Liabilities	433,528	220,346
Stockholders' Equity:		
Common stock, $0.0001 par value	12	11
Additional paid-in capital	761,883	498,553
Accumulated other comprehensive loss	(2)	(17)
Accumulated deficit	(298,116)	(253,896)
Total stockholders' equity	463,777	244,651
Total Liabilities and Stockholders' Equity	$ 897,305	$ 464,997

See accompanying notes to condensed consolidated financial statements.

ROKU, INC.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)
(unaudited)

	Three Months Ended September 30, 2019	Three Months Ended September 30, 2018	Nine Months Ended September 30, 2019	Nine Months Ended September 30, 2018
Net Revenue:				
Platform	$ 179,322	$ 100,050	$ 481,157	$ 265,468
Player	81,606	73,331	236,534	201,299
Total net revenue	260,928	173,381	717,691	466,767
Cost of Revenue:				
Platform	67,075	29,504	165,419	78,498
Player	75,376	64,884	218,695	168,412
Total cost of revenue	142,451	94,388	384,114	246,910
Gross Profit:				
Platform	112,247	70,546	315,738	186,970
Player	6,230	8,447	17,839	32,887
Total gross profit	118,477	78,993	333,577	219,857
Operating Expenses:				
Research and development	68,487	45,370	186,219	119,692
Sales and marketing	46,666	25,603	117,041	68,180
General and administrative	29,873	19,769	77,992	50,768
Total operating expenses	145,026	90,742	381,252	238,640
Loss from Operations	(26,549)	(11,749)	(47,675)	(18,783)
Other Income, Net:				
Interest expense	(767)	(112)	(1,436)	(220)
Other income, net	2,065	2,162	4,272	2,971
Total other income, net	1,298	2,050	2,836	2,751
Loss Before Income Taxes	(25,251)	(9,699)	(44,839)	(16,032)
Income tax benefit	(96)	(172)	(619)	(397)
Net Loss	$ (25,155)	$ (9,527)	$ (44,220)	$ (15,635)
Net loss per share —basic and diluted	$ (0.22)	$ (0.09)	$ (0.39)	$ (0.15)
Weighted-average shares used in computing net loss per share —basic and diluted	116,681	106,884	114,064	103,035

See accompanying notes to condensed consolidated financial statements.

ROKU, INC.

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(in thousands)
(unaudited)

	Three Months Ended		Nine Months Ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Net Loss	$ (25,155)	$ (9,527)	$ (44,220)	$ (15,635)
Other comprehensive income, net of tax:				
Unrealized gain (loss) on short-term investments, net of tax	(6)	(7)	15	(7)
Comprehensive Net Loss	$ (25,161)	$ (9,534)	$ (44,205)	$ (15,642)

See accompanying notes to condensed consolidated financial statements.

ROKU, INC.

CONDENSED CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY
(in thousands)
(unaudited)

	Common Stock		Additional Paid-in	Treasury	Accumulated Other Comprehensive	Accumulated	Total Stockholders'
	Shares	Amount	Capital	Stock	Income / (Loss)	Deficit	Equity
Balance—June 30, 2019	116,159	$ 12	$ 734,298	$ (671)	$ 4	$ (272,961)	$ 460,682
Vesting of early exercised stock options	—	—	20	—	—	—	20
Issuance of common stock pursuant to equity incentive plans, net of taxes	1,279	—	5,618	—	—	—	5,618
Stock-based compensation expense	—	—	22,618	—	—	—	22,618
Unrealized gain (loss) on short-term investments	—	—	—	—	(6)	—	(6)
Net loss	—	—	—	—	—	(25,155)	(25,155)
Balance—September 30, 2019	117,438	$ 12	$ 762,554	$ (671)	$ (2)	$ (298,116)	$ 463,777
Balance—December 31, 2018	109,770	$ 11	$ 499,224	$ (671)	$ (17)	$ (253,896)	$ 244,651
Vesting of early exercised stock options	—	—	52	—	—	—	52
Share repurchases	(2)	—	—	—	—	—	—
Issuance of common stock pursuant to equity incentive plans, net of taxes	5,281	1	24,765	—	—	—	24,766
Issuance of common stock in connection with at-the-market offering, net of issuance costs of $3.6 million	2,389	—	179,360	—	—	—	179,360
Stock-based compensation expense	—	—	59,153	—	—	—	59,153
Unrealized gain (loss) on short-term investments	—	—	—	—	15	—	15
Net loss	—	—	—	—	—	(44,220)	(44,220)
Balance—September 30, 2019	117,438	$ 12	$ 762,554	$ (671)	$ (2)	$ (298,116)	$ 463,777

	Common Stock		Additional Paid-in	Treasury	Accumulated Other Comprehensive	Accumulated	Total Stockholders'
	Shares	Amount	Capital	Stock	Income / (Loss)	Deficit	Equity
Balance—June 30, 2018	105,061	11	463,624	(723)	—	(251,147)	211,765
Vesting of early exercised stock options	—	—	40	—	—	—	40
Issuance of common stock pursuant to equity incentive plans, net of taxes	3,738	—	8,123	(17)	—	—	8,106
Stock-based compensation expense	—	—	11,499	—	—	—	11,499
Unrealized gain (loss) on short-term investments	—	—	-	—	(7)	—	(7)
Net loss	—	—	—	—	—	(9,527)	(9,527)
Balance—September 30, 2018	108,799	$ 11	$ 483,286	$ (740)	$ (7)	$ (260,674)	$ 221,876
Balance—December 31, 2017	99,157	10	436,278	(671)	—	(283,338)	152,279
Vesting of early exercised stock options	—	—	213	—	—	—	213
Issuance of common stock pursuant to equity incentive plans, net of taxes	9,501	1	25,558	(69)	—	—	25,490
Issuance of common stock pursuant to exercise of common warrants, net	141	—	—	—	—	—	—
Stock-based compensation expense	—	—	21,237	—	—	—	21,237
Adoption of ASU 2016-16	—	—	—	—	—	(40)	(40)
Adoption of ASU 2014-09	—	—	—	—	—	38,339	38,339
Unrealized gain (loss) on short-term investments	—	—	—	—	(7)	—	(7)
Net loss	—	—	—	—	—	(15,635)	(15,635)
Balance—September 30, 2018	108,799	$ 11	$ 483,286	$ (740)	$ (7)	$ (260,674)	$ 221,876

See accompanying notes to condensed consolidated financial statements.

ROKU, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(unaudited)

	Nine Months Ended	
	September 30, 2019	September 30, 2018
Cash flows from operating activities:		
Net loss	$ (44,220)	$ (15,635)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation and amortization	9,170	5,824
Stock-based compensation expense	59,153	21,237
Provision for doubtful accounts	114	755
Non-cash interest expense	471	216
Loss from exit of facilities	—	450
Loss on disposals of property and equipment	—	8
Amortization of premiums on short-term investments	(280)	(164)
Changes in operating assets and liabilities:		
Accounts receivable	(13,080)	(1,369)
Inventories	(37,946)	(36,171)
Prepaid expenses and other current assets	(15,270)	1,357
Operating lease right-of-use assets	13,603	—
Deferred cost of revenue	1,143	1,945
Other noncurrent assets	(44)	(1,098)
Accounts payable and accrued liabilities	69,448	16,943
Operating lease liabilities	856	—
Other long-term liabilities	(2,639)	(541)
Deferred revenue	(16,192)	(3,054)
Net cash provided by (used in) operating activities	24,287	(9,297)
Cash flows from investing activities:		
Purchase of property and equipment	(38,054)	(13,363)
Purchases of short-term investments	(12,365)	(44,900)
Sales/maturities of short-term investments	53,310	3,000
Net cash provided by (used in) investing activities	2,891	(55,263)
Cash flows from financing activities:		
Proceeds from equity issued under at-the-market program, net of offering costs	179,360	—
Proceeds from equity issued under incentive plans	24,765	25,480
Holdback payment for a prior business acquisition	—	(500)
Net cash provided by financing activities	204,125	24,980
Net Increase (Decrease) in cash, cash equivalents and restricted cash	231,303	(39,580)
Cash, cash equivalents and restricted cash—Beginning of period	155,564	177,250
Cash, cash equivalents and restricted cash—End of period	$ 386,867	$ 137,670
Cash, cash equivalents and restricted cash at end of period:		
Cash and cash equivalents	385,999	137,670
Restricted cash	868	—
Cash, cash equivalents and restricted cash—End of period	$ 386,867	$ 137,670
Supplemental disclosures of cash flow information:		
Cash paid for interest	$ 2,215	455
Cash paid for income taxes	$ 683	$ 404
Supplemental disclosures of non-cash investing and financing activities:		
Unpaid portion of property and equipment purchases	$ 8,931	$ 1,828

See accompanying notes to condensed consolidated financial statements.

NOTES TO UNAUDITED CONDENSED 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. OnFebruary 1, 2008, Roku LLC was converted into Roku, Inc., a Delaware corporation. The Company's TV streaming platform allows users to easily discover and access a wide variety of movies, TV episodes, live programming and more. The Company operates in two reportable segments and generates revenue through the sale of streaming players, advertising, content distribution, and subscription and transaction revenue sharing, as well as through licensing arrangements with TV brands.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The condensed consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") and applicable rules and regulations of the Securities and Exchange Commission (the "SEC") regarding interim financial reporting. Certain information and note disclosures normally included in the financial statements prepared in accordance with U.S. GAAP have been condensed or omitted pursuant to such rules and regulations. These condensed consolidated financial statements should be read in conjunction with the consolidated financial statements contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2018, filed with the SEC on March 1, 2019.

The condensed consolidated balance sheet as of December 31, 2018 has been derived from the audited consolidated financial statements as of that date but does not include all of the information and footnotes included in the Company's Annual Report on Form 10-K for the year ended December 31, 2018. The interim financial information is unaudited, but reflects all normal recurring adjustments that are, in the opinion of management, necessary to fairly present the information set forth herein. The results of operations for the three and nine months ended September 30, 2019 are not necessarily indicative of the operating results to be expected for the full year or any future periods.

There have been no material changes in the Company's significant accounting policies other than the adoption of Accounting Standards Update ("ASU") ASU 2016-02*, Leases (Topic 842),* ("ASC 842"), described below and in Note 7, and debt issuance costs, described in Note 8, as compared to the significant accounting policies described in the Company's Annual Report on Form 10-K for the year ended December 31, 2018.

Use of Judgements and Estimates

The preparation of the Company's condensed consolidated financial statements in accordance with U.S. GAAP requires management to make certain estimates, judgements, and assumptions that affect the reported amounts of assets and liabilities and related disclosures at the date of the financial statements, as well as the reported amounts of revenue and expenses during the periods presented. Significant items subject to such estimates and assumptions include: for 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 reporting, evaluation of customer versus vendor relationships, and other obligations such as sales return reserves and customer incentive programs; the valuation of inventory, the valuation of deferred income tax assets, the recognition and disclosure of contingent liabilities and stock-based compensation. 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.

Principles of Consolidation

The condensed consolidated financial statements have been prepared in accordance with U.S. GAAP and include the accounts of the Company and its wholly-owned subsidiaries. All intercompany transactions and balances have been eliminated in consolidation.

Comprehensive Income (Loss)

Comprehensive income (loss) includes unrealized gains (loss) on the Company's short-term investments for the three and nine months ended September 30, 2019 and September 30, 2018.

Concentrations

Customers accounting for 10% or more of the Company’s net revenue were as follows:

	Three Months Ended		Nine Months Ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Customer B	*	10%	10%	*
Customer C	13%	16%	13%	16%

Customers accounting for 10% or more of the Company’s accounts receivable were as follows:

	As of	
	September 30, 2019	December 31, 2018
Customer D	11%	11%

* Less than 10%

Restricted Cash

Restricted cash is comprised of cash collateral for outstanding letters of credit related to operating leases of office facilities. As of September 30, 2019, the Company had restricted cash of $0.9 million. The Company did not have any restricted cash as of December 31, 2018.

Content Licensing

The Company acquires rights to video content for viewing on The Roku Channel. Consideration for these content rights can include a fixed fee and/or a share of advertising revenue. The Company capitalizes content licensing fees and records a corresponding liability when the license period has begun, the cost of the licensed content is determinable, and the content is accepted and available for streaming. The Company amortizes licensed content assets into “Cost of Revenue, Platform” over the contractual window of availability.

As of September 30, 2019, content related expenses that met these requirements were not material

Recently Adopted Accounting Standards

In February 2016, the Financial Accounting Standards Board ("FASB") issued ASU No. 2016-02, *Leases (Topic 842),* in order to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet for those leases classified as operating leases under prior GAAP. ASU 2016-02 requires that a lessee should recognize a liability to make lease payments (the lease liability) and a right-of-use asset representing its right to use the underlying asset for the lease term on the balance sheet.

On January 1, 2019, the Company adopted the guidance in ASC 842 using the optional transition method and recorded right-of-use (“ROU”) assets and lease liabilities on its condensed consolidated balance sheet. As a result, periods prior to 2019 were not adjusted. On the adoption date, the Company recognized ROU assets totaling $39.9 million, lease liabilities totaling $42.1 million and reclassification of deferred and prepaid rents of $2.2 million to ROU assets on its condensed consolidated balance sheet. There was no impact to the accumulated deficit. The Company elected the package of practical expedients permitted under the transition guidance that allowed, among other things, the historical lease classification to be carried forward without reassessment. The Company did not elect the hindsight practical expedient to determine the lease term for existing leases. Refer to Note 7 for additional disclosures.

Recently Issued Accounting Pronouncements Not Yet Adopted

In August 2018, the FASB issued ASU 2018-15, *Intangibles—Goodwill and Other—Internal-Use Software (Topic 350), Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*, which requires hosting arrangements that are service contracts to follow the guidance for internal-use software to determine which implementation costs can be capitalized. The guidance is effective either prospectively or retrospectively for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years, with early adoption permitted. The Company is currently in the process of evaluating the impact of this new guidance on the consolidated financial statements and the related disclosures.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurements (Topic 820), Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement*. This standard removes, modifies, and adds certain disclosure requirements for fair value measurements. This pronouncement is effective for fiscal years, and for interim periods within those fiscal years, beginning after December 15, 2019, with early adoption permitted. The Company is currently in the process of evaluating the effects of the new guidance but does not expect the impact from this standard to be material.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. The guidance amends reporting of credit losses for assets held at amortized cost basis and available-for-sale debt securities to require that credit losses on available-for-sale debt securities be presented as an allowance rather than as a write-down. The measurement of credit losses for newly recognized financial assets and subsequent changes in the allowance for credit losses are recorded in the statements of operations. The amendments in this update will be effective for fiscal years beginning after December 15, 2019. The Company is currently in the process of evaluating the effects of the new guidance but does not expect the impact from this standard to be material.

3. REVENUE

Revenue Recognition

The Company enters into contracts that may include various product and service offerings, which are generally capable of being distinct and are accounted for as separate performance obligations.

Revenue is recognized upon the transfer of promised goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services.

Shipping charges billed to customers are included in revenue and the related shipping costs are included in cost of revenue. Revenue is recorded net of taxes collected or accrued. Sales taxes are recorded as current liabilities until remitted to the relevant government authority.

The Company does not have any capitalized costs associated with contract acquisition because most direct contract acquisition costs relate to contracts that are recognized over a period of one year or less.

Arrangements with Multiple Performance Obligations

The Company's contracts may contain multiple distinct performance obligations. The computed transaction price of each contract is allocated to each performance obligation based on a relative stand-alone selling price ("SSP"). For performance obligations routinely sold separately, the SSP is determined by evaluating such stand-alone sales. For those performance obligations that are not routinely sold separately, the Company determines SSP based on a market assessment approach, or on an expected cost-plus margin approach.

Nature of Products and Services

Platform Segment:

The Company's platform segment generates revenue from advertising sales, subscription and transaction revenue shares, the sale of branded channel buttons on remote controls and licensing arrangements with TV brands and service operators.

Player Segment:

The Company sells the majority of its players through retail distribution channels in the U.S., including brick and mortar and online retailers, as well as through the Company's website. The Company's player revenue includes allowances for returns and sales incentives in the estimated transaction price. These estimates are based on historical experience and anticipated performance.

Revenue Disaggregation

The Company's disaggregated revenue is represented by the two reportable segments discussed in Note 14. The disaggregation is based on the evaluations that are regularly performed 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.

Contract Balances

Contract balances include the following (in thousands):

	As of	
	September 30, 2019	December 31, 2018
Accounts receivable, net	$ 196,044	$ 183,078
Contract assets (included in Prepaid expenses and other current assets)	4,787	753
Deferred revenue, current	35,912	45,442
Deferred revenue, non-current	12,932	19,594
Total deferred revenue	$ 48,844	$ 65,036

Accounts receivable are recorded at the amount invoiced, net of an allowance for doubtful accounts, sales returns, and sales incentives. 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. Contract liabilities are included in deferred revenue and reflect consideration invoiced prior to the completion of performance obligations and revenue recognition.

Contract assets increased by approximately $4.0 million during the nine months ended September 30, 2019 primarily due to an increase in the growth of platform revenue combined with the timing of billing which falls into a subsequent period. Deferred revenue decreased by approximately $16.2 million during the nine months ended September 30, 2019 primarily due to revenue recognized of $5.0 million pursuant to customer acceptance of a milestone, and the remaining revenue recognized primarily relates to the timing of fulfillment of performance obligations and the overall growth in the business.

During the three and nine months ended September 30, 2019, the Company recognized revenue of approximately $6.3 million and $44.2 million, respectively, from the amounts deferred as of December 31, 2018. During the three and nine months ended September 30, 2018, the Company recognized revenue of approximately $5.3 million and $34.9 million, respectively, from the amounts deferred as of January 1, 2018.

Revenue Allocated to Future Performance Obligations

Revenue allocated to remaining performance obligations represents estimated contracted revenue that has not yet been recognized which includes unearned revenue and amounts that will be invoiced and recognized as revenue in future periods. Estimated contracted revenue was $146.8 million as of September 30, 2019 of which we expect to recognize approximately 62% over the next 12 months and the remainder thereafter.

4. BALANCE SHEET COMPONENTS

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

	September 30, 2019	December 31, 2018
Gross accounts receivable	$ 209,149	$ 204,975
Allowance for sales returns	(4,438)	(7,335)
Allowance for sales incentives	(8,378)	(13,750)
Other allowances	(289)	(812)
Total allowances	(13,105)	(21,897)
Total Accounts Receivable—net of allowances	$ 196,044	$ 183,078

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

	September 30, 2019	December 31, 2018
Balance, beginning of period	$ (7,335)	$ (6,907)
Charged to revenue	(9,519)	(17,396)
Utilization of sales return reserve	12,416	16,968
Balance, end of period	$ (4,438)	$ (7,335)

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

	September 30, 2019	December 31, 2018
Balance, beginning of period	$ (13,750)	$ (10,442)
Charged to revenue	(26,947)	(50,958)
Utilization of sales incentive reserve	32,319	47,650
Balance, end of period	$ (8,378)	$ (13,750)

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

	September 30, 2019	December 31, 2018
Computers and equipment	$ 21,642	$ 16,056
Leasehold improvements	54,294	18,396
Website and internal-use software	6,457	6,423
Office equipment and furniture	7,864	4,069
Total property and equipment	90,257	44,944
Accumulated depreciation and amortization	(28,379)	(19,680)
Property and Equipment, net	$ 61,878	$ 25,264

Depreciation and amortization expense, for property and equipment assets, for the three months ended September 30, 2019 and 2018 was $3.4 million and $2.1 million, respectively. Depreciation and amortization expense, for property and equipment assets, for the nine months ended September 30, 2019 and 2018 was $8.8 million and $5.4 million, respectively.

Accounts Payable and Accrued Liabilities—Accounts payable and accrued liabilities consisted of the following (in thousands):

	September 30, 2019	December 31, 2018
Accounts payable	$ 77,416	$ 56,576
Payments due to content publishers	55,096	32,463
Accrued cost of revenue	33,889	22,830
Operating lease liability, current	16,600	—
Accrued royalty expense	11,239	7,939
Accrued payroll and related expenses	11,074	12,217
Accrued inventory	10,497	6,008
Accrued capital expenditures	5,973	—
Marketing, retail and merchandising costs	5,777	—
Accrued legal fees	4,298	—
Customer prepayments	2,376	3,124
Taxes and related liabilities	1,160	1,314
Other accrued expenses	6,124	6,091
Total Accounts Payable and Accrued Liabilities	$ 241,519	$ 148,562

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

	September 30, 2019	December 31, 2018
Platform, current	$ 17,541	$ 28,569
Player, current	18,371	16,873
Total deferred revenue, current	35,912	45,442
Platform, non-current	6,221	12,783
Player, non-current	6,711	6,811
Total deferred revenue, non-current	12,932	19,594
Total Deferred Revenue	$ 48,844	$ 65,036

5. SHORT-TERM INVESTMENTS

The following is a summary of the Company's short-term investments (in thousands):

	September 30, 2019				December 31, 2018			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Loss	Fair Value	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Loss	Fair Value
Corporate bonds and commercial paper	$ 1,498	$ —	$ (2)	$ 1,496	$ 37,168	$ —	$ (17)	$ 37,151
U.S. government securities	—	—	—	—	4,995	—	—	4,995
Total Short-Term Investments	$ 1,498	$ —	$ (2)	$ 1,496	$ 42,163	$ —	$ (17)	$ 42,146

Tax effects related to unrealized losses are not material for all periods presented.

The following table summarizes the maturities of the Company's short-term investments by contractual maturity (in thousands):

	September 30, 2019		December 31, 2018	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Less than 1 year	$ 1,498	$ 1,496	$ 42,163	$ 42,146
Due in 1-3 years	—	—	—	—
Total Short-Term Investments	$ 1,498	$ 1,496	$ 42,163	$ 42,146

6. FAIR VALUE

We measure our financial assets and liabilities at fair value on a recurring basis.Fair value is defined as the price that would be received from the sale of an asset or paid to transfer a liability in the principal market or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date.

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

	September 30, 2019			December 31, 2018		
	Fair Value	Level 1	Level 2	Fair Value	Level 1	Level 2
Assets:						
Cash and cash equivalents:						
Cash	$ 336,053	$ 336,053	$ —	$ 147,221	$ 147,221	$ —
Money market funds	49,946	49,946	—	8,343	8,343	—
Restricted cash	868	868	—	—	—	—
Short-term investments:						
Corporate bonds and commercial paper	1,496	—	1,496	37,151	—	37,151
U.S. government securities	—	—	—	4,995	—	4,995
Total assets measured and recorded at fair value	$ 388,363	$ 386,867	$ 1,496	$ 197,710	$ 155,564	$ 42,146

The Company maximizes the use of observable inputs and minimizes the use of unobservable inputs in measuring fair value, and to utilize 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.

The Company considers all highly liquid investments purchased with an original or remaining maturity of less than three months at the date of purchase to be cash equivalents. The Company measured money market funds of $49.9 million and $8.3 million as cash equivalents as of September 30, 2019 and December 31, 2018, 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 measured its short-term investments using Level 2 inputs.

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

The Company did not use Level 3 inputs to measure any assets or liabilities as of September 30, 2019 and December 31, 2018.

7. LEASES

The Company determines if an arrangement contains a lease at its inception. ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term and leases are included in operating lease ROU assets, accrued liabilities, for the current portion of operating lease liabilities, and operating lease liabilities, non-current on our consolidated balance sheets. 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 took into consideration its credit rating and the length of the lease when calculating the incremental borrowing rate. The Company considers the options to extend or terminate the lease in determining the lease term, when it is reasonably certain to exercise one of the options. The Company combines lease and non-lease components into a single lease component for its real estate and equipment leases.

The Company has entered into operating leases primarily for office real estate. The leases have remaining lease terms ranging from one year to 11 years. Some leases include an option to extend the leases for up to seven years and some leases include an option to terminate after three years from the commencement date. The depreciable life of ROU assets is limited by the expected lease term.

The Company earns sublease income from subleases for a portion of the former headquarters. The subleases expire in 2020.

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

	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2019
Operating lease cost	$ 7,955	$ 18,117
Sublease income	(664)	(1,790)
Net operating lease cost	$ 7,291	$ 16,327

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

	Three months ended September 30, 2019	Nine Months Ended September 30, 2019
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash outflows from operating leases	$ 4,892	$ 12,332
Right-of-use assets obtained in exchange for lease obligations:		
Operating leases	$ 32,014	$ 115,794

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

	As of September 30, 2019
Operating lease right-of-use assets	$ 142,110
Included in accounts payable and accrued liabilities:	
Operating lease liability, current	16,600
Operating lease liability, non-current	142,134
Total operating lease liability	$ 158,734
Weighted Average Remaining Lease Term	
Operating leases (in years)	9.51
Weighted Average Discount Rate	
Operating leases	5.18%

Future lease payments under operating leases as of September 30, 2019 were as follows (in thousands):

Year ending December 31,	Operating Leases
2019 (remaining 3 months)	$ 4,969
2020	21,521
2021	26,395
2022	22,690
2023	23,164
Thereafter	132,455
Total future lease payments	231,194
Less: imputed interest	(50,173)
Less: expected tenant improvement allowance	(22,287)
Total	$ 158,734

As of September 30, 2019, the Company has additional operating leases, primarily corporate offices, that have not yet commenced of $129.0 million. These operating leases will commence in the remainder of fiscal year 2019 and fiscal year 2020 with lease terms of 6 years to 11 years.

The following table summarizes the future minimum lease payments due under operating leases as of December 31, 2018 and reflect the application of the prior lease standard (ASC 840, Leases). These amounts were disclosed in the Company's Annual Report on Form 10-K for the year ended December 31, 2018 (in thousands):

Year ending December 31,	Operating Leases
2019	$ 16,817
2020	29,124
2021	32,034
2022	32,844
2023	33,414
Thereafter	223,472
Less: sublease income	(3,711)
Total	$ 363,994

8. DEBT

The Company did not have any outstanding debt as of September 30, 2019 and December 31, 2018.

Senior Secured Term Loan A and Revolving Credit Facilities

On February 19, 2019 (the "Original Closing Date"), the Company entered into a Credit Agreement (the "Existing Credit Agreement") with Morgan Stanley Senior Funding, Inc. On May 3, 2019, (the "Closing Date"), the Existing Credit Agreement was amended pursuant to an Incremental Assumption and Amendment No. 1 (the "Amendment" and the Existing Credit Agreement as amended by the Amendment, the "Credit Agreement"). The Amendment increased the level of new term loan commitments and new revolving commitments under the Credit Agreement by an aggregate amount of $50.0 million.

The Credit Agreement now 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, plus (z) for up to 90 days after the Original Closing Date, $25.0 million (together with the Revolving Credit Facility and the Term Loan A Facility, collectively, the "Credit Facility"). Borrowings under the Term Loan A Facility may be made by the Company up to nine months immediately following the Original Closing Date (the "Term Loan A Availability Period"). Each lender's obligation to fund future loans or issue future letters of credit under the Credit Facility is subject to the satisfaction of certain conditions set forth in the Credit Agreement. On the Closing Date, the Company terminated its Restated 2014 LSA (as defined below) with Silicon Valley Bank.

Loans under the Credit Facility bear interest at a rate equal to, at the Company's election, (i) an alternate base rate, based upon the highest of (x) the prime rate published by the Wall Street Journal, (y) the federal funds effective date plus ½ of 1% and (z) the one-month LIBOR plus 1%, in each case plus an applicable margin of up to 1% per annum, with step-downs based on its secured leverage ratio or (2) an adjusted one-, two-, three-, or six month LIBOR, at its election, plus an applicable margin of up to 2% per annum, with step-downs based on its secured leverage ratio.

Loans under the Term Loan A Facility will amortize in equal quarterly installments beginning on the last day of the fiscal quarter ending after the date of the initial borrowing under the Term Loan A Facility, in an aggregate annual amount equal to (i) on or prior to December 31, 2021, 1.25% of the drawn principal amount of the Term Loan Facility and (ii) thereafter, 2.50% of the drawn principal amount of the Term Loan Facility, with any remaining balance payable on the maturity date of the Term Loan A Facility.

The Company's obligations under the Credit Agreement are secured by substantially all of its assets. In the future, certain of its direct and indirect subsidiaries may be required to guarantee the Credit Agreement. The Company may prepay, and in circumstances is required to prepay, loans under the Credit Agreement without payment of a premium. The Credit Agreement contains customary representations and warranties, customary affirmative and negative covenants, a financial covenant that is tested quarterly and requires the Company to maintain a certain adjusted quick ratio of at least 1.00 to 1.00, and customary events of default. As of September 30, 2019, the Company is in compliance with all the covenants of the Credit Agreement.

The Company incurred debt issuance costs for the Credit Agreement, which are amortized over the contractual term of the agreement. Debt issuance costs are recorded in prepaid expenses and other current assets on the condensed consolidated balance sheet.

Line of Credit with Silicon Valley Bank

The Company first entered into a loan and security agreement (the "LSA") with Silicon Valley Bank in July 2011. The LSA was amended and restated in subsequent periods. The amended and restated loan and security agreement (the "Restated 2014 LSA") entered into in November 2014 provided advances under a revolving line of credit up to $30.0 million and provided for letters of credit to be issued up to $5.0 million.

In June 2017, the Company entered into a second amendment to the Restated 2014 LSA (such amendment, the "Second Amendment"). Advances under the Second Amendment carry a floating per annum interest rate equal to, at the Company's option, (1) the prime rate or (2) LIBOR plus 2.75%, or the prime rate plus 1% depending on certain ratios. The Second Amendment further changed the financial covenant to maintain a current ratio (calculated as current assets, divided by current liabilities less deferred revenue) greater than or equal to 1.25. As of December 31, 2018, the Company was in compliance with all of the covenants in the amended Restated 2014 LSA.

On July 18, 2018, the Company entered into a third amendment to the Restated 2014 LSA (such amendment, the "Third Amendment"). The Third Amendment increased the amount by which the Company could utilize its line of credit to support the issuances of letters of credits from $5.0 million to $30.0 million.

On February 19, 2019, the Company terminated the Restated 2014 LSA agreement with Silicon Valley Bank.

9. STOCKHOLDERS' EQUITY

At-the-Market Offerings

On March 12, 2019, the Company entered into an Equity Distribution Agreement with Citigroup Global Markets Inc., as its sales agent (the "Citi Equity Distribution Agreement"), pursuant to which the Company could issue and sell from time-to-time shares of its Class A common stock for aggregate gross proceeds of up to $100.0 million. In March 2019, the Company sold approximately 1.4 million shares of Class A common stock at an average selling price of $72.00 per share, constituting all available shares for sale under the Citi Equity Distribution Agreement, for aggregate gross proceeds of $100.0 million and incurred issuance costs of $2.0 million.

On May 16, 2019, the Company entered into an Equity Distribution Agreement with Morgan Stanley & Co. LLC, as its sales agent (the "MS Equity Distribution Agreement"), pursuant to which the Company could issue and sell up to 1.0 million shares of its Class A common stock. In May 2019, the Company sold all 1.0 million available shares for sale under the MS Equity Distribution Agreement at an average selling price of $82.90 per share, for aggregate gross proceeds of $82.9 million and incurred issuance costs of $1.6 million.

Preferred Stock

The Company is authorized to issue 10 million shares of undesignated preferred stock with rights and preferences determined by the Company's Board of Directors at the time of issuance.

As of September 30, 2019 and December 31, 2018, there wereno 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. All shares of common stock outstanding immediately prior to the initial public offering ("IPO"), including shares of common stock issued upon the conversion of the convertible preferred stock, were converted into an equivalent number of shares of Class B common stock. All common stock, stock options, and restricted stock units issued at the time of, and subsequent to, the IPO are exercised or vested into shares of Class A common stock.

The Company has reserved the following shares of common stock for future issuances (in thousands):

	As of September 30, 2019
Common stock awards granted under equity incentive plans	16,189
Common stock awards available for issuance under Employee Stock Purchase Plan	2,089
Common stock awards available for issuance under the 2017 Equity Incentive Plan	17,317
Total reserved shares of common stock	35,595

Equity Incentive Plans

The 2008 Equity Incentive Plan (the "2008 Plan") became effective in February 2008. The 2008 Plan allowed for the grant of incentive stock options to employees and non-statutory stock options and restricted stock awards to employees, directors and consultants. Subject to certain limitations, options granted under the 2008 Plan were granted at a price per share equivalent to the fair market value on the date of grant and generally vest over four years and have a term of 10 years. Outstanding stock options granted under the 2008 Plan, prior to the Company's IPO, are exercisable for Class B common stock. Following the Company's IPO, no further equity awards could be made pursuant to the 2008 Plan.

The 2017 Equity Incentive Plan (the "2017 Plan") became effective in September 2017. The 2017 Plan provides for the grant of incentive stock options to employees and for the grant of non-statutory stock options and restricted stock awards, as well as other forms of equity compensation to employees, directors and consultants. Stock options and restricted stock units under the 2017 Plan are generally expensed over four years and have a term of 10 years. Only shares of Class A common stock are issued pursuant to equity awards granted under the 2017 Plan.

Stock-Based Compensation

The Company measures the cost of awards granted under equity incentive plans based on the grant date fair value. The Company uses the straight-line method for expense recognition and recognizes forfeitures as they occur.

The following table shows total stock-based compensation expense for the three and nine months ended September 30, 2019 and 2018 (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Cost of platform revenue	$ 120	$ 29	$ 238	$ 67
Cost of player revenue	287	136	776	247
Research and development	10,230	5,561	28,020	10,658
Sales and marketing	6,415	3,277	16,555	5,673
General and administrative	5,566	2,496	13,564	4,592
Total stock-based compensation	$ 22,618	$ 11,499	$ 59,153	$ 21,237

Stock Options

The summary of the Company's stock option activity is as follows (in thousands, except price 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, 2018 - outstanding	16,371	$ 8.59		—	
Granted	570	99.95		$ 39.21	
Exercised	(4,690)	5.37		—	
Forfeited and expired	(427)	8.05		—	
Balance, September 30, 2019 - outstanding	11,824	$ 14.28	6.4	—	$ 1,034,409
Options exercisable at September 30, 2019	6,538	$ 5.44	5.1	—	$ 629,790

The intrinsic value for options exercised during the three months ended September 30, 2019 and 2018, was$137.5 million and $206.2 million, respectively, and during the nine months ended September 30, 2019 and 2018 was $383.0 million and $403.2 million, respectively. Intrinsic value represents the difference between the fair values of the Company's common stock and the exercise prices on the date of grant. As of September 30, 2019, the Company had $46.3 million of unrecognized stock compensation expense related to unvested stock options that is expected to be recognized over a weighted-average period of approximately 1.92 years.

The fair value of options granted under the equity incentive plans is estimated on the grant date using the Black-Scholes option-valuation model. The assumptions used in the Black-Scholes model are as follows:

	Three Months Ended		Nine Months Ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Dividend rate	—	—	—	—
Expected term (in years)	5.0 - 6.73	5.8 - 6.8	5.0 - 6.73	5.3 - 6.8
Risk-free interest rate	1.35 - 1.79%	2.76 - 2.81%	1.35 - 2.56%	2.32 - 2.88%
Expected volatility	35 - 36%	38 - 40%	35 - 36%	38 - 40%

Restricted Stock Units

Pursuant to the 2017 Plan, the Company grants restricted stock units to employees. The fair value of restricted stock units is based on the Company's closing stock price on the date of grant. The summary of the Company's restricted stock unit activity is as follows (in thousands, except price per share data):

	Number of Shares	Weighted Average Grant Date Fair Value Per Share
Balance, December 31, 2018 - outstanding	3,686	$ 48.50
Awarded	1,719	74.06
Released	(595)	47.36
Forfeited	(445)	50.50
Balance, September 30, 2019 - outstanding	4,365	$ 58.52

The unrecognized compensation cost related to restricted stock units as of September 30, 2019 was $226.1 million, which the Company expects to recognize over 2.89 years. The intrinsic value of restricted stock units that vested during the three months ended September 30, 2019 and 2018 was $13.6 million and $2.9 million, respectively, and during the nine months ended September 30, 2019 and 2018 was $64.4 million and $3.2 million, respectively, which represented the fair value of the Company's common stock underlying the restricted stock units on their vesting date.

10. COMMITMENTS AND CONTINGENCIES

Outstanding Commitments

The Company has contracts with vendors for the manufacture of inventory and related items. The Company also has contracts with content providers and other vendors for content licensing and advertising buys in the normal course of business. As of September 30, 2019, the Company had $89.0 million purchase commitments for inventory and related items and $66.5 million for content licensing, advertising buys and other platform services.

Content Licensing

The Company licenses certain content for users to access through The Roku Channel. The Company records an obligation for licensing of content when it enters into an agreement to obtain future titles and the cost of the content is known. Certain agreements include the obligation to license rights for unknown future titles, the ultimate quantity and/or fees for which are not yet determinable as of the reporting date. As of September 30, 2019, the amounts recorded in "Accrued liabilities" for license purchase commitments were not material.

Letters of Credit

As of September 30, 2019 and December 31, 2018, the Company had irrevocable letters of credit outstanding in the amount of $30.4 million and $26.4 million, respectively, related to facilities leases. The letters of credit have various expiration dates through 2030.

Contingencies

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

The Company is currently involved in, and may in the future be involved in, legal proceedings, claims, and investigations in the ordinary course of business, including claims for infringing patents, copyrights or other intellectual property rights related to its platform and products, or the content distributed through its platform by the Company or third-party channel developers. 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.

Indemnification

Many of the Company's agreements include provisions for indemnifying content publishers, licensees, distributors, retailers, contract manufacturers and suppliers in the event that the Company's products or services or the Company's technologies incorporated therein, infringe on a third party's intellectual property rights. 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.

11. INCOME TAXES

Income tax benefit for the three months ended September 30, 2019 and 2018 was $0.1 million and $0.2 million, respectively, and income tax benefit for the nine months ended September 30, 2019 and 2018 was $0.6 million and $0.4 million, respectively. The income tax benefit for the three and nine months ended September 30, 2019 and 2018, was primarily attributable to non-U.S. tax benefit associated with the Company's non-U.S. operation. Based on the available objective evidence during the three months ended September 30, 2019, the Company believes it is more likely than not that the tax benefits of the U.S. losses incurred may not be realized. Accordingly, the Company recorded a full valuation allowance against the tax benefits of the U.S. losses incurred. The primary difference between the effective tax rate and the statutory tax rate relates to the valuation allowance on the Company's U.S. losses.

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 September 30, 2019, management believes it is more likely than not that the deferred tax assets will not be fully realizable. Accordingly, the Company has provided a full valuation allowance against its deferred tax assets with the exception of deferred tax assets related to foreign entities in the U.K., China, and Denmark.

12. RELATED-PARTY TRANSACTIONS

The Company has engaged in transactions with one of its strategic investors. With respect to this investor, the Company recorded revenue of $2.7 million and $1.3 million for the three months ended September 30, 2019 and 2018, respectively, and $6.9 million and $2.9 million for the nine months ended September 30, 2019 and 2018, respectively. The Company had accounts receivable balance of $3.5 million and $2.4 million as of September 30, 2019 and December 31, 2018, respectively, related to transaction with this investor. The Company incurred expenses of $0.6 million and $0.2 million with this investor for the three months ended September 30, 2019 and 2018, respectively, and $0.8 million and $0.3 million for the nine months ended September 30, 2019 and 2018, respectively. The Company had a payable of $0.1 million and $1.5 million to this investor as of September 30, 2019 and December 31, 2018, respectively.

In addition, the Company has engaged in transactions with another company in which the Company's Chief Executive Officer holds a majority voting interest and is a member of such company's board of directors, and another member of the Company's Board of Directors is such company's Chief Executive Officer. With respect to transactions with this other company, the Company incurred expenses of $ 1.2 million for the three months and nine months ended September 30, 2019. The Company did not consummate any transactions with the other company for the three and nine months ended September 30, 2018. There were no outstanding amounts payable to this other company as of September 30, 2019 and December 30, 2018.

13. NET LOSS PER SHARE

The Company's basic net loss per share is calculated by dividing the net loss by the weighted-average number of shares of common stock outstanding for the period. For purposes of the calculation of diluted net loss per share options to purchase common stock, restricted stock units and unvested shares of common stock issued upon the early exercise of stock options are considered common stock equivalents but have been excluded from the calculation of diluted net loss per share as their effect is antidilutive.

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

	Three Months Ended		Nine Months Ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Numerator:				
Net loss	$ (25,155)	$ (9,527)	$ (44,220)	$ (15,635)
Denominator:				
Weighted-average shares used in computing net loss per share, basic and diluted	116,681	106,884	114,064	103,035
Net loss per share, basic and diluted	$ (0.22)	$ (0.09)	$ (0.39)	$ (0.15)

Common shares that would be excluded from the calculation of diluted net loss per share because of their anti-dilutive effect are as follows (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Equity awards to purchase common stock	16,189	20,575	16,189	20,575
Unvested shares of common stock issued upon early exercise of stock options and business acquisition	45	83	45	83
Total	16,234	20,658	16,234	20,658

14. SEGMENT INFORMATION

The Company is organized into two reportable segments as follows:

Platform—Consists primarily of fees received from advertising sales, subscription and transaction revenue shares, sales of branded channel buttons on remote controls and licensing arrangements with TV brands and service operators. The Company's first-party video ad inventory includes The Roku Channel, native display ads on home screens and screen savers as well as ad inventory obtained through content publisher agreements. To supplement supply, the Company can re-sell video inventory purchased from content publishers and, to a lesser extent, directly sell third-party inventory on a revenue share basis.

No customer accounted for more than 10% of platform segment revenue.

Player—Consists primarily of net sales of streaming media players and accessories through retailers and distributors, as well as directly to customers through the Company's website.

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

	Three Months Ended		Nine Months Ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Customer A	17%	17%	16%	15%
Customer B	19%	16%	19%	15%
Customer C	35%	34%	37%	36%

Substantially all of the Company's assets were held in the United States and were attributable to the operations in the United States as of September 30, 2019 and December 31, 2018. Revenue in international markets was less than 10% for all periods presented.

15. SUBSEQUENT EVENT

On October 22, 2019, the Company announced that it had entered into an agreement and plan of merger to purchase Boston-based dataxu, Inc., a demand-side platform (DSP) company that enables marketers to plan and buy video advertising campaigns, for aggregate consideration of approximately $150.0 million consisting of equal parts cash and shares of the Company's Class A Common Stock. The acquisition was consummated on November 8, 2019.

Item 2. 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 our condensed consolidated financial statements and related notes included elsewhere in this Quarterly Report on Form 10-Q and with our audited consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2018, filed on March 1, 2019, with the SEC.

Overview

Roku pioneered streaming to the TV, and we are capitalizing on this large economic opportunity as a leading TV streaming platform for users, content publishers and advertisers. Roku connects users to the streaming content they love, enables content publishers to build and monetize large audiences, and provides advertisers with unique capabilities to engage consumers.

Our business model is to increase the number of households that use our platform to watch TV, which is measured by active accounts, increase engagement by those users, which is measured by streaming hours, and then monetize our platform. We measure our platform monetization progress through average revenue per user ("ARPU") and growth in gross profit.

We generate platform revenue primarily from advertising, content distribution and billing services on our platform and player revenue primarily from the sale of streaming players. During the three and nine months ended September 30, 2019, we generated revenue of $260.9 million and $717.7 million, respectively, which is up 50% and 54%, respectively, from the three and nine months ended September 30, 2018.

We continue to manage the average selling prices ("ASP") of our streaming players to grow the number of players sold and active accounts. As a result, player revenue and player gross profit may fluctuate and may decline. We expect that tradeoffs from player revenue and player gross profit to grow the number of players sold and grow active accounts, and to result in increased platform monetization and growth in aggregate gross profit.

Key Performance Metrics

We use the following key performance metrics to evaluate our business, measure our performance, develop financial forecasts and make strategic decisions. Our key performance metrics are gross profit, active accounts, hours streamed, and ARPU.

Gross Profit

We measure the performance of our business using gross profit. The majority of our gross profit is generated from platform revenue. We believe gross profit is the primary metric to measure the performance of our business because we have two revenue segments with different margin profiles, and we aim to maximize our high margin platform revenue from our active accounts as they stream content on our platform. During the three and nine months ended September 30, 2019, we generated gross profit of $118.5 million and $333.6 million, respectively, which is up 50% and 52%, respectively, from the three and nine months ended September 30, 2018.

Active Accounts

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 that streamed content from The Roku Channel only on non-Roku platforms are not included in this metric. The number of active accounts also does not correspond to the number of unique individuals who actively utilize our platform, or the number of devices associated with an account. For example, a single account may be used by more than one individual, such as a family, and one account may be used on multiple devices. We believe that the number of active accounts is a relevant measure to gauge the size of our user base. We grow new accounts by selling streaming devices; by partnering with TV brands that manufacture and sell Roku TV models under licenses from us; and through licensing relationships with service operators. As of September 30, 2019, we had 32.3 million active accounts, a net increase of 1.7 million active accounts from June 30, 2019.

Hours Streamed

We define hours streamed as the aggregate amount of time our streaming devices stream content on our platform in a given period. Streaming hours on non-Roku platforms are not included in this metric. We report hours streamed on a calendar basis. 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.

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

During the third quarter of 2019, we began rolling out a new Roku OS feature that is designed to identify when content has been continuously streaming on a channel for an extended period of time without user interaction. This feature periodically prompts the user to confirm that they are still watching the selected channel and closes the channel if the user does not respond affirmatively. We believe that implementing this new feature across the Roku platform will benefit us, our customers, channel partners and advertisers. Some of our leading channel partners, including Netflix, have already implemented similar features within their channels. This new Roku OS feature supplements these channel features. We are currently rolling this feature out to our entire installed base. While we expect continued robust growth in our aggregate streaming hours as we grow active accounts and user engagement with our streaming platform increases, we believe our year-over-year growth rates of streaming hours reported in 2020 are likely to be lower than the year-over-year growth rates we reported in 2019. We do not expect the rollout of this feature to have a material impact on our future financial performance. In the three months ended September 30, 2019 our users streamed 10.3 billion hours, an increase of 0.9 billion hours from the three months ended June 30, 2019.

Average Revenue per User

We measure platform monetization progress with ARPU. We define ARPU as our platform revenue for the trailing four quarters divided by the average of the number of active accounts at the end of the current period and the end of the corresponding period in the prior year. ARPU measures the rate at which we are monetizing our active account base and the progress of our platform business. At September 30, 2019, our ARPU was $22.58, a 30% increase from September 30, 2018.

Components of Results of Operations

Revenue

Platform Revenue

We generate platform revenue from advertising sales, subscription and transaction revenue shares, sales of branded channel buttons on remote controls and licensing arrangements with TV brands and service operators. Our first-party video ad inventory includes The Roku Channel, native display ads on our home screen and screen saver as well as ad inventory we obtain through our content publisher agreements. To supplement our supply, we can re-sell video inventory that we purchase from content publishers and, to a lesser extent, directly sell third-party inventory on a revenue share basis. To date, we generate most of our platform revenue in the United States.

Player Revenue

We generate player revenue primarily from the sale of streaming players through consumer retail distribution channels, including major brick and mortar retailers, such as Best Buy and Walmart, and online retailers, primarily Amazon. We generate most of our player revenue in the United States. In our international markets, we sell our players through wholesale distributors which, in turn, re-sell to retailers. We currently distribute our players in Canada, the United Kingdom, France, the Republic of Ireland, Mexico and several other Latin American countries.

To enhance user experience, we introduced wireless speakers in 2018 that work with Roku TV models and introduced the Roku Smart Soundbar and Roku Wireless Subwoofer in September 2019.

Cost of Revenue

Cost of Platform Revenue

Cost of platform revenue consists of advertising inventory acquisition costs, payment processing fees, third-party cloud service fees, content licensing fees and allocated personnel-related costs, including salaries, benefits and stock-based compensation for Roku personnel who support platform services.

Cost of Player Revenue

Cost of player revenue is comprised of player manufacturing costs payable to our third-party contract manufacturers, technology licenses or royalty fees, inbound and outbound freight, duty and logistics costs, third-party packaging and assembly costs, provision for excess or obsolete inventory, allocated overhead costs related to facilities and customer support, and salary, benefit and stock-based compensation costs for operations personnel.

Operating Expenses

Research and Development

Research and development expenses consist primarily of personnel-related costs, including employee salaries, benefits and stock-based compensation for our engineers and other employees engaged in the development of our products including new technologies, features and functionality and fees for outsourced consulting services. In addition, research and development expenses include allocated facilities and overhead costs. We believe continued investment is important to attaining our strategic objectives and expect research and development expenses to increase in absolute dollars for the foreseeable future.

Sales and Marketing

Sales and marketing expenses consist primarily of personnel-related costs, including salaries, benefits, commissions and stock-based compensation expense for our employees engaged in sales and sales support, marketing, communications, data science and analytics, business development, product management and partner and customer support functions. Sales and marketing expenses also include marketing, retail and merchandising costs, as well as events, public relations and other professional services and allocated facilities and overhead. We expect our sales and marketing expenses to increase as we continue to grow our business.

General and Administrative

General and administrative expenses consist primarily of personnel-related costs, including salaries, benefits and stock-based compensation for our executive, finance, legal, information technology, human resources and other administrative personnel. We expect our general and administrative expenses to increase due to the anticipated growth of our business and related infrastructure, compliance with global laws and regulations, as well as accounting, legal, insurance, investor relations and other costs associated with being a public company.

Other Income (Expense), Net

Our other income (expense), net, for the three and nine months ended September 30, 2019 consists of interest income on short-term investments and cash balances, interest expense that primarily includes amortization of deferred debt costs and foreign currency re-measurement and transaction gains and losses. Other income (expense), net for three and nine months ended September 30, 2019 consists of interest income and foreign currency re-measurement and transaction gains and losses.

Income Tax Expense

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

Results of Operations

The following table sets forth our results of operations as a percentage of net revenue.

	Three Months Ended		Nine Months Ended	
	September 30, 2019	September 30, 2018	September 30, 2019	September 30, 2018
Net Revenue:				
Platform	69%	58%	67%	57%
Player	31%	42%	33%	43%
Total net revenue	100%	100%	100%	100%
Cost of Revenue:				
Platform	26%	17%	23%	17%
Player	29%	37%	30%	36%
Total cost of revenue	55%	54%	53%	53%
Gross Profit:				
Platform	43%	41%	44%	40%
Player	2%	5%	3%	7%
Total gross profit	45%	46%	47%	47%
Operating Expenses:				
Research and development	26%	26%	26%	26%
Sales and marketing	18%	15%	16%	15%
General and administrative	11%	11%	11%	11%
Total operating expenses	55%	52%	53%	52%
Loss from Operations	(10)%	(6)%	(6)%	(5)%
Other Income, Net:				
Interest expense	—%	—%	(1)%	—%
Other income, net	1%	1%	1%	1%
Total other income, net	1%	1%	—%	1%
Loss before income taxes	(9)%	(5)%	(6)%	(4)%
Net loss attributable to common stockholders	(9)%	(5)%	(6)%	(4)%

Comparison of Three and Nine Months Ended September 30, 2019 and September 30, 2018

Net Revenue

	Three Months Ended				Nine Months Ended			
(in thousands, except percentages)	September 30, 2019	September 30, 2018	Change $	Change %	September 30, 2019	September 30, 2018	Change $	Change %
Platform	$ 179,322	$ 100,050	$ 79,272	79%	$ 481,157	$ 265,468	$ 215,689	81%
Player	81,606	73,331	8,275	11%	236,534	201,299	35,235	18%
Total Net Revenue	$ 260,928	$ 173,381	$ 87,547	50%	$ 717,691	$ 466,767	$ 250,924	54%

Platform

Platform revenue increased by $79.3 million, or 79%, during the three months ended September 30, 2019 compared to the three months ended September 30, 2018. In addition to an increase in content revenue, the majority of the increase is from higher advertising revenue.

Platform revenue increased by $215.7 million, or 81%, during the nine months ended September 30, 2019 as compared to the nine months ended September 30, 2018. In addition to an increase in content revenue, the majority of the increase is from higher advertising revenue. The increase was partially offset by a decrease of $10.6 million in licensing revenue resulting from delivery of intellectual property that were lower in 2019 as compared to 2018.

Player

Player revenue increased by $8.3 million, or 11%, during the three months ended September 30, 2019 as compared to the three months ended September 30, 2018, as the volume of player units sold increased 21% as compared to the three months ended

September 30, 2018 offset by a 9% decrease in the average selling price of players. Revenue generated from the sale ofaudio products is included in player revenue and is not significant.

Player revenue increased by $35.2 million, or 18%, during the nine months ended September 30, 2019 as compared to the nine months ended September 30, 2018. During the nine months ended September 30, 2019, the volume of players sold increased 26% as compared to the nine months ended September 30, 2018 offset by a 7% decrease in the average selling price of players. Revenue generated from the sale of audio products is included in player revenue and is not significant.

Cost of Revenue and Gross Profit

(in thousands, except percentages)	Three Months Ended September 30, 2019	Three Months Ended September 30, 2018	Change $	Change %	Nine Months Ended September 30, 2019	Nine Months Ended September 30, 2018	Change $	Change %
Cost of revenue:								
Platform	$ 67,075	$ 29,504	$ 37,571	127%	$ 165,419	$ 78,498	$ 86,921	111%
Player	75,376	64,884	10,492	16%	218,695	168,412	50,283	30%
Total Cost of Revenue	$ 142,451	$ 94,388	$ 48,063	51%	$ 384,114	$ 246,910	$ 137,204	56%
Gross profit:								
Platform	$ 112,247	$ 70,546	$ 41,701	59%	$ 315,738	$ 186,970	$ 128,768	69%
Player	6,230	8,447	(2,217)	(26)%	17,839	32,887	(15,048)	(46)%
Total Gross Profit	$ 118,477	$ 78,993	$ 39,484	50%	$ 333,577	$ 219,857	$ 113,720	52%

Platform

Cost of platform revenue increased by $37.6 million, or 127%, during the three months ended September 30, 2019 as compared to the three months ended September 30, 2018. This increase is a result of higher advertising inventory acquisition costs, ad serving costs, content licensing fees and credit card processing fees totaling $35.2 million and a $2.1 million increase in allocated overhead primarily in advertising and platform support.

Cost of platform revenue increased by $86.9 million, or 111%, during the nine months ended September 30, 2019 as compared to the nine months ended September 30, 2018. This increase is a result of higher advertising inventory acquisition costs, ad serving costs, content licensing fees and credit card processing fees totaling $82.2 million and a $4.1 million increase in allocated overhead primarily in advertising operations and content distribution operations driven by the growth of the platform business.

Gross profit on platform revenue increased by $41.7 million, or 59%, during the three months ended September 30, 2019 as compared to the three months ended September 30, 2018, driven by an 79% increase in platform revenue offset by a 127% increase in platform costs.

Gross profit on platform revenue increased by $128.8 million, or 69%, during the nine months ended September 30, 2019 as compared to the nine months ended September 30, 2018, driven by an 81% increase in platform revenue offset by a 111% increase in platform costs.

Player

Cost of player revenue increased by $10.5 million, or 16%, during the three months ended September 30, 2019 as compared to the three months ended September 30, 2018. The cost of player revenue increased approximately $3.6 million due to an increase in manufacturing costs to support a higher volume of players sold. In addition, royalty expenses increased $2.5 million driven by an increased volume of sales and approximately $1.7 million of royalty accrued for intellectual property claims and increased freight costs of $1.5 million.

Cost of player revenue increased by $50.3 million, or 30%, during the nine months ended September 30, 2019 as compared to the nine months ended September 30, 2018. The cost of player revenue increased approximately $27.2 million due to an increase in manufacturing costs to support a higher volume of players sold. In addition, royalty expenses increased $14.6 million driven by increased volume of sales, approximately $3.7 million of royalty accrued for intellectual property claims, and offset by release of accrual of $8.9 million in the second quarter of 2018 pursuant to a potential intellectual property liability that did not materialize. The freight costs increased by $3.2 million to support higher volume.

Gross profit on player sales decreased by $2.2 million, or 26%, during the three months ended September 30, 2019 as compared to the three months ended September 30, 2018 primarily due to the impact of royalty accruals and the decrease in the average selling prices of players and increases in manufacturing and logistics costs.

Gross profit on player sales decreased by $15.0 million, or 46%, during the nine months ended September 30, 2019 as compared to the nine months ended September 30, 2018, primarily due to the impact of royalty accruals and releases as noted above, and the decrease in the average selling prices of players and increases in manufacturing and logistics costs.

Operating Expenses

	Three Months Ended				Nine Months Ended			
	September 30, 2019	September 30, 2018	Change $	Change %	September 30, 2019	September 30, 2018	Change $	Change %
(in thousands, except percentages)								
Research and development	$ 68,487	$ 45,370	$ 23,117	51%	$ 186,219	$ 119,692	$ 66,527	56%
Sales and marketing	46,666	25,603	21,063	82%	117,041	68,180	48,861	72%
General and administrative	29,873	19,769	10,104	51%	77,992	50,768	27,224	54%
Total Operating Expenses	$ 145,026	$ 90,742	$ 54,284	60%	$ 381,252	$ 238,640	$ 142,612	60%

Research and Development

Research and development expenses increased by $23.1 million, or 51%, during the three months ended September 30, 2019 as compared to the three months ended September 30, 2018. The increase was primarily due to higher personnel-related costs of $16.6 million, as a result of increased engineering headcount and the value of stock-based compensation, higher facilities costs of $4.3 million, and higher platform and product development costs of $2.2 million that includes expenses such as consulting and outside services, travel and equipment partially offset by allocation of overhead to player and platform costs.

Research and development expenses increased by $66.5 million, or 56%, during the nine months ended September 30, 2019 as compared to the nine months ended September 30, 2018. The increase was primarily due to higher personnel-related costs of $50.9 million as a result of increased engineering headcount and the value of stock-based compensation, higher facilities costs of $8.4 million and higher platform and product development costs of $7.2 million that includes expenses such as consulting and outside services, travel and equipment partially offset by allocation of overhead to player and platform costs.

Sales and Marketing

Sales and marketing expenses increased by $21.1 million, or 82%, during the three months ended September 30, 2019 as compared to the three months ended September 30, 2018. The increase was primarily due to higher personnel-related costs of $8.5 million related to increased headcount to support our growth in platform revenue, mainly in advertising and content distribution, and the value of stock-based compensation, an increase of $7.5 million in marketing, retail and merchandising costs and an increase in other expenses of $5.0 million that includes facilities costs, consulting services and travel.

Sales and marketing expenses increased by $48.9 million, or 72%, during the nine months ended September 30, 2019 as compared to the nine months ended September 30, 2018. The increase was primarily due to higher personnel-related costs of $27.9 million related to increased headcount to support our growth in platform revenue, mainly in advertising and content distribution, and the value of stock-based compensation, an increase of $11.4 million in marketing, retail and merchandising costs and an increase in other expenses of $9.6 million that includes facilities costs, consulting services and travel.

General and Administrative

General and administrative expenses increased by $10.1 million, or 51%, during the three months ended September 30, 2019 as compared to the three months ended September 30, 2018. The increase was primarily due to higher personnel-related costs of $5.4 million as a result of increased headcount in general and administrative functions and the value of stock-based compensation and $4.6 million primarily related to increased legal and other outside consulting and professional service fees.

General and administrative expenses increased by $27.2 million, or 54%, during the nine months ended September 30, 2019 as compared to the nine months ended September 30, 2018. The increase was primarily due to higher personnel-related costs of $16.8 million as a result of increased headcount in general and administrative functions and the value of stock-based compensation and $10.8 million primarily related to increased legal and other outside consulting and professional service fees.

Other Income, Net

	Three Months Ended				Nine Months Ended			
	September 30, 2019	September 30, 2018	Change $	Change %	September 30, 2019	September 30, 2018	Change $	Change %
(in thousands, except percentages)								
Interest expense	$ (767)	$ (112)	$ (655)	585%	$ (1,436)	$ (220)	$ (1,216)	553%
Other income, net	2,065	2,162	(97)	(4)%	4,272	2,971	1,301	44%
Total Other Income, Net	$ 1,298	$ 2,050	$ (752)	(37)%	$ 2,836	$ 2,751	$ 85	3%

Other income, net, decreased by $0.8 million during the three months ended September 30, 2019 as compared to the three months ended September 30, 2018 primarily due to an increase in interest expense relating to amortization of deferred debt costs and decrease in interest income from short-term investments and a higher level of cash balances.

Other income, net, increased by $0.09 million during the nine months ended September 30, 2019 as compared to the nine months ended September 30, 2018 primarily due to an increase in interest income as a result of a higher level of cash balances.

Income Tax Benefit

	Three Months Ended				Nine Months Ended			
	September 30, 2019	September 30, 2018	Change $	Change %	September 30, 2019	September 30, 2018	Change $	Change %
(in thousands, except percentages)								
Income Tax Benefit	$ (96)	$ (172)	$ 76	(44)%	$ (619)	$ (397)	$ (222)	56%

Income tax benefit arises from foreign income taxes and state minimum income taxes in the United States.

Liquidity and Capital Resources

As of September 30, 2019, we had cash, cash equivalents and short-term investments of $387.5 million. Our primary source of liquidity is cash generated through operating and financing activities, including sales of our securities. Our primary uses of cash include operating expenses 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 advertising platform, operating system and technology and players along with the timing and effort related to the introduction of new platform features, players, hiring of experienced personnel, the expansion of sales and marketing activities, as well as overall economic conditions. We entered into lease agreements for new corporate headquarters, as well as other office locations. We have incurred, and will continue to incur, material expenses in 2019 and expect to continue to incur material expenses in future years for facility and related building costs. We may also contemplate and engage in merger and acquisition activity that could materially impact our liquidity and capital resource position. For example, on November 8, 2019 we acquired dataxu, Inc. for aggregate consideration of $75.0 million in cash and 571,516 shares of our Class A common stock. However, we believe that our existing cash balances and cash flow from operations, together with amounts available under our Credit Agreement and Revolving Credit Facility, will be sufficient to fund our working capital and meet our anticipated cash needs for the foreseeable future.

As of September 30, 2019, approximately 1% of our cash was held outside the United States. These amounts were primarily held in Europe and are utilized to fund our foreign operations. The amount of unremitted earnings related to our foreign subsidiaries is not material.

At-the-Market Offerings

On March 12, 2019, we entered into an Equity Distribution Agreement with Citigroup Global Markets Inc., as our sales agent (the “Citi Equity Distribution Agreement”), pursuant to which we could issue and sell from time-to-time shares of our Class A common stock for aggregate gross proceeds of up to $100.0 million. In March 2019, we sold approximately 1.4 million shares of Class A common stock at an average selling price of $72.00 per share, constituting all available shares for sale under the Citi Equity Distribution Agreement, for aggregate gross proceeds of $100.0 million and incurred issuance costs of $2.0 million.

On May 16, 2019, we entered into an Equity Distribution Agreement with Morgan Stanley & Co. LLC, as our sales agent (the “MS Equity Distribution Agreement”), pursuant to which we could issue and sell up to 1.0 million shares of our Class A common stock. In May 2019, we sold all 1.0 million available shares for sale under the MS Equity Distribution Agreement at an average selling price of $82.90 per share, for aggregate gross proceeds of $82.9 million and incurred issuance costs of $1.6 million.

Senior Secured Term Loan A and Revolving Credit Facilities

On February 19, 2019 (the "Original Closing Date"), we entered into a Credit Agreement (the "Existing Credit Agreement") with Morgan Stanley Senior Funding, Inc. ("MSSF"). On May 3, 2019, (the "Closing Date"), the Existing Credit Agreement was amended pursuant to an Incremental Assumption and Amendment No. 1 (the "Amendment" and the Existing Credit Agreement as amended by the Amendment, the "Credit Agreement"). The Amendment increased the level of new term loan commitments and new revolving commitments under the Credit Agreement by an aggregate amount of $50.0 million.

The Credit Agreement now 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 our consolidated EBITDA for the most recently completed four fiscal quarter period, plus (x) an additional amount at our discretion, so long as, on a pro forma basis at the time of incurrence, our 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, plus (z) for up to 90 days after the Original Closing Date, $25.0 million (together with the Revolving Credit Facility and the Term Loan A Facility, collectively, the "Credit Facility"). Borrowings under the Term Loan A Facility may be made by us up to nine months immediately following the Original Closing Date (the "Term Loan A Availability Period"). Each lender's obligation to fund future loans or issue future letters of credit under the Credit Facility is subject to the satisfaction of certain conditions set forth in the Credit Agreement.

Loans under the Credit Facility bear interest at a rate equal to, at our election (i) an alternate base rate, based upon the highest of (x) the prime rate published by the Wall Street Journal, (y) the federal funds effective date plus ½ of 1% and (z) the one-month LIBO rate plus 1.00%, in each case plus an applicable margin of up to 1.00% per annum, with step-downs based on our secured leverage ratio or (ii) an adjusted one-, two-, three-, or six month LIBO rate, at our election, plus an applicable margin of up to 2.00% per annum, with step-downs based on our secured leverage ratio.

Loans under the Term Loan A Facility will amortize in equal quarterly installments beginning on the last day of the fiscal quarter ending after the date of the initial borrowing under the Term Loan A Facility, in an aggregate annual amount equal to (i) on or prior to December 31, 2021, 1.25% of the drawn principal amount of the Term Loan Facility and (ii) thereafter, 2.50% of the drawn principal amount of the Term Loan Facility, with any remaining balance payable on the maturity date of the Term Loan A Facility.

The Credit Agreement contains customary representations and warranties and customary affirmative and negative covenants, including, among other things, restrictions on indebtedness, liens, limitations on restrictive agreements, fundamental changes and business activities, investments, mergers, dispositions, transactions with affiliates, prepayment of other indebtedness and dividends and other distributions. The Credit Agreement also contains a financial covenant requiring us to maintain a minimum adjusted quick ratio of at least 1.00 to 1.00, tested as of the last day of any fiscal quarter.

As of September 30, 2019, we were in compliance with all the covenants of the Credit Agreement and there were no outstanding borrowings.

Cash Flows

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

	Nine Months Ended	
	September 30, 2019	**September 30, 2018**
Consolidated Statements of Cash Flows Data:		
Cash flows provided by (used in) operating activities	$ 24,287	$ (9,297)
Cash flows provided by (used in) investing activities	2,891	(55,263)
Cash flows provided by financing activities	204,125	24,980

Operating Activities

Our operating activities provided cash of $24.3 million for the nine months ended September 30, 2019. Our net loss of $44.2 million for the nine months ended September 30, 2019 was adjusted by non-cash charges of $68.6 million comprising mainly of $59.2 million of stock-based compensation and $9.2 million of depreciation and amortization primarily on property and equipment. The changes in our operating assets and liabilities used cash of $0.1 million comprised of inflows of $69.4 million from an increase in accounts payable and accrued liabilities due to timing of payments, increased developer payables, and overall growth in the volume of business, and $13.6 million from amortization of operating lease right-of-use assets. These inflows were partially offset by cash outflows of $37.9 million from an increase in inventory balances, $16.2 million from a decrease in deferred revenue, $15.3 million from an increase in prepaid and other current assets due to an increase in prepaid contracts, marketing expenses and prepaid capital expenditure for new facilities, and $13.1 million from an increase in accounts receivable as a result of increased revenue.

Our operating activities used cash of $9.3 million for the nine months ended September 30, 2018. Our net loss of $15.6 million for the nine months ended September 30, 2018 was adjusted by non-cash charges of $28.3 million comprising mainly of $5.8 million of depreciation and amortization, $21.2 million of stock-based compensation, $0.5 million relating to loss incurred on exiting facilities and $0.8 million of provision related to doubtful accounts. The changes in our operating assets and liabilities used cash of $22.0 million comprising of outflows of $36.2 million from increasing inventory levels from its low point at the end of 2017 holiday season, $1.4 million from increase in accounts receivable and $3.1 million from decrease in deferred revenue. These outflows were offset by cash inflows from of $16.9 million from increase in accounts payable and accrued liabilities and $1.9 million from decrease in deferred cost of revenue.

Investing Activities

Our investing activities for the nine months ended September 30, 2019 included cash inflow of $53.3 million received from the sales/maturities of short-term investments, offset by $38.1 million for the purchase of property and equipment, expenditures on leasehold improvements related to expanding our facilities and other capital investments and $12.4 million for the purchase of short-term investments.

Our investing activities for the nine months ended September 30, 2018 included cash outflow of $13.4 million spent on purchase of property and equipment, expenditure on leasehold improvements related to expanding our facilities and other capital investments and $44.9 million spent on the purchase of short-term investments, partially offset by $3.0 million received from the sales/maturities of short-term investments.

Financing Activities

Our financing activities provided cash of $204.1 million for the nine months ended September 30, 2019. The cash was received mainly from net proceeds from the issuance of common stock through our at-the-market programs amounting to $179.4 million, net of offering costs and the exercise of employee stock options of $24.8 million.

Our financing activities provided cash of $25.0 million for the nine months ended September 30, 2018. The cash was received mainly from the exercise of employee stock options amounting to $25.5 million following the expiry of the lock-up period in March 2018, partially offset by a payment of $0.5 million in connection with a previous business acquisition.

Off-Balance Sheet Arrangements

During the periods presented, we did not have any off-balance sheet arrangements, as defined by applicable SEC rules and regulations.

Contractual Obligations

Our future minimum payments under our noncancelable contractual obligations were as follows as of September 30, 2019 (in thousands):

	Payments Due by Period				
	Total	Less Than 1 Year	1 – 3 Years	3 – 5 Years	More Than 5 Years
Purchase commitments (1)	$ 88,962	$ 88,962	—	—	—
Operating lease obligations (2)	231,194	22,109	70,930	65,973	72,182
Other obligations (3)	66,475	49,584	16,441	450	—
Total	$ 386,631	$ 160,655	$ 87,371	$ 66,423	$ 72,182

(1) Represents commitments to purchase finished goods from our contract manufacturer and other inventory related items.
(2) Represents future minimum lease payments under operating leases.
(3) Represents commitments included in other noncancelable arrangements like content licensing, advertising buys and other platform services.

We rely on outsourced suppliers to manufacture, assemble and test our players and audio devices. Consistent with industry practices, we enter into firm, noncancelable, and unconditional purchase commitments to acquire products through a combination of purchase orders, supplier contracts, and open orders based on projected demand information. Our suppliers 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.

The contractual commitment amounts in the table 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 in the table above.

Critical Accounting Policies and Estimates

Our financial statements are prepared in accordance with generally accepted accounting principles in the United States. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, expenses and related disclosures. We evaluate our estimates and assumptions on an ongoing basis. Our estimates are based on historical experience and various other assumptions that we believe to be reasonable under the circumstances. Our actual results could differ from these estimates.

Except for the accounting policy related to our adoption of the new lease standard there have been no material changes to our critical accounting policies and estimates as compared to the critical accounting policies and estimates described in our Annual Report on Form 10-K for the year ended December 31, 2018. Refer to Note 7 of Part I, Item 1 of this Quarterly Report on Form 10-Q for the critical accounting policy resulting from our adoption of the new lease standard.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Interest Rate Fluctuation Risk

Our exposure to interest rate risk primarily relates to the interest income generated by cash, cash equivalents and short-term investments held in our operating and asset management accounts. The primary objective of our investment activities is to preserve principal while maximizing income without significantly increasing risk. We do not believe that an increase or decrease in interest rates of 100 basis points would have a material effect on our operating results or financial condition.

Foreign Currency Exchange Rate Risk

During the nine months ended September 30, 2019, there were no material changes to our foreign currency exchange rate risk disclosures as set forth under the heading "Item 7A – Quantitative and Qualitative Disclosures About Market Risk," in Part II of our Annual Report on Form 10-K for the year ended December 31, 2018.

Item 4. 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) as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of the period coveredby this quarterly report, our disclosure controls and procedures were, in design and operation, effective at a reasonable assurance level.

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. Any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objective and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

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 September 30, 2019 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings

We are currently involved in, and may in the future be involved in, legal proceedings, claims, and investigations in the ordinary course of our business, including claims for infringing patents, copyrights or other intellectual property rights related to our platform and products, or the content distributed through our platform by us or third-party channel developers. Although the results of these proceedings, claims, and investigations cannot be predicted with certainty, we do not believe that the final outcome of any matters that we are currently involved in are reasonably likely to have a material adverse effect on our business, financial condition, or results of operations. Regardless of final outcomes, however, any such proceedings, claims, and investigations may nonetheless impose a significant burden on management and employees and may come with expensive attorney fees or unfavorable preliminary and interim rulings.

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 Quarterly Report on Form 10-Q, 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 harmed. 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. The risks facing our business have not changed substantively from those discussed in our Annual Report on Form 10-K, filed with the SEC on March 1, 2019, except for those risks marked with an asterisk (*).

Risks Related to Our Business and Industry

We have incurred operating losses in the past, expect to incur operating losses in the future and may never achieve or maintain profitability.*

We began operations in 2002 and we have experienced net losses and negative cash flows from operations in each year since inception. As of September 30, 2019, we had an accumulated deficit of $298.1 million and for the nine months ended September 30, 2019, we experienced a net loss of $44.2 million. We expect our operating expenses to increase in the future as we expand our operations. If our revenue and gross profit do not grow at a greater rate than our operating expenses, we will not be able to achieve and maintain profitability. We expect to incur significant losses 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. If our expenses exceed our revenue, we may never achieve or maintain profitability and our business may be harmed.

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

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

Companies such as Amazon, Apple and Google offer TV streaming devices that compete with our streaming players and Roku TV. In addition, Google licenses its 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. These companies have the financial resources to subsidize the cost of their streaming devices in order to promote their other products and services, which could make it harder for us to acquire new users and increase hours streamed. 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 promote their brands through traditional forms of advertising, such as TV commercials, as well as internet advertising or website product placement, and have greater resources to devote to such efforts than we do.

In addition, many TV brands, such as LG, Samsung Electronics Co., Ltd. and VIZIO, Inc., offer their own TV streaming solutions within their TVs. Other devices, such as Microsoft's Xbox and Sony's PlayStation game consoles and many DVD and Blu-ray players, also incorporate TV streaming functionality. Similarly, some service operators, such as Comcast and Altice, offer TV streaming applications as part of their cable service plans and can leverage their existing consumer bases, installation networks, broadband delivery networks and name recognition to gain traction in the TV streaming market. If consumers of TV streaming content prefer these alternative products to our streaming players and Roku TVs, we may not be able to achieve our expected growth in revenue, gross profit or ARPU.

In July 2018, we launched our Roku TV Wireless Speaker product line, designed specifically for use with Roku TVs, and in September 2019, we launched our Roku Smart Soundbar and Roku Wireless Subwoofer. As a result of these developments, we may face additional competition from makers of TV audio speakers and soundbars, as well as makers of other TV peripheral devices. While our audio products have not generated significant revenue, if our audio products do not operate as designed or do not enhance the Roku TV or other viewing experience as we intend, our users' overall viewing experience may be diminished, and this may impact the overall demand for Roku TVs or our audio products.

We expect competition in TV streaming from the large technology companies and service operators described above, as well as new and growing companies, to increase in the future. This increased competition could result in pricing pressure, lower revenue and gross profit or the failure of our players, Roku TV and our platform to gain or maintain broad market acceptance. To remain competitive and maintain our position as a leading TV streaming platform we need to continuously invest in product development, marketing, service and support and device distribution infrastructure. In addition, evolving TV standards such as 4K, 8K, HDR and unknown future developments may require further investments in the development of our players, Roku TV and our platform. We may not have sufficient resources to continue to make the investments needed to maintain our competitive position. In addition, most of our competitors have longer operating histories, greater name recognition, larger customer bases and significantly greater financial, technical, sales, marketing and other resources than us, which provide them with advantages in developing, marketing or servicing new products and offerings. As a result, they may be able to respond more quickly to market demand, devote greater resources to the development, promotion and sales of their products or the distribution of 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.

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

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

Our business model depends on our ability to generate platform revenue from advertisers and content publishers. We generate platform revenue primarily from the video advertising and audience development campaigns that run across our platform and from our content partners on a transactional basis when new subscriptions are purchased and content transactions occur on our platform. As such, we are seeking to expand our user base and increase the number of hours that are streamed across our platform in an effort to create additional platform revenue opportunities. The total number of hours streamed, however, does not correlate with platform revenue on a period-by-period basis, because we do not monetize every hour streamed on our platform. 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. Moreover, streaming hours on our platform are measured whenever a Roku player or a Roku TV is streaming content, whether a viewer is actively watching or not. For example, if a Roku player is connected to a TV, and the viewer turns off the TV, steps away or falls asleep and does not stop or pause the player then the particular streaming channel may auto-play subsequent content for a period of time determined by the streaming channel. We believe that this also occurs across a wide variety of non-Roku streaming devices and other set-top boxes. During the third quarter of 2019, we began rolling out a new Roku OS feature that is designed to identify when content has been continuously streaming on a channel for an extended period of time without user interaction. Some of our leading channel partners, including Netflix, have already implemented similar features within their channels. This new Roku OS feature, which we are in the process of rolling out to our entire installed base, supplements these channel features. While we expect continued robust growth in our aggregate streaming hours as we grow active accounts and user engagement with our streaming platform increases, we believe our year-over-year growth rates of streaming hours reported in 2020 are likely to be lower than the year-over-year growth rates we reported in 2019. We do not expect the rollout of this feature to have a material impact on our future financial performance.

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

To date, the majority of the hours streamed on our platform have consisted of subscription video on demand content; however, in order to materially increase the monetization of our platform through the sale of video advertising, we will need our users to stream significantly more ad-supported content. Our efforts to monetize our platform through ad-supported content is still developing and may not continue to grow as we expect. Further, while we have experienced, and expect to continue to experience, growth in our advertising revenue, our efforts to monetize our platform through the distribution of advertising video on demand content are still developing and our advertising revenue may not grow as we expect. This means of monetization will require us to continue to attract advertising dollars to our platform as well as deliver advertising video on demand content that appeals to users. Accordingly, there can be no assurance that we will be successful in monetizing our platform through the distribution of advertising-supported video.

We depend on a small number of content publishers for a majority of our streaming hours, and if we fail to maintain these relationships, our business could be harmed, even though the revenue received, directly or indirectly, from streaming on certain of these channels has not been significant to our overall revenue.*

Historically, a small number of content publishers have accounted for a significant portion of the content streamed across our platform and the terms and conditions of our relationships with content publishers vary. In the nine months ended September 30, 2019 and the year ended December 31, 2018, Netflix and YouTube accounted for more than 50% all hours streamed in each period. However, although YouTube's free ad-supported channel is the most viewed ad-supported channel and the second most viewed channel overall by hours streamed on our platform for the nine months ended September 30, 2019 and the year ended December 31, 2018, we do not receive material revenue from it. In addition, our agreements with content publishers generally have a term of one to three years and can be terminated before the end of the term by the content publisher under certain circumstances, such as if we materially breach the agreement, become insolvent, enter bankruptcy, commit fraud or fail to adhere to the content publishers' security or other platform certification requirements. If we fail to maintain our relationships with the content publishers on terms favorable to us, or at all, or if these content publishers face problems in delivering their content across our platform, we may lose channel partners or users and our business may be harmed.

We operate in an evolving industry, which makes it difficult to evaluate our business and prospects. If TV streaming develops more slowly than we expect, our operating results and growth prospects could be harmed. In addition, our future growth depends on the growth of TV streaming advertising.

TV streaming is a relatively new and rapidly evolving industry, making our business and prospects difficult to evaluate. The growth and profitability of this industry and the level of demand and market acceptance for our products and streaming platform are subject to a high degree of uncertainty. We believe that the continued growth of streaming as an entertainment alternative will depend on the availability and growth of cost-effective broadband internet access, the quality of broadband content delivery, the quality and reliability of new devices and technology, the cost for users relative to other sources of content, as well as the quality and breadth of content that is delivered across streaming platforms. These technologies, products and content offerings continue to emerge and evolve. Users, content publishers or advertisers may find TV streaming platforms to be less attractive than traditional TV, which would harm our business. In addition, many advertisers continue to devote a substantial portion of their advertising budgets to traditional advertising, such as TV, radio and print. The future growth of our business depends on the growth of TV streaming advertising, and on advertisers increasing spend on such advertising. We cannot be certain that they will do so. If advertisers do not perceive meaningful benefits of TV streaming advertising, then this market may develop more slowly than we expect, which could adversely impact our operating results and our ability to grow our business.

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

We may fail to attract content publishers that generate sufficient quantity or quality of ad-supported content hours on our platform and continue to grow supply of quality video ad inventory. Our business model depends on our ability to grow video ad inventory on our platform and sell it to advertisers. While The Roku Channel serves as a valuable source of video ad inventory for us to sell, we are also dependent on our ability to monetize video ad inventory that we obtain from the publishers of ad-supported channels on our platform. Our access to video ad inventory in ad-supported streaming channels on our platform varies greatly among channels, accordingly, we do not have access to all of the video ad inventory on our platform. For certain channels, including YouTube's ad supported channel, we have no access to video ad inventory at this time, and we may not secure access in the future. The amount, quality and cost of video ad inventory available to us can change at any time. If we are unable to grow and maintain a sufficient supply of quality video advertising inventory at reasonable costs to keep up with demand, our business may be harmed.

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

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

Our Roku OS is designed for performance using relatively low-cost hardware, which enables us to drive user growth with our players and Roku TVs offered at a low cost to consumers. However, this hardware must be interoperable with all channels and other offerings, technologies and systems from our content publishers, including virtual multi-channel video programming distributors such as DirectTV Now, Sling TV and YouTube TV. We have no control over these offerings, technologies and systems beyond our channel certification requirements, and if our players do not provide our users with a high-quality experience on those offerings on a cost-effective basis or if changes are made to those offerings that are not compatible with our players, we may be unable to increase active account growth and user engagement, we may be required to increase our hardware costs and our business will be harmed. We plan to continue to introduce new products regularly and we have experienced that it takes time to optimize such products to function well with these offerings, technologies and systems. In addition, many of our largest content publishers have the right to test and certify our new products before we can publish their channels on new products. These certification processes can be time consuming and introduce third party dependencies into our product release cycles. If content publishers do not certify new products on a timely basis or require us to make changes in order to obtain certifications, our product release plans may be adversely impacted, or we may not continue to offer certain channels. To continue to grow our active accounts and user engagement, we will need to prioritize development of our products to work better with new offerings, technologies and systems. If we are unable to maintain consistent operability of Roku devices that is on parity with or better than other platforms, our business could be harmed. In addition, any future changes to offerings, technologies and systems from our content publishers, such as virtual service operators, may impact the accessibility, speed, functionality, and other performance aspects of our products. We may not successfully develop products 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.

Changes in consumer viewing habits could harm our business.

The manner in which consumers access streaming content is changing rapidly. As the technological infrastructure for internet access continues to improve and evolve, consumers will be presented with more opportunities to access video, music and games on-demand with interactive capabilities. Time spent on mobile devices is growing rapidly, in particular by young adults streaming video content, including popular streaming channels like Netflix and YouTube, as well as content from cable or satellite providers available live or on-demand on mobile devices. In addition, personal computers, smart TVs, DVD players, Blu-ray players, gaming consoles and cable set-top boxes allow users to access streaming entertainment content. If other streaming or technology providers are able to respond and take advantage of changes in consumer viewing habits and technologies better than us, our business could be harmed.

New entrants may enter the TV streaming market with unique service offerings or approaches to providing video. In addition, our competitors may enter into business combinations or alliances that strengthen their competitive positions. If new technologies render the TV streaming market obsolete or we are unable to successfully compete with current and new competitors and technologies, our business will be harmed, and we may not be able to increase or maintain our market share and revenue.

If we fail to obtain or maintain popular content, we may fail to retain existing users and attract new users.

We have invested a significant amount of time to cultivate relationships with our content publishers; however, such relationships may not continue to grow or yield further financial results. We must continuously maintain existing relationships and identify and establish new relationships with content publishers to provide popular content. In order to remain competitive, we must consistently meet user demand for popular streaming channels and content; particularly as we launch new players or TVs, or enter new markets, including international markets. If we are not successful in helping our content publishers launch and maintain streaming channels that attract and retain a significant number of users on our platform or if we are not able to do so in a cost-effective manner, our business will be harmed. Our ability to successfully help content publishers maintain and expand their channel offerings on a cost-effective basis largely depends on our ability to:

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

If we fail to help our content publishers maintain and expand their channel offerings our business may be harmed.

If the advertising and audience development campaigns on our platform are not relevant or not engaging to our users, our growth in active accounts and hours streamed may be adversely impacted.

We have made, and are continuing to make, investments to enable advertisers and content providers to deliver relevant advertisements and audience development campaigns to users on our platform. Existing and prospective advertisers and content providers may not be successful in serving ads and audience development 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 users and advertisers 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 and advertisers. If we do not introduce relevant advertisements and audience development campaigns or such advertisements and audience development campaigns are overly intrusive and impede the use of our TV streaming platform, our users may stop using our platform which will harm our business.

The Roku Channel may not continue to attract a large number of users and/or generate significant advertising revenue, and our users may not purchase Premium Subscriptions.*

We operate “The Roku Channel,” which offers both ad-supported free access for users to a collection of films, television series and other content as well as “Premium Subscriptions,” which we launched in January 2019, allowing our users to pay for ad-free content from various content providers, all on one streaming channel. We have incurred, and will continue to incur, costs and expenses in connection with the launch, development, expansion and operation of The Roku Channel, which we monetize primarily through advertising. If our users do not continue to stream the free, 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 for any period of time, 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, usage of The Roku Channel may decline, and our business may be harmed. 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 content we make available, our users may not stream content and view advertisements on The Roku Channel, and The Roku Channel may not generate sufficient advertising revenue to be cost effective for us to operate, regardless of our ability to sell Premium Subscriptions. 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 and/or generating significant advertising revenue through the distribution of The Roku Channel on such other streaming platforms.

Our growth will depend in part upon our ability to develop relationships with TV brands and, to a lesser extent, service operators.

We developed, and intend to continue to develop, relationships with TV brands and, to a lesser extent, service operators in both the United States and international markets. Our licensing arrangements are complex and time-consuming to negotiate and complete. Our current and potential partners include TV brands, cable and satellite companies and telecommunication providers. Under these license arrangements, we generally have limited control over the amount and timing of resources these entities dedicate to the relationship. If our TV brand or service operator partners fail to meet their forecasts for distributing licensed devices, our business may be harmed.

We license our Roku OS to certain TV brands to manufacture co-branded smart TVs, or Roku TVs. 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 and increasing hours streamed. We have not received, nor do we expect to receive significant license revenue from these arrangements in the near term, but we expect to incur expenses in connection with these commercial agreements. If these arrangements do not result in increased users and hours streamed, our business may be harmed. The loss of a relationship with a TV brand or service operator could harm our results of operations, damage our reputation, increase pricing and promotional pressures from other partners and distribution channels or increase our marketing costs. If we are not successful in maintaining existing and creating new relationships with any of these third parties, or if we encounter technological, content licensing or other impediments to our development of these relationships, our ability to grow our business could be adversely impacted.

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

We earn revenue by acquiring subscribers for certain of our content publishers activated on or through our platform. If users do not use our platform for these purchases or subscriptions for any reason, and instead pay for services directly with content publishers or by other means that we do not receive attribution for, our business may be harmed. In addition, certain channels available on our platform allow users to purchase additional streaming services from within their channels. The revenue we earn from these transactions are generally not equivalent to the revenue we earn from activations on or through our platform that we receive full attribution credit for. For Premium Subscriptions, we only earn revenue for subscriptions to these services through our platform. Accordingly, if users activate subscriptions for content or services through other channels on our platform, our business may be harmed.

If we were to lose the services of our Chief Executive Officer or other members of our senior management team, we may not be able to execute our business strategy.

Our success depends in a large part upon the continued service of key members of our senior management team. In particular, our founder, President and Chief Executive Officer, Anthony Wood, is critical to our overall management, as well as the continued development of our devices and the Roku platform, our culture and our strategic direction. All of our executive officers are at will employees, and we do not maintain any key person life insurance policies. The loss of any member of our senior management team could harm our business.

If we are unable to attract and retain highly qualified employees, we may not be able to continue to grow our business.

Our ability to compete and grow depends in large part on the efforts and talents of our employees. Our employees, particularly engineers and other product developers, are in high demand, and we devote significant resources to identifying, hiring, training, successfully integrating and retaining these employees. As competition with other companies increases, we may incur significant expenses in attracting and retaining high quality engineers and other employees. The loss of employees or the inability to hire additional skilled employees as necessary to support the rapid growth of our business and the scale of our operations could result in significant disruptions to our business, and the integration of replacement personnel could be time-consuming and expensive and cause additional disruptions to our business.

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

Most of our agreements with streaming channel publishers are not long term. Any disruption in the renewal of such agreements may result in the removal of certain channels from our platform and may harm our active account growth and engagement.*

We enter into agreements with all our streaming channel publishers, which have varying expiration dates; typically, over one to three years. Upon expiration of these agreements, we are required to re-negotiate and renew these agreements in order to continue providing content offerings from these streaming channel publishers on our platform. We may not be able to reach a satisfactory agreement before our existing agreements have expired. If we are unable to renew such agreements on a timely basis on mutually agreeable terms, we may be required to temporarily or permanently remove certain channels from our platform. The loss of such channels from our platform for any period of time may harm our business.

If our content publishers do not continue to develop channels for our platform and participate in new features that we may introduce from time to time, our business may be harmed.

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

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 in our market, whether by established or new companies;
- our ability to retain and grow our active account base and increase engagement among new and existing users;
- our ability to maintain effective pricing practices, in response to the competitive markets in which we operate or other macroeconomic factors, such as inflation or increased product taxes;
- our revenue mix, which drives gross profit;
- seasonal or other shifts in advertising revenue or player sales;
- the timing of the launch of new or updated products, streaming channels or features;
- the addition or loss of popular content;
- the ability of retailers to anticipate consumer demand;
- an increase in the manufacturing or component costs of our players or the manufacturing or component costs of our TV brand licensees for Roku TVs; and
- an increase in costs associated with protecting our intellectual property, defending against third-party intellectual property infringement allegations or procuring rights to third-party intellectual property.

Our gross margins vary across our devices and platform offerings. Player revenue has a lower gross margin compared to platform revenue derived through our arrangements with advertising, content distribution, billing and licensing activities. Gross margins on our players vary across player models and can change over time as a result of product transitions, pricing and configuration changes, component costs, player returns and other cost fluctuations. In addition, our gross margin and operating margin percentages, as well as overall profitability, may be adversely impacted as a result of a shift in device, geographic or sales channel mix, component cost increases, price competition, or the introduction of new players, including those that have higher cost structures with flat or reduced pricing. We have in the past and may in the future strategically reduce our player gross margin in an effort to increase our active accounts and grow our gross profit. As a result, our player revenue may not increase as rapidly as it has historically, or at all, and, unless we are able to adequately increase our platform revenue and grow our active accounts, we may be unable to grow gross profit and our business will be harmed. If a reduction in gross margin does not result in an increase in our active accounts and gross profit, our financial results may suffer, and our business may be harmed.

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

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

Given the seasonal nature of our player 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 macroeconomic conditions, a decline in the effectiveness of our promotional activities, actions by our competitors or disruptions in our supply or distribution chain, tariffs or other restrictions on trade or for any other reason, would cause our full year results of operations to suffer significantly. For example, delays or disruptions at U.S. ports of entry could adversely affect our or our licensees' ability to timely deliver players and co-branded Roku TVs to retailers during the holiday season. A substantial portion of our expenses are personnel related and include salaries, stock-based compensation and benefits that are not seasonal in nature. Accordingly, in the event of a revenue shortfall, we would be unable to mitigate the negative impact on margins, at least in the short term, and our business would be harmed.

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

To continue to acquire new active accounts, we must maintain and expand our retail sales channels. The majority of our players and Roku TVs 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. To a lesser extent, we sell players directly through our website and internationally through distributors. For the nine months ended September 30, 2019 and September 30, 2018, Amazon, Best Buy and Walmart in total accounted for 72% and 66%, respectively, of our player revenue and are expected to each account for more than 10% of our player revenue in fiscal 2019. These three retailers collectively accounted for 68% and 61% of our player revenue for the years ended December 31, 2018 and 2017, respectively. These retailers and our international distributors also sell products offered by our competitors. We have no minimum purchase commitments or long-term contracts with any of these retailers or distributors. If one or several retailers or distributors were to discontinue selling our players or Roku TVs or choose not to prominently display those devices in their stores or on their websites, the volume of Roku devices sold could decrease, which would harm our business. For example, in April 2018, Amazon and Best Buy announced a partnership whereby two Best Buy controlled smart TV brands will exclusively utilize Amazon's operating system, and such TVs will be sold by Best Buy and Amazon. Although, to date, this arrangement has not limited our TV brand partners' ability to sell on either Amazon or at Best Buy, if our existing TV brands choose to work exclusively with other operating system developers, this may impact our Roku TV program and our ability to continue to grow active accounts. Traditional retailers have limited shelf and end cap space in their stores and limited promotional budgets, and online retailers have limited prime website product placement space. Competition is intense for these resources, and a competitor with more extensive product lines and stronger brand identity, such as Apple or Google, possesses greater bargaining power with retailers. In addition, one of our online retailers, Amazon, sells its own competitive TV streaming products and is able to market and promote these products more prominently on its website, and could refuse to offer our devices. Any reduction in our ability to place and promote our devices, or increased competition for available shelf or website placement, would require us to increase our marketing expenditures simply to maintain our product visibility, which may harm our business. In particular, the availability of product placement during peak retail periods, such as the holiday season, is critical to our revenue growth, and if we are unable to effectively sell our devices during these periods, our business would be harmed.

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

Building and maintaining a strong brand is important to attract and retain users, as potential users have a number of TV streaming choices. Successfully building a brand is a time consuming and comprehensive endeavor and can be positively and negatively impacted by any number of factors. Some of these factors, such as the quality or pricing of our players or our customer service, are within our control. Other factors, such as the quality and reliability of Roku TVs and the quality of the content that our content publishers provide, may be out of our control, yet users may nonetheless attribute those factors to us. Our competitors may be able to achieve and maintain brand awareness and market share more quickly and effectively than we can. Many of our competitors are larger companies and promote their brands through traditional forms of advertising, such as print media and TV commercials, and have substantial resources to devote to such efforts. Our competitors may also have greater resources to utilize internet advertising or website product placement more effectively than we can. If we are unable to execute on building a strong brand, it may be difficult to differentiate our business and platform from our competitors in the marketplace, therefore our ability to attract and retain users may be adversely affected and our business may be harmed.

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

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

We must continually develop new and improved streaming devices and other products that meet changing consumer demands. Moreover, the introduction of a new streaming device or other product is a complex task, involving significant expenditures in research and development, promotion and sales channel development. For example, in 2018, we introduced our Roku TV Wireless Speaker, designed specifically for use with Roku TVs and in 2019 we introduced our Roku Smart Soundbar and Roku wireless Subwoofer. Whether users will broadly adopt new products is not certain. Our future success will depend on our ability to develop new and competitively priced streaming devices and other products and add new desirable content and features to our platform. Moreover, we must introduce new streaming devices and other products in a timely and cost-effective manner, and we must secure production orders for those products from our contract manufacturers. The development of new products is a highly complex process, and while our research and development efforts are aimed at solving increasingly complex problems, we do not expect that all of our projects will be successful. The successful development and introduction of new products depends on a number of factors, including the following:

- 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;
- the ability of our contract manufacturers to cost-effectively manufacture our new products;
- the availability of materials and key components used in manufacturing;
- tariffs which could impact the pricing of such devices and depress consumer demand; and
- our ability to attract and retain world-class research and development personnel.

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

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

We do not have any internal manufacturing capabilities and primarily rely upon one contract manufacturer, Foxconn Industrial Internet Co. Ltd., or Foxconn, to build our players, smart soundbars and wireless subwoofers. We similarly rely on one contract manufacturer, Tonly Electronics Holdings Ltd., or Tonly, to manufacture our wireless speakers. Our contract manufacturers may be vulnerable to:

- capacity constraints,
- increases in U.S. tariffs on imports of our players, speakers, soundbars, subwoofers or other devices,
- future possible changes in U.S. regulations on exports of U.S. technologies, or dealings with certain countries or parties,
- Chinese tariffs on U.S. parts or components for finished players or other devices that are assembled in China,
- reduced component availability, and

- our control over delivery schedules, manufacturing yields and costs, particularly when components are in short supply or when we introduce a new player or other product or feature, is limited.

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

Our contracts with our contract manufacturers generally do not obligate them to supply our players or other products in any specific quantity or at any specific price. In the event our contract manufacturers are unable to fulfill our production requirements in a timely manner, their costs increase because of U.S. or Chinese tariffs, or they decide to terminate their relationship with us, our order fulfillment may be delayed, and we would have 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 or to our quality and performance standards. Any significant interruption in manufacturing at one of our contract manufacturers would require us to reduce our supply of players or other products to our retailers and distributors, which in turn would reduce our revenue. In addition, the Foxconn and Tonly facilities are located in Asia and may be subject to political, economic, trade, social and legal uncertainties that may harm our relationships with these parties. We believe that the international location of these facilities increases supply risk, including the risk of supply interruptions, tariffs, trade and export or import restrictions. Furthermore, any manufacturing issues affecting the quality of our products, including players and audio products, could harm our business.

If either of our contract manufacturers fail for any reason to continue manufacturing our players or other products in required volumes and at high quality levels, or at all, we would have 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 or to our quality and performance standards. Any significant interruption in manufacturing at a contract manufacturer could require us to reduce our supply of players or other products to our retailers and distributors, which in turn would reduce our revenue and user growth.

Certain of our Roku TV brand partners do not have manufacturing capabilities and primarily depend upon contract manufacturers, and the supply of Roku TVs to the market could be disrupted if they encounter problems with their contract manufacturers or suppliers.*

Certain of our Roku TV brand partners do not have internal manufacturing capabilities and primarily rely upon contract manufacturers to build the Roku TVs that they sell to retailers. Their contract manufacturers may be vulnerable to capacity constraints and reduced component availability, increases in U.S. tariffs on imports of Roku TVs, future possible changes in U.S. regulations on exports of U.S. technologies or dealings with certain countries or parties, Chinese tariffs on U.S. parts or components for Roku TVs that are assembled in China, and their control over delivery schedules, manufacturing yields and costs, particularly when components are in short supply may be limited. Delays, component shortages and other manufacturing and supply problems could impair the retail distribution of their Roku TVs. A significant interruption in the supply of Roku TVs to retailers and distributors could, in turn, reduce our user growth.

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

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

Our businesses are subject to risks generally associated with doing business abroad, such as U.S. and foreign governmental regulation in the countries in which our manufacturing sources are located. Our operations and performance depend significantly on global, regional and U.S. economic and geopolitical conditions. For example, there has been discussion and dialogue regarding potential significant changes to U.S. trade policies, legislation, treaties and tariffs, including the North American Free Trade Agreement ("NAFTA"). On November 30, 2018 the United States, Mexico, and Canada signed a replacement trade deal for NAFTA, known as the United States-Mexico-Canada Agreement ("USMCA"), which still needs to be ratified by the respective government of each of the three countries. The USMCA could undergo changes that lead to further modifications of certain USMCA provisions before being passed into law. In addition, the current U.S. Administration has threatened to withdraw from NAFTA if Congress does not move expeditiously to approve the USMCA, which could lead to higher tariffs on imports of televisions from Mexico by our licensees. Furthermore, the current U.S. Administration has threatened tougher trade terms with China and other countries, leading to the imposition or announcement of future imposition of substantially higher U.S. Section 301 tariffs on roughly $500 billion of imports from China. In response, China has imposed higher Chinese tariffs on a large amount of U.S. exports to China, which could affect the prices of U.S. origin parts or components of our products assembled in China. At this time, it is unknown whether and to what extent new USMCA legislation will be passed into law; whether additional Section 301 tariffs will be imposed on Roku products, imported from China and, if so, how long U.S. tariffs on Chinese goods will remain in effect or whether even higher tariffs will be imposed, or new regulatory proposals to restrict trade will be adopted; whether international trade agreements will be negotiated or existing free trade agreements re-negotiated, or the effect that any such action would have, either positively or negatively, on our industry or our business or licensees. If any new legislation and/or regulations are implemented, or if existing trade agreements are renegotiated or terminated, or if tariffs are imposed on foreign-sourced or U.S. goods, it may be inefficient and expensive for us to alter our business operations in order to adapt to or comply with such changes, and higher prices could depress consumer demand. Such operational changes could have a material adverse effect on our business, financial condition, results of operations or cash flows.

Also, various countries, in addition to the United States, regulate the import and export of certain technology, including import and export licensing requirements, and have enacted laws that could limit our ability to distribute our products or could limit our commercial and/or strategic partners' ability 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, prevent our commercial and/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 change in export or import regulations, the imposition of customs duties on intangible goods such as cross-border data flows which are currently duty-free under the WTO's temporary e-commerce moratorium, economic sanctions or related legislation, increased export and import controls stemming governmental policies, or change in the countries, governments, persons or technologies targeted by such regulations, could result in decreased use of our products by, or in our decreased ability to export or sell our products to, existing or new customers in international markets. Any decreased use of our products or limitation on our ability to export or sell our products would harm our business.

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

We bear supply risk under our contract manufacturing arrangements with Foxconn and Tonly. Lead times for the materials and components that our contract manufacturers orders on our behalf through different component suppliers vary significantly and depend on numerous factors, including the specific supplier, contract terms and market demand for a component at a given time. Lead times for certain key materials and components incorporated into our players or other products are currently lengthy, requiring our contract manufacturers to order materials and components several 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 that are unique to our products 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 players or the use of particular components. If we incur costs to cover excess supply commitments, this would harm our business.

Conversely, if we underestimate our player or other product requirements, our contract manufacturers may have inadequate component inventory, which could interrupt the manufacturing of our players or other products and result in delays or cancellation of orders from retailers and distributors. In addition, from time to time we have experienced unanticipated increases in demand that resulted in the need to ship players via air freight, which is more expensive than ocean freight, and adversely affected our player gross margin during such periods of high demand, for example, during end-of-year holidays. If we fail to accurately forecast our manufacturing requirements, our business may be harmed.

Our players incorporate key components from sole source suppliers and if our contract manufacturer is unable to source these components on a timely basis, due to fabrication capacity issues or other material supply constraints, we will not be able to deliver our players to our retailers and distributors.*

We depend on sole source suppliers for key components in our players. Our players utilize specific system on chip, or SoC, Wi-Fi silicon products and Wi-Fi front-end modules from various manufacturers, depending on the player, for which we do not have a second source. Although this approach allows us to maximize player performance on lower cost hardware, reduce engineering 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 Chinese tariffs on U.S. parts or components for finished players that are used in final assembly of their components, or the risk that the strategic supplier may stop producing such components, cease operations or be acquired by, or enter into exclusive arrangements with, our competitors or other companies. Any such interruption or delay may force us to seek similar components from alternative sources, which may not be available. Switching from a sole-source supplier would require that we redesign our players to accommodate new components and would require us to re-qualify our players with regulatory bodies, such as the 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;
- 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 players could adversely affect our ability to meet scheduled player deliveries to our retailers and distributors, result in lost sales and higher expenses and harm our business.

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

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

- manage a larger organization;
- hire more employees, including engineers with relevant skills and experience;
- expand our manufacturing and distribution capacity;
- increase our sales and marketing efforts;
- broaden our customer support capabilities;
- support a larger number of TV brand and service operators;
- implement appropriate operational and financial systems;
- expand internationally; and
- maintain effective financial disclosure controls and procedures.

In addition, due to the continued growth in our headcount, we entered into lease agreements for a new corporate headquarters, which we have begun to occupy, and we started to incur material expenses this year.

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

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

We currently generate the vast majority of our revenue in the United States and have limited experience marketing, selling, licensing and supporting our devices and monetizing our platform outside the United States. In addition, we have limited experience managing the administrative aspects of a global organization. While we intend to continue to explore opportunities to expand our business in international markets in which we see compelling opportunities, we may not be able to create or maintain international market demand for our devices and streaming platform.

In the course of expanding our international operations and operating overseas, in addition to the risks we face in the United States, we will be subject to a variety of risks that could adversely affect our business, including:

- differing regulatory requirements, including country-specific data privacy and security laws and regulations, consumer protection laws and regulations, tax laws, trade laws, labor regulations, tariffs, export quotas, custom duties on cross-border movements of goods or data flows, or other trade restrictions;

- compliance with laws such as the Foreign Corrupt Practices Act, UK Bribery Act and other anti-corruption laws, export controls and economic sanctions, and local laws prohibiting corrupt payments to government officials;
- slower adoption and acceptance of streaming products and services in other countries;
- competition with existing local traditional pay TV services and products, including those provided by incumbent pay TV service providers;
- greater difficulty supporting and localizing our devices and streaming platform, including delivering support and training documentation in languages other than English;
- our ability to deliver or provide access to popular streaming channels to users in certain international markets;
- different or unique competitive pressures as a result of, among other things, the presence of local consumer electronics companies and the greater availability of free content on over-the-air channels in certain countries;
- challenges inherent in efficiently staffing and managing an increased number of employees over large geographic distances, including the need to implement appropriate systems, policies, compensation and benefits and compliance programs;
- difficulties in understanding and complying with local laws, regulations and customs in foreign jurisdictions;
- differing legal and court systems, including limited or unfavorable intellectual property protection;
- international political or social unrest or economic instability;
- availability of reliable broadband connectivity and wide area networks in areas targeted for expansion;
- adverse tax consequences such as those related to changes in tax laws or tax rates or their interpretations could impact our judgment in determining our tax provision and effective tax rate;
- fluctuations in currency exchange rates could impact our revenue and expenses of our international operations and expose us to foreign currency exchange rate risk;
- restrictions on the repatriation of earnings;
- future possible changes in U.S. regulations on exports of U.S. technologies or dealings with certain countries or parties; and
- working capital constraints.

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

If we experience higher player returns than we expect and are unable to resell such returned players as refurbished players, our business could be harmed.*

We offer customers who purchase players through our website 30 days to return such players. We also generally honor the return policies of our retail and distribution partners, who typically allow customers to return players, even with open packaging within certain time periods that may exceed 30 days. We generally resell any returned players as refurbished players. To the extent we experience a greater number of returns than we expect, are unable to resell returned players as refurbished players or are required to provide price protection in amounts greater than we expect, our business could be harmed.

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. We may also be involved in disputes with agencies and their advertisers over the operation of our platform or the terms of our agreements. If we are unable to collect or make adjustments to bills, we could incur write-offs for bad debt, 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.

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

We rely on the expertise of our engineering and software development teams for the performance and operation of our platform and computer systems. Service interruptions, errors in our software or the unavailability of computer systems used in our operations could diminish the overall attractiveness of our devices and platform to existing and potential users. 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 a transition effectively, we may experience operational delays and 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, 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 and could adversely affect our business. Any disruption in the services provided by these vendors could have adverse impacts on our business reputation, customer relations and operating results.

If any aspect of our computer systems or those of third parties we utilize in our operations fails, it may lead to downtime or slow processing time, either of which may harm the experience of 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 do not effectively address capacity constraints, upgrade or patch our systems as needed and continually develop our 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.

Significant disruptions of our information technology systems or data security incidents could harm our reputation and our business and subject us to liability.*

We are increasingly dependent on information technology systems and infrastructure to operate our business. In the ordinary course of our business, we collect, store, process and transmit large amounts of sensitive corporate, personal and other information, including intellectual property, proprietary business information, user payment card information, other user information 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 ability to maintain the confidentiality, integrity and availability of personal information in our possession or control create potential legal liability, both from regulators as well as from affected consumers, and also impacts the attractiveness of our subscription service to existing and potential members. We have also outsourced 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' personal and credit card information, and as a result, we manage a number of third-party vendors who may or could have access to our computer networks or to confidential information that moves across our platform. 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 or have access to those systems, is 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 potentially vulnerable to unintentional or malicious, internal and external attacks on our technology environment. Vulnerabilities can be exploited from inadvertent or intentional actions of our employees, third-party vendors, business partners, or by malicious third parties. Attacks of this nature 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. For example, despite any of our efforts to secure our information technology systems and the data contained in those systems, including any efforts to educate or train our employees, we may remain vulnerable to phishing attacks. In addition to the extraction of sensitive or personal information, such attacks could include the deployment of harmful malware, ransomware, 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 likely experience directed attacks on at least a periodic basis that are intended to interrupt our operations, interrupt our customers' ability to access our services, extract money from our company, and/or obtain our data (including without limitation customer or employee personal information or proprietary information). Although we have implemented certain systems, processes, and safeguards intended to thwart attackers and mitigate risks to our systems and data, we cannot be certain that threat actors will not have a material impact on our systems or services in the future. Additionally, we cannot directly control the security of the computer systems of our third-party vendors or business partners or actions of their personnel, and therefore may be vulnerable to attacks through those or similar third-party relationships.

We maintain limited insurance policies to cover losses relating to our systems. However, there may be exceptions to our insurance coverage such that our insurance policies may not cover some or all aspects of a security incident. 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. 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 or regulators 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 hackers. Our platform also incorporates licensed software from third-parties, including open source software, and we may also be vulnerable to attacks that focus on such third-party software. Any attempts by hackers to disrupt our platform, our devices, website, computer systems or our mobile apps, if successful, could harm our business, subject us to liability, be expensive to remedy, cause harm to our systems and operations and damage our reputation. Efforts to prevent hackers from entering our computer systems or exploiting vulnerabilities in our devices are expensive to implement and may not be effective in detecting or preventing intrusion or vulnerabilities. Such unauthorized access to users' data could damage our reputation and our business and could expose us of the risk to 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' and/or commercial partners' information technology systems or other similar data security incidents could adversely affect our business operations and/or result in the loss, misappropriation, and/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 and telecommunication 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 this to be the case, attackers have become very sophisticated in the way they conceal 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 customers, could disrupt our business, harm our reputation, compel us to comply with applicable federal and/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 and/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 failure or perceived failure by us or our vendors or 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 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. 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 take a principled, risk-based approach to information security and require "reasonable", "appropriate" or "adequate" technical and organizational security measures, meaning that 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 or reasonable in all instances. 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 for years to come.

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

Our business relies upon the ability of consumers to access high-quality streaming content through the internet. As a result, the growth of our business depends on our users' ability to obtain low-cost, high-speed access to the internet, which relies in part on the 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, interruptions or delays in their operations. Any material disruption 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 platform. We may also face increased costs of doing business if network operators engage in discriminatory practices with respect to streamed video content in an effort to monetize access to their networks by data providers. In the past, internet service providers have attempted to implement usage-based pricing, bandwidth caps and traffic "shaping" or throttling. To the extent network operators were to create tiers of internet access service and either charge us for access to these tiers or prohibit our content offerings from being available on some or all of these tiers, our quality of service could decline, our operating expenses could increase and our ability to attract and retain customers could be impaired, each of which would harm our business.

In addition, most network operators that provide consumers with access to the internet also provide these consumers with multichannel video programming. 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.

We could become subject to litigation regarding intellectual property rights that could be costly, result in the loss of rights important to our devices and platform 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 face increasing competition, the possibility of intellectual property rights claims against us will grow. Plaintiffs who have no relevant product revenue may not be deterred by our own issued patents and pending patent applications in bringing intellectual property rights claims against us. The cost of patent litigation or other proceedings, even if resolved in our favor, could be substantial. Some of our competitors may be better able to sustain the costs of such litigation or proceedings because of their substantially greater financial resources. Patent litigation and other proceedings may also require significant management time and divert management from our business. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could impair our ability to compete in the marketplace. The occurrence of any of the foregoing could harm our business.

As a result of intellectual property infringement claims, or to avoid potential claims, we may choose or be required to seek licenses from third parties. These licenses may not be available on commercially reasonable terms, or at all. Even if we are able to obtain a license, the license would likely obligate us to pay license fees or royalties or both, and the rights granted to us might be nonexclusive, with the potential for our competitors to gain access to the same intellectual property. In addition, the rights that we secure under intellectual property licenses may not include rights to all of the intellectual property owned or controlled by the licensor, and the scope of the licenses granted to us may not include rights covering all of the products and services provided by us and our licensees. Furthermore, an adverse outcome of a dispute may require us to pay damages, potentially including treble damages and attorneys' fees, if we are found to have willfully infringed a party's intellectual property; cease making, licensing or using technologies that are alleged to infringe or misappropriate the intellectual property of others; expend additional development resources to redesign our solutions; enter into potentially unfavorable royalty or license agreements in order to obtain the right to use necessary technologies, content or materials; and to indemnify our partners and other third parties. 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.

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

In certain of our agreements we indemnify our content publishers, licensees, distributors, retailers, manufacturing partners and suppliers. We could incur significant expenses defending these partners if they are sued for patent infringement based on allegations related to our technology. If a partner were to lose a lawsuit and in turn seek indemnification from us, we also could be subject to significant monetary liabilities. In addition, because the devices sold by our licensing partners and TV brands 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 player in question, even if the claim does not pertain to our technology.

If we fail 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 our employees, consultants, contractors, advisors and any third parties who have access to our proprietary know-how, information or technology. However, we cannot be certain that we have executed such agreements with all parties who may have helped to develop our intellectual property or who had access to our proprietary information, nor can we be certain that our agreements will not be breached. Any party with whom we have executed such an agreement could potentially breach that agreement and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. We cannot guarantee that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Detecting the disclosure or misappropriation of a trade secret and enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, time-consuming and could result in substantial costs and the outcome of such a claim is unpredictable. Further, the laws of certain foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property or proprietary rights both in the United States and abroad. If we are unable to prevent the disclosure of our trade secrets to third parties, or if our competitors independently develop any of our trade secrets, we may not be able to establish or maintain a competitive advantage in our market, which could harm our business.

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

The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions to maintain patent applications and issued patents. We may fail to take the necessary actions and to 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.

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.

We and our third-party contractors collect, process, transmit and store the personal information of our users, which creates legal obligations and exposes us to potential liability.*

We collect, process, transmit and store information about our users and their device usage patterns, and rely on third-party contractors to collect, process, transmit and store personal information of our users, including our users’ credit card data. Further, we and third parties 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 streaming channels and deliver relevant advertising and personalized content for ourselves and on behalf of our partners on our devices.

We collect information about the interaction of users with our devices, our advertisements, and our partners' streaming channels. To deliver relevant advertisements effectively, we must successfully leverage this data as well as data provided by third parties. Our ability to collect and use such data could be restricted by a number of factors, including consumers having the ability to refuse consent to or opt out from our collection and use of this data for advertising purposes or the ability of our advertisers to use such data to provide more relevant advertisements, restrictions imposed by advertisers, content publishers and service providers, changes in technology, and new developments in laws, regulations and industry standards. For example, European Union laws prohibit access to or storage of information on a user's device 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 unambiguous, affirmative consent, and users may choose not to provide this consent to collection of information which is used for advertising purposes. Any restrictions on our ability to collect or use data could harm our ability to grow our revenue, particularly our advertising revenue which depends on engaging the relevant recipients of advertising campaigns.

Various federal, state, and foreign laws and regulations govern the collection, use, retention, sharing and security of the data we receive from and about our users. The regulatory environment for the collection and use of consumer data by device manufacturers, online service providers, content distributors, advertisers and publishers is very unsettled in the United States and internationally. Privacy groups and government bodies, including the Federal Trade Commission ("FTC") state attorneys general, and the European Commission and European data protection authorities, have increasingly scrutinized privacy issues with respect to devices that link personal identities or user and device data, with data collected through the internet, and we expect such scrutiny to continue to increase. The United States and foreign governments have enacted and are considering regulations that could significantly restrict industry participants' ability to collect, use and share personal information and pseudonymous data, such as by regulating the level of consumer notice and consent required before a company can place cookies or other tracking technologies. For example, we have been subject to the EU General Data Protection Regulation ("GDPR") since May 2018. The GDPR includes detailed requirements related to the collection, storage and use of personal data related to people resident in the EU or which is processed in the context of EU operations and places new data protection obligations and restrictions on organizations and may require us to make further changes to our policies and procedures in the future beyond what we have already done. Further, following a referendum in June 2016 in which voters in the United Kingdom approved an exit from the European Union, the United Kingdom government has initiated a process to leave the European Union, known as Brexit. Brexit has created uncertainty with regard to the regulation of data protection in the United Kingdom. In particular, although the United Kingdom enacted a Data Protection Act in May 2018, a level of uncertainty remains regarding how data transfers to and from the United Kingdom will be regulated after Brexit. We made changes to our data protection compliance program to prepare for the GDPR and will continue to monitor the implementation and evolution of global data protection regulations, but if we are not compliant with GDPR requirements, we may be subject to significant fines and our business may be harmed. Other countries have also proposed or passed legislation with data usage limitations similar to that of the GDPR.

The U.S. data protection legal landscape continues to evolve, with California and Nevada having recently passed broad-based data protection legislation and with states and the federal government continuing to consider additional data protection legislation. The potential effects of this legislation are far-reaching and may require us to modify our data processing practices and policies and to incur substantial costs and expenses in an effort to comply. Effective October 1, 2019, Nevada amended its existing Security of Personal Information Law ("SPI Law") to now require, among other things, that businesses provide an online mechanism or toll-free phone number to intake requests from consumers to opt out of the sale of their personal data. The California Consumer Privacy Act ("CCPA") goes into effect in January 2020 and gives California residents expanded rights to access and require deletion of their personal information, opt out of certain personal information sharing, and receive detailed information about how their personal information is used. The CCPA also provides for civil penalties for violations, as well as a private right of action for data breaches that may increase data breach litigation. The CCPA was recently amended, and the California Office of the Attorney General has proposed regulations to implement portions of the CCPA. These regulations are subject to public comment. Depending on the final text of the regulations, they may significantly impact the CCPA compliance measures we have, or will, undertake.

We are continuing to assess the impact of new and proposed data protection laws and proposed amendments to existing laws on our business, as well as a possible California ballot initiative on privacy issues.

Applicable data privacy and security laws also obligate us to employ reasonable security measures that are appropriate to the nature of the data we collect and process and the risks attendant to our data processing activities, among other factors, in order to protect personal information from unauthorized access or disclosure, or accidental or unlawful destruction, loss, or alteration. We have implemented security measures that we believe are appropriate, but we cannot be sure a regulator would deem our security measures to be appropriate given the lack of prescriptive measures in certain data protection laws. Without more specific guidance, we cannot know whether our chosen security safeguards are adequate according to each applicable data protection law. Given the evolving nature of security threats and evolving safeguards, we cannot be sure that our chosen safeguards will protect against security threats to our business. However, even security measures that are appropriate, reasonable, and/or in accordance with applicable legal requirements may not be able to fully protect our information technology systems and the data contained in those systems, or our data that is contained in third parties' systems. Moreover, data protection laws impose on us responsibility for our employees and third parties that assist with aspects of our data processing. Our employees' or third parties' intentional, unintentional, or inadvertent actions may increase our vulnerability or expose us to security threats, such as phishing attacks, and we may remain responsible for a successful phishing attack despite the quality and legal sufficiency of our security measures.

In addition, some countries are considering or have enacted 'data localization' laws requiring that user data regarding users in their country be maintained in their country. Maintaining local data centers in individual countries could increase our operating costs significantly. In addition, we expect that, in addition to the business as usual costs of compliance, the evolving regulatory interpretation and enforcement of new laws such as the GDPR and CCPA and 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 indemnity or public statements against us by consumer advocacy groups or others. In addition to potential liability, these events could harm our business.

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.

If service operators refuse to authenticate streaming channels on our platform, our users may be restricted from accessing certain content on our platform and our business may be harmed.

Certain service operators, including pay TV providers, have from time to time refused to grant our users access to streaming content through "TV Everywhere" channels and have made that content available only on certain devices favored by such service operators, including devices offered by that service operator or its partners. If major service operators do not authenticate popular TV Everywhere channels on our platform, we may be unable to offer a broad selection of popular streaming channels and consumers may not purchase or use our streaming players. If we are unable to continue to provide access to popular streaming channels on our platform, our business may be harmed.

United States or international rules that permit ISPs to limit internet data consumption by users, including unreasonable discrimination in the provision of broadband internet access services, could harm our business.*

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, 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.

On February 26, 2015, the FCC adopted open internet rules intended to protect the ability of consumers and content producers to send and receive non-harmful, lawful information on the internet, known as the Open Internet Order. The FCC's Open Internet Order prohibited broadband internet access service providers from: (i) blocking access to legal content, applications, services or non-harmful devices; (ii) throttling, impairing or degrading performance based on content, applications, services or non-harmful devices; and (iii) charging more for favorable delivery of content or favoring self-provisioned content over third-party content. The Open Internet Order also prohibited broadband internet access service providers from unreasonably interfering with consumers' ability to select, access and use the lawful content, applications, services or devices of their choosing as well as edge providers' ability to make lawful content, applications, services or devices available to consumers.

In January 2018, the FCC released a new order, known as the Restoring Internet Freedom Order, that repealed most of the blocking, throttling, and paid prioritization restrictions adopted in the Open Internet Order. The Restoring Internet Freedom Order reclassified broadband internet access service as a non-common carrier "information service" and repealed rules that had prohibited broadband internet access service providers from: (i) blocking access to legal content, applications, services or non-harmful devices; (ii) throttling, impairing or degrading performance based on content, applications, services or non-harmful devices; and (iii) charging more for favorable delivery of content or favoring self-provisioned content over third-party content. The Restoring Internet Freedom Order continued to require internet service providers to be transparent about their policies and network management practices, and subjected discriminatory practices to case-by-case assessment under antitrust and consumer protection laws. Most portions of the Restoring Internet Freedom Order went into effect on April 23, 2018 and the remainder went into effect on June 11, 2018. Numerous parties filed judicial challenges to the Restoring Internet Freedom Order, and on October 1, 2019, the United States Court of Appeals for the District of Columbia Circuit released a decision that affirmed nearly all of the Restoring Internet Freedom Order, but reversed the FCC's decision to prohibit all state and local regulation targeted at broadband Internet service, requiring case by case determinations as to whether state and local regulation conflicts with the FCC's rules. The court also required the FCC to reexamine three issues from the Restoring Internet Freedom Order, but allowed the order to remain in effect while the FCC conducts that review. The original parties to the appeal may seek additional review of the Restoring Internet Freedom Order from the full Court of Appeals or the Supreme Court. To the extent the courts, the agencies or the states do not uphold or adopt sufficient safeguards to protect against discriminatory conduct, network operators may seek to extract fees from us or our content publishers to deliver our traffic or otherwise engage in blocking, throttling or other discriminatory practices, and our business could be harmed.

Several states have adopted or are considering network neutrality legislation or regulation. On September 30, 2018, California Governor Jerry Brown signed open internet legislation into law, effective January 1, 2019. The California legislation codifies portions of the FCC's rescinded Open Internet Order. The U.S. Department of Justice filed suit on September 30, 2018 to block implementation of the California law, and the broadband service provider trade associations CTIA, the National Cable & Telecommunications Association, the United States Telecom Association and the American Cable Association, have also sued California to invalidate the state's net neutrality law on grounds that the law is preempted by the FCC's Restoring Internet Freedom Order, among other claims. The status of the preemption claim is uncertain in light of the Court of Appeals decision, discussed above, on the FCC's preemption authority. The California Attorney General has agreed to delay implementation of the law until the litigation is resolved. Meanwhile, at least five additional states (Colorado, Maine, Oregon, Vermont and Washington) have enacted net neutrality legislation, and governors in at least six other states (Hawaii, Montana, New Jersey, New York, Rhode Island and Vermont) have signed executive orders requiring service providers contracting with state agencies to adhere to network neutrality principles. The regulatory framework for network neutrality thus remains unsettled and is subject to ongoing Federal and state legislative and regulatory activity. Moreover, the FCC's legal authority and willingness to preempt state net neutrality laws on a case-by-case basis remain unsettled. If the FCC preempts individual state net neutrality laws that prohibit blocking, throttling, and other discriminatory practices, our business could be harmed.

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.

Broadband internet providers are subject to government regulation and enforcement actions, and changes in current or future laws, regulations or enforcement actions that negatively impact our distributors or content publishers could harm our business.*

Upon the effective date of the FCC's Restoring Internet Freedom Order, the FTC became the federal agency primarily responsible for regulating broadband privacy and data security in the United States. The FTC follows an enforcement-focused approach to regulating broadband privacy and security. Future FTC enforcement actions could cause us or our content publishers to alter advertising claims or alter or eliminate certain features or functionalities of our products or services which may harm our business. At the FCC, many broadband internet providers provide traditional telecommunications services that are subject to FCC and state rate regulation of intrastate telecommunications services, and are recipients of federal universal service fund payments, which are intended to subsidize telecommunications services in areas that are expensive to serve. Changes in rate regulations or in universal service funding rules, either at the federal or state level, could affect these broadband internet providers' revenue and capital spending plans. In addition, various international regulatory bodies have jurisdiction over non-United States broadband internet providers. The Nevada SPI Law and the CCPA also apply to broadband internet providers that do business in Nevada and California, respectively. To the extent these broadband internet providers are adversely affected by laws or regulations regarding their business, products or service offerings, our business could be harmed.

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

Generally accepted accounting principles in the United States ("U.S. GAAP") are subject to interpretation by the Financial Accounting Standards Board (the "FASB"), the SEC, and other various bodies formed to promulgate and interpret appropriate accounting principles. A change in these principles or interpretations could have a significant effect on our reported results of operations and may even affect the reporting of transactions completed before the announcement or effectiveness of a change. For example, we recently adopted *Accounting Standards Codification*, *Revenue from Contracts with Customers (Topic 606)*, using the modified retrospective method. We applied the new revenue standard to all contracts that were not completed as of January 1, 2018. We recognized the cumulative effect of initially applying the new revenue standard as an adjustment to the opening balance of retained earnings. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those prior periods. 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 government regulations or laws relating to the internet, video 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 general business regulations and laws, as well as regulations and laws specific to the internet and online services, which may include 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, intellectual property, competition, electronic contracts, internet access, net neutrality, advertising, calling and texting, content restrictions, 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 laws and regulations governing issues such as data privacy and security, payment processing, taxation, net neutrality, video, telecommunications, e-commerce tariffs and consumer protection related to the internet continue to develop. For example, laws relating to the liability of providers of online services for activities of their users and other third parties have been tested by a number of claims, including actions based on invasion of privacy and other torts, unfair competition, copyright and trademark infringement, and other theories based on the nature and content of the materials searched, the advertisements posted, actions taken or not taken by providers in response to user activity or the content provided by users. Congress has also recently enacted legislation related to liability of providers of online services and may continue to legislate in this area. The recently enacted CCPA and recently amended Nevada SPI Law also apply to entities that do business in California and Nevada, respectively, and impose a number of new requirements on internet and online services. Moreover, as internet commerce and advertising continues to evolve, increasing regulation by federal, state and foreign regulatory authorities becomes more likely.

As we develop new services and devices, and improve our TV streaming platform, we may also be subject to new laws and regulations specific to such technologies. For example, in developing our Roku TV reference design, we were required to understand, address and comply with an evolving regulatory framework for developing, manufacturing, marketing and selling TVs. If we fail to adequately address or comply with such regulations regarding the manufacture and sale of TVs, we may be subject to fines or sanctions, and our licensees may be unable to sell Roku TVs at all, which would 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, and similar activities continue to proliferate, often with little harmonization between jurisdictions and little guidance. A number of existing bills are pending in the U.S. Congress and other government bodies that contain provisions that would regulate, for example, how companies can use cookies and other tracking technologies to collect, use and share user information. The CCPA also imposes requirements on certain tracking activity, and we are continuing to assess the impact of the CCPA and proposed amendments to the law on our business. The European Union has already enacted 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. If we or the third parties that we work with, such as contract payment processing services, content publishers, vendors or developers violate or are alleged to violate applicable privacy or security laws, industry standards, our contractual obligations, or our policies, such violations and alleged violations may also put our users' information at risk and could in turn harm our business and reputation and subject us to potential liability. Any of these consequences could cause our users, advertisers or publishers to lose trust in us, which could harm our business. Furthermore, any failure on our part to comply with these laws may subject us to liability and reputational harm.

Our use of data to deliver relevant advertising and other services on our platform places us and our content publishers at risk for claims under various unsettled laws, including the Video Privacy Protection Act ("VPPA"). Some of our content publishers have been engaged in litigation over alleged violations of the VPPA relating to activities on our platform in connection with advertising provided by unrelated third parties. The Federal Trade Commission has also in recent years revised its rules implementing the Children's Online Privacy Protection Act ("COPPA Rules") broadening the applicability of the COPPA Rules, including the types of information that are subject to these regulations, and it is currently examining whether additional changes are appropriate. Such actions could limit the information that we or our content publishers and advertisers may collect and use through certain content publishers, the content of advertisements and in relation to certain channel partner content. The CCPA also imposes certain opt in and opt out requirements for certain information about minors. We and our content publishers and advertisers could be at risk for violation or alleged violation of these and other privacy, advertising, or similar laws.

Our actual or perceived failure to adequately protect personal data and confidential information could harm our business.*

A variety of state, national, foreign, and international laws and regulations apply to the collection, use, retention, protection, disclosure, security, transfer and other processing of personal data. These privacy and data protection-related laws and regulations are evolving, with new or modified laws and regulations proposed and implemented frequently and existing laws and regulations subject to new or different interpretations. In addition, each state and the District of Columbia, as well as some foreign nations, have passed laws requiring notification to regulatory authorities and/or to affected users within a specific timeframe when there has been a security breach involving personal data as well as impose additional obligations for companies. For example, the CCPA was signed into law on June 28, 2018 and largely takes effect on January 1, 2020 (and enforcement of some of the provisions will not be immediately active) and the amendments to the Nevada SPI Law took effect on October 1, 2019. These laws, along with any implementing regulations, impose additional obligations on companies that process certain information about California and Nevada residents, respectively. Compliance with these laws and regulations can be costly, could delay or impede the development of new products, and may cause reputational harm.

As part of our data protection compliance program, we ensure that we have approved data transfer mechanisms in place to provide adequacy for the transfer of personal data from the European Economic Area (the "EEA") to the United States. However, there are legal challenges in the EU about the adequacy of these data transfer mechanisms generally and, if these challenges are successful, this may adversely affect our ability to transfer personal data from the EEA to the United States.

We will continue to review our business practices and may find it necessary or desirable to make changes to our personal data handling to cause our transfer and receipt of EEA residents' personal data to be legitimized under 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.

While we have implemented administrative, physical and electronic security measures to protect against reasonably foreseeable loss, misuse and alteration of personal data and confidential information (e.g., protected content or intellectual property), cyberattacks on companies have increased in frequency and potential impact in recent years and, if successful against us, may harm our reputation and business and subject us to potential liability despite reasonable precautions. As discussed above, we cannot be certain that our chosen security measures will be deemed adequate or reasonable by regulators in all instances.

If we are not able to comply with these laws or regulations or if we become liable under new laws or regulations, we could be directly harmed, and we may be forced to implement new measures to reduce our exposure to this liability. This may require us to expend substantial resources or to suspend or discontinue certain products or services, which may harm our business. In addition, the increased attention focused upon liability issues as a result of lawsuits and legislative proposals could harm our business. Any actual or perceived inability to adequately protect our users' privacy may render our products or services less desirable and could harm our reputation and business. Any costs incurred as a result of this potential liability could harm our business.

If we are found liable for content that we distribute 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. The Digital Millennium Copyright Act (the "DMCA") is intended, in part, to limit the liability of eligible service providers for caching, hosting or linking to, user content that includes materials that infringe copyrights or other rights. We rely on the protections provided by the DMCA in conducting our business. However, the DMCA and similar statutes and doctrines that we may rely on in the future is subject to uncertain judicial interpretation and regulatory and legislative amendments. Moreover, the DMCA only provides protection primarily in the United States. If the rules around these statutes and doctrines change, if international jurisdictions refuse to apply similar protections or if a court were to disagree with our application of those rules to our business, we could incur liability and our business could be harmed. If we become liable for these types of claims as a result of the content that is streamed over 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, we may be adversely impacted if copyright holders assert claims, or commence litigation, alleging copyright infringement against the developers of channels that are distributed on our platform. While our platform policies prohibit streaming content on our platform without distribution rights from the copyright holder, and we maintain processes and systems for the reporting and removal of infringing content, in certain instances our platform has been misused by unaffiliated third parties to unlawfully distribute copyrighted content. For example, we are involved in litigation in Mexico that was commenced in May 2017 by a large Mexican pay TV and internet access provider. We were not named as a defendant in this case, as the case principally targeted entities that are alleged to sell unlicensed content to consumers using our platform, among other means. Involvement in these legal proceedings has been complicated and has drawn management time and company resources. At the commencement of this case, however, a court issued a temporary ban on the importation and sale of Roku devices in Mexico. In October 2018, the ban on sales was lifted by a Federal Court in Mexico; however, the underlying litigation may continue. Our involvement in this litigation caused us to incur legal expenses and other costs and has drawn management time and other company resources away from other matters. Our continuing involvement in this litigation, or similar legal matters in the future, could be disruptive to our business. If content partners or distributors in Latin America or in any other country are influenced by these proceedings and are deterred from working with us to sell players or other products or to maintain their channels or sell advertising on our platform, this could impair our ability to implement our international expansion plans.

Our involvement in any such legal matters now or in the future, could cause us to incur significant legal expenses and other costs, and be disruptive to our business.

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

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

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

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

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

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

Our use of open source software could impose limitations on our ability to commercialize our devices and our TV streaming platform.

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

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

Our users and licensees depend on our customer support organization to resolve any issues relating to our devices. A high level of support is critical for the successful marketing and sale of our devices. We currently outsource our customer support operation to a third-party customer support organization. If we do not effectively train, update and manage our third-party customer support organization to assist our users, and if that support organization does not succeed in helping them quickly resolve issues or provide effective ongoing support, it could adversely affect our ability to sell our devices to users and harm our reputation with potential new users and our licensees.

We 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 billing services and financial reporting.*

We have increasingly complex business arrangements with our content publishers and 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 billing services and financial reporting. Our current and planned systems, procedures and controls may not be adequate to support our complex arrangements and the rules governing revenue and expense recognition for our future operations and expected growth. Delays or problems associated with any improvement or expansion of our operational and financial systems and controls could adversely affect our relationships with our users, content publishers or licensees; cause harm to our reputation and brand; and could also result in errors in our financial and other reporting.

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

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

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 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. Acquisitions in international markets would involve additional risks, including those related to integration of operations across different cultures and languages, currency risks and the particular economic, political and regulatory risks associated with specific countries. We may not be able to address these risks successfully, or at all, without incurring significant costs, delays or other operational problems and if we were unable to address such risks successfully our business could be harmed.

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

We entered into a credit agreement among us, as borrower, the lenders and issuing banks from time to time party thereto, and Morgan Stanley Senior Funding, Inc., or the Agent providing for a (i) a four-year revolving credit facility in the aggregate principal amount of up to $100.0 million, or 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, collectively, the Credit Agreement. The Credit Agreement contains a number of affirmative and negative covenants, which may restrict our current and future operations, particularly our ability to respond to certain changes in our business or industry or take future actions. The Credit Agreement also contains a financial covenant requiring us to maintain a minimum adjusted quick ratio of at least 1.00 to 1.00, tested as of the last day of any fiscal quarter on the basis of the prior period of our four consecutive fiscal quarters. Pursuant to the Credit Agreement, we granted the Agent a security interest in substantially all of our assets. See the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations —Liquidity and Capital Resources— Senior Secured Term Loan A and Revolving Credit Facilities."

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

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

By engaging in business activities in the United States, we become subject to various state laws and regulations, including requirements to collect sales tax from our sales within those states, and the payment of income taxes on revenue generated from activities in those states. The laws and regulations governing the collection of sales tax for sales on our website and payment of income taxes are numerous, complex, and vary from state to state. A successful assertion by one or more states that we were required to collect sales or other taxes or to pay income 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.

Reforming the taxation of international businesses has been a priority for U.S. politicians, and key members of the legislative and executive branches have proposed a wide variety of potential changes. Certain changes to U.S. tax laws could affect the tax treatment of our foreign earnings, as well as cash and cash equivalent balances we maintain outside the United States. Additionally, any changes in the U.S. or foreign taxation of such activities may increase our worldwide effective tax rate and the amount of taxes we pay and harm our business.

For example, the TCJA was enacted on December 22, 2017 and significantly reforms the Internal Revenue Code of 1986, as amended. The TCJA, among other things, includes changes to U.S. federal tax rates, imposes additional limitations on the deductibility of interest, has both positive and negative changes to the utilization of future net operating loss carryforwards, allows for the expensing of certain capital expenditures, and puts into effect the migration from a "worldwide" system of taxation to a territorial system. The U.S. Department of Treasury has broad authority to issue regulations and interpretative guidance that may significantly impact how we will apply the law, which could affect our financial position and result of operations.

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

We intend to continue to make significant investments to support planned business growth and may require additional funds to respond to business challenges, including the need to develop new devices and enhance our 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 advertising platform, operating system and technology and players along with the timing and effort related to the introduction of new platform features, players, hiring of experienced personnel, the expansion of sales and marketing activities, as well as overall economic conditions. For example, we entered into lease agreements for a corporate headquarters, and we started to incur material expenses beginning this year. On November 8, 2019 we acquired dataxu, Inc. for aggregate consideration of $75 million in cash and 571,516 shares of our Class A common stock.

We may need to engage in equity or debt financings to secure additional funds. If we raise additional funds through future issuances of equity or convertible debt securities, our then existing stockholders could suffer significant dilution, and any new equity securities we issue could have rights, preferences and privileges superior to those of holders of our Class A common stock. Any debt financing we secure could involve additional restrictive covenants relating to our capital raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions. If we were to violate such restrictive covenants, we could incur penalties, increased expenses and an acceleration of the payment terms of our outstanding debt, which could in turn harm our business.

We may not be able to obtain additional financing on terms favorable to us, if at all. If we are unable to obtain adequate financing or financing on terms satisfactory to us when we require it, our ability to continue to support our business growth and to respond to business challenges could be significantly impaired, and our business may be harmed.

Our facilities are located near known earthquake fault zones, and the occurrence of an earthquake or other naturaldisaster could cause damage to our facilities and computer systems, which could require us to curtail or cease operations.

Our principal offices and a network operations center are located in the San Francisco Bay Area, an area known for earthquakes, and are thus vulnerable to damage. We are also vulnerable to damage from other types of disasters, including power loss, fire, floods, communications failures and similar events. If any disaster were to occur, our ability to operate our business at our facilities could be impaired.

Risks Related to Ownership of Our Class A Common Stock

The dual class structure of our common stock as contained in our amended and restated certificate of incorporation has the effect of concentrating voting control with those stockholders who held our stock prior to our IPO, including our executive officers, employees and directors and their affiliates, and limiting your ability 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 50% of the outstanding shares of our common stock. Because of the 10-to-1 voting ratio between our Class B and Class A common stock, the holders of our Class B common stock collectively will continue to control a majority of the combined voting power of our common stock even when the shares of Class B common stock represent as little as 10% of the combined voting power of all outstanding shares of our Class A and Class B common stock. This concentrated control will limit your ability to influence corporate matters for the foreseeable future, and, as a result, the market price of our Class A common stock could be adversely affected.

Future transfers by holders of Class B common stock will generally result in those shares converting to Class A common stock, which will have the effect, over time, of increasing the relative voting power of those holders of Class B common stock who retain their shares in the long term. For example, Mr. Wood currently controls 49.06% of the voting power of our Class A and Class B common stock even though he owns approximately 16% of the outstanding Class A and Class B common stock as of September 30, 2019. If, for example, Mr. Wood retains a significant portion of his holdings of Class B common stock for an extended period of time, he could, in the future, control a majority of the combined voting power of our Class A and Class B common stock. As a board member, Mr. Wood owes a fiduciary duty to our stockholders and must act in good faith in a manner he reasonably believes to be in the best interests of our stockholders. As a stockholder, even a controlling stockholder, Mr. Wood is entitled to vote his shares in his own interests, which may not always be in the interests of our stockholders generally.

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

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

- actual or anticipated fluctuations in our financial condition and operating results;
- changes in projected operational and financial results;
- loss by us of key content publishers;
- changes in laws or regulations applicable to our devices or platform;
- the commencement or conclusion of legal proceedings that involve us;
- actual or anticipated changes in our growth rate relative to our competitors;
- announcements of new products or services by us or our competitors;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or
- capital-raising activities or commitments;
- additions or departures of key personnel;
- issuance of new or updated research or reports by securities analysts;
- the use by investors or analysts of third-party data regarding our business that may not reflect our financial performance;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- sales of our Class A common stock;
- share price and volume fluctuations attributable to inconsistent trading volume levels of our shares; and
- general economic and market conditions.

Furthermore, the stock markets frequently experience extreme price and volume fluctuations that affect the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political and market conditions such as recessions, elections, interest rate changes or international currency fluctuations, may negatively impact the market price of our Class A common stock. As a result of such fluctuations, you may not realize any return on your investment in us and may lose some or all of your investment. In the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future, which could result in substantial costs and divert our management's attention from other business concerns.

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

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

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

If our existing stockholders sell, or indicate an intention to sell, substantial amounts of our Class A common stock in the public market, the trading price of our Class A common stock could decline. All of our outstanding Class A shares are eligible for sale in the public market, other than shares and 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 employees, other service providers, and directors are subject to our quarterly trading window, which generally opens at the start of the second full trading day after the public dissemination of our annual or quarterly financial results and closes (i) with respect to the first, second and third quarter of each year, at the end of the fifteenth day of the last month of the such quarter and (ii) with respect to the fourth quarter of each year, at the end of the trading day on the Wednesday before Thanksgiving. These employees, service providers and directors may also sell shares during a closed window periods 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 would be dilutive to existing stockholders and the trading price of our Class A common stock could decline.

If securities or industry analysts do not publish research or publish unfavorable research about our business, 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. To the extent we obtain equity research analyst coverage, we will not have any control of the analysts or the content and opinions included in their reports. The price of our Class A common stock could decline if one or more equity research analysts downgrade our stock or issue other unfavorable commentary or research. 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 regulations implemented by the SEC and the Nasdaq Global Select Market, 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 intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management's time and attention from revenue-generating activities to compliance activities. If, notwithstanding our efforts, we fail to comply with new laws, regulations and standards, regulatory authorities may initiate legal proceedings against us and our business may be harmed.

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

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

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

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

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

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

- establishing a classified Board of Directors so that not all members of our Board of Directors are elected at one time;
- permitting the Board of Directors to establish the number of directors and fill any vacancies and newly created directorships;
- providing that directors may only be removed for cause;
- prohibiting cumulative voting for directors;
- requiring super-majority voting to amend some provisions in our certificate of incorporation and bylaws;

- authorizing the issuance of “blank check” preferred stock that our Board of Directors could use to implement a stockholder rights plan;
- eliminating the ability of stockholders to call special meetings of stockholders;
- prohibiting stockholder action by written consent, which requires all stockholder actions to be taken at a meeting of our stockholders; and
- reflecting our two classes of common stock as described above.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibit 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 also affect the price that some investors are willing to pay for our Class A common stock.

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware and the federal district courts of the United States of America 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 amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware is the exclusive forum for 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 amended and restated certificate of incorporation or our bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. This exclusive-forum provision, if permitted by applicable law, 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 this exclusive-forum provision in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business.

Our amended and restated certificate of incorporation further provides that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. In December 2018, the Delaware Chancery Court issued an opinion invalidating such provision which we have appealed to the Supreme Court of the State of Delaware. Until a final resolution is reached on this matter, we will not attempt to enforce this provision of our certificate of incorporation. As a result, we may incur additional costs associated with resolving disputes that would otherwise be restricted by that provision in other jurisdictions, which could harm our business.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

None.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits.

		Incorporation by reference			
Exhibit Number	**Description**	**Form**	**SEC File No.**	**Exhibit**	**Filing Date**
3.1	Amended and Restated Certificate of Incorporation of Roku, Inc.	8-K	001-38211	3.1	10/03/2017
3.2	Amended and Restated Bylaws of Roku, Inc.	S-1	333-220318	3.4	9/01/2017
4.1	Reference is made to Exhibits 3.1 through 3.2.				
4.2	Form of Class A common stock certificate	S-1/A	333-220318	4.1	9/18/2017
10.1#	Roku, Inc. Amended and Restated Severance Benefit Plan	8-K	001-38211	99.1	7/16/2019
31.1*	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
31.2*	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
32.1**	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
32.2**	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
101.INS*	Inline XBRL Instance Document- the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.				
101.SCH*	Inline XBRL Taxonomy Extension Schema Document				
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document				
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document				
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document				
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document				
104	The cover page from the Company’s Quarterly Report on Form 10-Q for the quarter ended September 30, 2019, has been formatted in Inline XBRL.				

\# Indicates management contract or compensatory plan, contract or agreement.

* Filed herewith.

** These exhibits are furnished with this Quarterly Report on Form 10-Q and are not deemed filed with the Securities and Exchange Commission and are not incorporated by reference in any filing of Roku, Inc. under the Securities Act of 1933, as amended, or the Securities and Exchange Act of 1934, as amended, whether made before or after the date hereof and irrespective of any general incorporation language contained in such filings.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

	Roku, Inc.
Date: November 8, 2019	By: /s/ Anthony Wood Anthony Wood President and Chief Executive Officer (Principal Executive Officer)
Date: November 8, 2019	By: /s/ Steve Louden Steve Louden Chief Financial Officer (Principal Financial and Accounting Officer)

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Anthony Wood, certify that:

1) I have reviewed this Quarterly Report on Form 10-Q of Roku, Inc.;

2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4) The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5) The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 8, 2019

By: /s/ Anthony Wood
Anthony Wood
President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Steve Louden, certify that:

1) I have reviewed this Quarterly Report on Form 10-Q of Roku, Inc.;

2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4) The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5) The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 8, 2019

By: /s/ Steve Louden
Steve Louden
Chief Financial Officer

Exhibit 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**

I, Anthony Wood, do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

The Quarterly Report on Form 10-Q of Roku, Inc. for the quarter ended September 30, 2019, as filed with the Securities and Exchange Commission (the "Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

The information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects, the financial condition and results of operations of Roku, Inc.

Date: November 8, 2019

By: /s/ Anthony Wood
Anthony Wood
President and Chief Executive Officer

Exhibit 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

I, Steve Louden, do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

The Quarterly Report on Form 10-Q of Roku, Inc. for the quarter ended September 30, 2019, as filed with the Securities and Exchange Commission (the "Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

The information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects, the financial condition and results of operations of Roku, Inc.

Date: November 8, 2019

By: /s/ Steve Louden
Steve Louden
Chief Financial Officer